



35th AESOP Annual Congress

INTEGRATED PLANNING IN A WORLD OF TURBULENCE

BOOK OF ABSTRACTS



Łódź - Poland // 11-15.07.2023

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ISBN: 978-90-82-81918-2

Published by AESOP
Lodz, 2023

The modern world is struggling with the growing civilization challenges related to the effects of climate change, the progressive degradation of the natural environment, migrations resulting from economic crises and political tensions, as well as shortening product life cycles, automation, and autonomy of management processes. It is becoming increasingly difficult to predict development processes, phenomena, and events, as evidenced by the outbreak of the COVID-19 pandemic in 2019.

In the realm of contemporary challenges, the imperative for integrated planning becomes all the more pronounced, especially in the face of a world characterized by turbulence. The pertinence of existing planning methodologies, rooted in long-term strategic visions aimed at fostering stable societal development, prompts an inquiry into their efficacy and legitimacy. This scrutiny becomes particularly crucial when juxtaposed against the multifaceted planning challenges posed by the pervasive uncertainty of events, risks, and the interplay of anthropogenic and natural hazards.

Therefore integrated planning emerges as a compelling alternative, addressing the spatial, sustainability, environmental, and values dimensions. Navigating the complexities of contemporary challenges requires a departure from conventional norms, urging a paradigm shift towards adaptive and innovative strategies that resonate with the uncertainties of our time.

The Congress provided a room for a wide scope of discussion on planning and attracted an attention of the academic community from all over the world and, as a result of this interest, 769 papers were submitted to the Congress. Finally 593 papers have been accepted for an oral presentation within 17 Congress Tracks, 38 submissions for Poster session and 62 for on-line presentation. About 85% of these submissions were written by authors from AESOP-member schools.

This Book of Abstracts presents contributions submitted at the AESOP 2023 Annual Congress in Lodz.

Local Organizing Committee

AESOP 2023 Annual Congress Lodz



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KEYNOTE SPEACHES

Keynote speakers:



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Rachelle Alterman is an Honorary Member of AESOP and the founding president of the International Academic Association on Planning, Law and Property Rights, with roots in AESOP. She is an emeritus (non-retired) professor at the Technion – Israel Institute of Technology and was recently elected Member of the Israel National Academy of Sciences and Humanities. With degrees in social science, planning, and law from Canadian and Israeli universities, Alterman heads the Lab on comparative research in planning law, property rights, and housing policies. She is also a Senior Researcher at the Neaman Institute for National Policy Research, and Visiting Professor at Bar Ilan University, where she currently heads a degree program in real estate valuation. Rachelle has served as a visiting professor at several American and Dutch universities. Currently, she is a Visiting High Level International Expert at Jiaotong University in Xian, China.



Prof. Bohdan Cherkes

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Architect and researcher of the history of architecture. Since 1995, he has been a full professor and dean of the Faculty of Architecture of the Lviv Polytechnic, and since 2001 the director of the Faculty of Architecture of the Lviv Polytechnic. He has lectured at many universities, including in Kraków, Darmstadt and Vienna. His research interests include issues such as identity in architecture and city planning, urban models and urban planning, history and theory of the city. He is the author of over one hundred scientific publications in Austria, China, Germany, the Netherlands, Poland, Russia, the United States and Ukraine. Recent monographs: "Identität, Architektur und Rekonstruktion der Stadt" (Berlin, 2014) and "Lviv: city, architecture, modernism" (edited together with Andrzej Szczerski, Wrocław, 2017).



Prof. Karina M. Pallagst

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Karina Pallagst is professor for International Planning Systems at RPTU's Faculty of Spatial and Environmental Planning. Previously she worked at UC Berkeley's center for Global Metropolitan Studies (GMS). Prior to this appointment she was a senior research specialist at the Dresden-based Institute of Ecological and Regional Development (IOER). Prof. Pallagst holds a PhD from Kaiserslautern University and a post-doctoral degree from Dresden Technical University. Her research focuses on international comparative urban development, shrinking cities, urban

growth, planning cultures, planning theory, and border studies. She serves on numerous think tanks, working groups and committees regarding spatial planning and international urban development. She is a co-founder of the Center for Border Studies of the University of the Greater Region, and the Shrinking Cities International Research Network. Recent monograph: Handbook on Shrinking Cities (Edward Elgar Publishers, 2022).



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COHESIVE MARITIME SPATIAL PLANNING AT A SEA BASIN SCALE

Jacek Zaucha

Sea space, once considered abundant and free from conflicts, has undergone significant changes due to the rapid development of the blue economy, particularly offshore wind energy, and the recognition of the sea as natural capital delivering ecosystem services. This has led to the emergence of industrial seascapes, notably in the North Sea, and the dwindling availability of sea space for human economic activities. Blue Growth is both a conceptual and tangible revolution that is visibly transforming the development of sea space. The increasing presence of offshore structures has raised awareness not only among maritime spatial planners, scientists, and politicians but also among the general public. In response to the increasing anthropogenic pressure, Maritime Spatial Planning (MSP) has been introduced to mitigate spatial conflicts at sea. MSP is a relatively new approach to managing sea space, adding new opportunities in comparison to the previous reliance on international conventions such as UNCLOS. In the European Union (EU), MSP has been mandatory for nine years, resulting in the development of marine spatial plans in most EU countries. For instance, Poland has officially adopted one plan with 22 others nearing completion. MSP has underscored the significance of maritime borders and coherence between national plans. While spatial planning at sea – according to EU law– is primarily conducted at the national, regional, or local levels, there are processes in place to coordinate national plans on a macro-regional scale (sea-basin scale) due to the interconnected nature of marine ecosystems. The fact is that the dominating role in this regard is played by the various intergovernmental co-operation network such as VASAB-Helcom Working Group on MSP or Barcelona convention. The adequacy of formal cooperation structures in ensuring coherent spatial development of marine ecosystems remains an open question.

This intervention addresses the unique characteristics of sea space and explores various approaches to its management. It also examines the theoretical (present in the literature) and practical concepts (applied in the MSP praxis) of cross-border coherence in maritime spatial plans. Understanding the notion of "coherence" reveals the challenges that MSP faces in ensuring the required coordination between national plans. The examination of these challenges highlights important dilemmas, such as the conflict between sectoral policies and the siloed approach to maritime spatial development. Other issues include temporal and scale inconsistencies. The intervention concludes with suggestions for future research directions on coherence between maritime spatial plans in the context of accelerating blue growth. One proposed way forward is the utilization of boundary spanning objects to enhance consistency in the planning process, particularly in information exchange. Additionally, recommendations are made to address the limitations of current MSP paradigms and national-centric planning schemes.

PLANNING IN TIMES OF CRISIS: DO WE NEED NEW PLANNING PARADIGMS?

Karina Pallagst (RPTU Kaiserslautern-Landau)

During the worldwide lockdown starting in March 2020 due to the COVID-19 pandemic, a large amount of societal, economic and cultural activities came to a halt. The Corona virus has changed the world, however the crisis is not a stand-alone threat – we are also in the midst of a climate crisis, a demographic crisis, an energy crisis, a geopolitical crisis with the war against Ukraine, and the interconnectedness between those crises needs to be considered for the future development of cities and regions.

Despite the fact that each nation state reacts differently when it comes to crises, all cities and citizens have to face the consequences such as migration and economic recession (Bunzel and Kühl 2020), and at the same time the climate crisis calls for grand transformations. Due to our globalised world, answers cannot only be found locally, yet cities and regions might be places of change and labs for future solutions.

Hence the question remains: How will multiple crises and their societal impacts affect the development of cities and regions, and what does it mean for planning as a discipline? Schneidewind believes in a 'post-corona city' and suggests that it should be more local/ closer/ diverse, more public and more agile. In general, it can give impulses for a post-corona world: 'social, greener, more diverse' (Schneidewind et al. 2020, p. 3). However, we need to face the truth: We will learn to live with increased vulnerability in many facets. This cannot be accomplished by individual scholars, but requires a programmatic international approach. Shrinking cities with their history, experience and expertise of dealing with crises and downturn might contribute forcefully to these discourses (Pallagst and Hammer 2022). Yet, many open questions remain unsolved: Will the changes we saw during the pandemic result in trends in the longer-term? Which types of cities will appear to be most resilient? How can we balance the transformations demanded by overlapping crises? And, what does it mean for planning cultures and paradigms in planning?

The keynote speech highlights the specific challenges planning has to face in the midst of multiple crises. With the example of shrinking cities, it presents insights into the requirements for planning, in particular for planning cultures, and proposes a critical perspective towards planning paradigms.

Keywords: Planning cultures – planning paradigms – crises – shrinking cities – transformation

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PLANNING AND PLANNING LAW: A STRAINED MARRIAGE

Rachelle Alterman

When modern urban planning first emerged during the Industrial Revolution, it came hand in hand with the rudimentary forms of planning law. Married together, they gradually spread to many countries, especially advanced economies. Countries with direct central control of land and decision making had no place for planning law, but after the collapse of the Soviet block in the early 1990s and China's gradual opening, planning laws received a major boost. However, the marriage between planning and law is not always a happy one. The presentation will discuss the synergies between planning and law, but also the underlying forces that often lead to discord and conflict. Today, strains in the marriage are especially apparent in the two major global challenges that perplex planners: housing and climate change. In both realms, law and its instruments play the flickering roles of both angels and devils, depending on perspective, contexts and time.

ABSTRACTS

TRACK 01: INTEGRATED PLANNING FOR COMPLEXITY

AMERICA'S FORGOTTEN NUCLEAR POWER TOWNS (72)

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Across the world, the future of nuclear power as a safe, secure and economical energy source is being increasingly scrutinized. While there are many reasons for this examination, the experiences of Chernobyl, Three Mile Island, Fukushima and even in today's Ukrainian Zaporizhzhia have been strongly influential. In fact, between 2015 and 2022, more than fifty plants have been closed across the globe. While this scrutiny has largely occurred at national policy levels, comparatively little pragmatic or scholarly work has been undertaken by planners concerning the impacts of the closings on host communities. As with communities housing outmoded military installations, these host communities are in danger of becoming forgotten places. Such has been the case of the United States.

Throughout the United States, there were at peak 101 towns that housed nuclear power plants. Built largely in the 1950s to 1970s, in a period where nuclear power was considered a major source of energy that would free the nation of dependency on fossil fuel. Most of these host communities now find themselves living with an unwanted, neglected and seemingly permanent facility within their borders. America has moved away from nuclear power as a primary form of producing electricity. As it closes these facilities, the federal government has given the power of monitoring these plants to the Nuclear Regulatory Commission. This agency views its mandate as simply providing safe conditions for the creation of nuclear power and little else. The private producers, upon determining that a plant must be closed see their responsibilities as simply destroying the plant itself. No government agency or private company has taken on the responsibility for the total removal of all evidence of the nuclear waste or spent rods. They have in essence left the communities to their own resources. There are now 11 communities that formerly hosted nuclear plants which have been closed and more will follow.

This paper addresses how these communities have been impacted by the closures and how they have adapted to the fact that the citizens of these communities are likely to live with the nuclear residue of these plants for at least decades to come. We will focus on an assessment of how the host communities have reacted to the mandates of the government and energy providers and are undertaking the re-planning of their communities on their own. As countries beyond America undertake closings, there are considerable lessons in planning the end state of these facilities that could be valuable to other countries.

Keywords: Nuclear plant closures, redevelopment, environmental regulations

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EVALUATING OF NEW TOWN PLANNING IN SOUTH KOREA: NEW URBANISM PERSPECTIVE (87)

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[Introduction]

New Urbanism is an urban movement that began in the United States in the 1980s. The key concept is to create a specific social pattern in the city and improve the quality of urban life through urban physical infrastructure planning. However, New Urbanism was criticized for being regarded as a planning technique that could only be applied in new vacant land like a new town, not in the old city place. Nonetheless, Over the past 40 years, New Urbanists have been creating and popularizing many now-common development patterns and strategies, including mixed-use, transit-oriented development, integrating design standards into affordable housing, and designing beautiful streets. South Korea is one of the countries with many large-scale new town developments, but there was a lack of consideration and reflection on the planning principles on New Urbanism. Accordingly, this study is evaluating the winning works of the Korean new town planning through New Urbanism and we derived the trends and implications of new town planning in Korea.

[Research Methodology]

This study is analysis to the winning works of the 'National New Town Planning Contest' that is the third phase urban development project implemented by the national government. It is representative of South Korean urban planning trends in that it reflects the nation's urban planning goals and visions. First, as a theoretical study, we studied about the background, concept, and main principles of New Urbanism and history of South Korean new town planning. And we studied about previous urban planning theories that influenced New Urbanism and later urban planning theories. Second, the framework of the analysis was created based on the main principles of New Urbanism. Based on this, we analyzed and compared to the three winning works. Finally, by integrating the results of this analysis, we derived the similarity and differences between New Urbanism and Korea's new city planning and present to implications for future urban planning strategies.

[Findings]

The basic principles of New Urbanism are 'Walkability', 'Connectivity', 'Mixed-Use & Diversity', 'Mixed Housing', 'Traditional Neighborhood Structure', 'Increased Density', 'Smart Transportation', 'Sustainability' and etc. This study set indicators that can be judged through the retained data, 15 guidelines in 8 categories as the framework for analysis, and we analyzed each winning works. As a result of the analysis, the planning theory claimed by New Urbanism in terms of 'Walkability', 'Mixed-Use & Diversity', 'Mixed Housing', 'Increased Density', 'Smart Transportation', and 'Sustainability' was applied to all winning works. On the other hand, in terms of 'Connectivity' and 'Traditional Neighborhood Structure', a plan different from the basic principles of New Urbanism was proposed.

[Conclusion and Discussion]

As a result of this study, we found to three discussion points. First, most values on New Urbanism are reflect this context in South Korean urban planning. The second, while New Urbanists are aiming for a grid road system in terms of 'connectivity', a modified form appears in Korea's new town planning. The third, transect planning in terms of 'traditional neighborhood structure' is not applied in some district because residential quality. This study evaluating the recent government-led new town planning in South Korea from the perspective of New Urbanism, and we tried to discuss the appropriate planning method for each urban planning element. Although this study has a limitation in that it is limited to the target of analysis only for the 3rd phase new town, it is meaningful in that it analyzed the government-led new town planning and identified the national vision and trend of urban planning. In future studies, it will be necessary to analyze and monitor the conformity of these new towns to the planning goals after implementation.

Keywords: New Urbanism, New Town Planning, Urban Planning

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INVERTED SLUM AND ITS COMPLEXITIES: A MULTIDIMENSIONAL ANALYSIS OF URBAN POVERTY IN MACEIÓ/AL (89)

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Among the multiple possibilities for approaching the theme of integrated planning, we propose one that shifts to the center of the analysis one of the countries that is currently on the periphery of the world geopolitical organization: Brazil. In order to subvert the center-periphery paradigm, we will invert the hegemonic orders and bring to the heart of the discussion the city of Maceió, the capital of the Brazilian state that is located on the periphery of the periphery of capitalism, for, among other factors, presenting the lowest value National Index of Municipal Human Development - IDHM: 0.631 (Atlas Brasil, 2010).

In this context, the outline of this writing defines as a new center what is considered the edge of the periphery: occupations in grotas, which in this study we call “inverted slum”. The term locally known as grotas arises from the specific geomorphological configuration of Maceió, in which the terrain is composed of numerous folds, which form, at certain points of transition between the plains and plateaus, some narrow ravines (Cavalcanti et al., 2015). Although this geomorphology plays a role as a defining agent of the municipality's formal urban design, it also serves as a place of residence for populations crossed by the multidimensions of poverty. Due to its formal configuration and social function, we call this type of occupation inverted slum, thus highlighting the relevance of its analysis. Therefore, to understand the inverted slum from the perspective of integrated planning, we propose as the objective of this material the construction of a multidimensional analysis of urban poverty in Maceió.

In order to respond to the problem presented, we adopted the following methodological steps: a) in the first moment, we carried out a bibliographic review of the key concepts related to the proposed discussion, addressing the notions of integrated planning, territory and poverty; b) collection and treatment of data, extracted from surveys produced by the Brazilian Institute of Geography and Statistics (IBGE, 2010) and ONU-Habitat (2019). While the choice for data obtained from the IBGE (2010) was due to allowing us to analyze multidimensional poverty for the lowest possible spatial disaggregation level for Brazilian municipalities, which is the census sector; the report prepared by ONU-Habitat (2019) is used in an attempt to update and highlight the data on popular territories located in the inverted slum of the capital of Alagoas.

Thus, based on these data, we propose to estimate the Multidimensional Poverty Index (MPI) developed by Alkire and Foster (2009), in order to diagnose the levels of poverty in the inverted slum of Maceió. The choice of MPI (2009) is based on Sen (2010), when he points out that the study of poverty should not be limited to the perspective of income, but consider non-monetary

sources that have a multidimensional impact on the levels of well-being of individuals. We will therefore consider the dimensions of education, sanitation, housing conditions and income for the calculation of the MPI. Furthermore, we will use the R Statistic and Qgis software for data processing, production of descriptive statistics, MPI's estimates and spatial analysis.

Therefore, we hope to collaborate in the identification of existing urban poverty patterns in the territory of Maceió, as well as in the recognition of priority areas for public policy interventions, whose purpose is to mitigate economic, social and spatial inequalities. In this way, from the understanding of these disparities, we seek to effectively contribute to the diagnosis, and consequent prognosis of the circumstances that can help the Public Power in the management of the analyzed territories, through the implementation of laws and actions that allow the most efficient allocation of resources that promote the improvement of the quality of life of the population residing in inverted slum.

Keywords: multidimensional poverty, inverted slum, integrated planning, Maceió/AL

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MEGA-EVENTS AS A CATALYST FOR URBAN MEGA-PROJECTS: THE LARGE-SCALE DEVELOPMENT OF MILANO PORTA ROMANA RAILYARD AS AN EXEMPLARY CASE (94)

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Milano is co-hosting the next Winter Olympic Games in 2026. One of the main planned venues aligned to this mega-event (Muller, 2015) is the Olympic Village located in Porta Romana district in Milano, the second biggest railyard in the city (Montedoro, 2013). Such a brownfield is included and regulated by a system of seven former railyards that particularly the Municipality of Milano and the state-company Ferrovie dello Stato (FS) are willing to regenerate in the city-making framework. This article aims to frame the spatial planning of Porta Romana's mega-project in relation to other intertwined venues over the northern Italian territory, demonstrating that the Winter Olympics are conceived as a catalyst to foster massive regeneration projects in urban nodes (Oosterlynck et al., 2011) through large and stable coalitions of actors and operational devices for arranging multi-scalar and multi-actors' interests (Altshuler & Luberoft, 1992), affecting this Olympic Village. Our research is based on field observations, semi-structured interviews, and desk analysis of documents, literature, and press articles which have been fundamental for interpreting the nexus between the large-scale project of Porta Romana and the catalyst dimension of mega-events.

In conclusion, we argue that despite the fact that Milano will host only a few venues and competitions and, despite the lack of general and complex plans to handle the Olympic Games, such a mega-event might be a relevant catalyzer for implementing and unlocking specific mega-projects located in 'frozen' public areas (Brown, 2020), as the case of the Porta Romana shows, especially with a legacy vision of converting the athletes housing into students housing in the post-event phase.

Keywords: Mega-events, Mega-projects, Winter Olympics, Milano Porta Romana railyard, Olympic Village

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KNOWLEDGE NETWORKS IN LARGE-SCALE PLANNING PROCESSES IN ISRAELI CITIES (101)

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In contemporary urban planning, knowledge is shaped and communicated in uneven networks of discourse arenas – both traditional and new; professional, non-professional and mixed in character. Such arenas include established local and state institutions, as well as various ad-hoc platforms ranging from professional meetings to public consultations, media coverage, social-media debates, and so on. These arenas, the actors that participate in them, and their knowledge contents are not stable or fixed (Laclau and Mouffe, 2001; Wynne, 2002). Their formation and articulations in a planning process shape a "system of meanings" underlying the process (Finlayson and Martin, 2006, 159).

This research examines knowledge networks as they form during city master planning processes in multiple Israeli cities. As centralized and local planning efforts have intensified over the past 15 years, arenas for knowledge communication have proliferated: state and local bodies employ online platforms, national and local media popularize planning debates, and citizens' groups use social media to amplify messaging. Yet, the knowledge of professional planners continues to dominate planning discourses, while local knowledge and power are often delegitimized, particularly when class- and identity-related differences and biases are at play (Fenster and Yacobi, 2005; Yiftachel, 1998; Jabareen, 2015, 2017; Margalit and Kemp, 2019, 2019a).

We identify discourse arenas and the networked connections between them in a variety of cities by mapping the participation of common actors, and the themes they discuss. We ask which arenas and networks are created during planning processes in each city, and what are the impacts of socio-spatial and ethnic variables on the facilitation of knowledge-based discourses on plans. We focus on multi-year master planning processes, through analysis of planning documents, meeting transcripts, official announcements, media reports and social media discussions, as well as interviews with planners, residents and other participants.

Keywords: knowledge, networks, master planning

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HEALTH IMPACT ASSESSMENT IN URBAN DEVELOPMENT - MODEL APPROACH, POTENTIALS AND LIMITATIONS FOR THE SYSTEMATIC INTEGRATION OF HEALTH ASPECTS IN URBAN PLANNING PROCESSES: CASE STUDY GERA, GERMANY (167)

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The Covid-19 pandemic has brought the issue of health back into the spotlight of urban development. However, urban health issues have long had a high priority in urban development, for example when it comes to issues such as air pollution, noise, heat or stress.

Municipalities face the challenge of taking health aspects more intensively into account and becoming more health-promoting in the various areas of urban planning and development.

“COVID-19 has forced city governments to reconsider the relationship between mobility, urban space and health to ensure physical distance while meeting the mobility needs of residents”(AESOP 2023). It should also be take into account that all residents, regardless of their socioeconomic status, can participate in social life and have access to health services.

Against this background, the paper explores the research questions what kind of opportunities and limitations of a health impact assessment are in order to take health aspects into account more systematically in urban planning and how an ideal-typical model does look like that consistently integrates health aspects into urban planning as well as effectively integrating itself into the administrative structure and processes of urban development and planning and the health sector.

The interdisciplinary research project GFA_Stadt: “Health Impact Assessment (HIA) in Urban Development” serves as the research background. The questions are discussed both in terms of ideal types of planning procedures in Germany as well as in a case study of an urban development framework plan. The aim is also to link HIA systematically with the procedural steps of urban planning and to develop a model for establishing an improved connection between public health service and urban planning.

An initial observation of the research project was that the disciplines of health, urban planning and environment have different logics of action and that relevant actors rarely work together. The HIA toolkit provides a combination of procedures, methods and instruments to assess a strategy, a programme or a project with regard to possible impacts on health and the distribution of these across the citizenship. It is intended to contribute to the increased consideration of health aspects in different fields of action in the sense of "Health in all Policies". So far, there is no standardized structure for the implementation of HIA in Germany.

However, experience with the HIA instrument already exists in Great Britain, Austria, Australia, the USA, Ireland, New Zealand, Sweden and the Netherlands.

The conclusion discusses what the developed model of interlinking urban planning and HIA phases can achieve for healthy Post-Pandemic Cities, and which obstacles exist in the implementation of HIA in municipal administrations in Germany, especially in urban planning and health departments. Furthermore, it is reflected on the extent to which the instruments can contribute to urban resilience.

Methodologically, the article draws on guideline-based interviews and expert workshops with participants from science, institutions, and municipal administration, on literature and document analysis. A core methodological element are case studies in the cities of Gera and Hamburg.

Keywords: health impact assessment, urban planning, health sector, interdisciplinary challenge

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INNOVATIVE PLANNING TO CREATE PUBLIC VALUE IN BROWNFIELD HOUSING DEVELOPMENT IN ENGLAND (177)

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The redevelopment of brownfield land for residential use has been a priority of planning policy in England since the late 1990s. The current National Planning Policy Framework (2021) exhorts developers to “make as much use as possible” of such land.

These ambitions present complex challenges. The costs incurred in demolishing existing structures, decontaminating polluted land, securing planning consent and construction itself routinely exceed the value generated by development. For developers, the return on investment is less than for low-risk greenfield sites. For local planning authorities, the capacity to secure developer contributions for public goods is constrained.

These challenges require innovative planning responses. In this context, innovation refers to the creative reframing of problems, the pursuit of collaborative action, with the purpose of achieving public value, an outcome beyond purely monetary value (Vigar et al., 2020). The present paper, drawing on research conducted for the Planning Advisory Service (PAS), explores innovative practice and the creation of public value in nine diverse brownfield development projects.

The case study local planning authorities were all actively seeking to create public value, through development capture, but also through the design and implementation of the project itself. These were sometimes framed within a narrative of vulnerable communities, people in housing need, elderly people with extra care needs, providing affordable (council) housing and profit share opportunities for the local authority. The rationale for intervention in post-industrial areas was the regenerative impact locally, providing affordable housing, new opportunities for home ownership, and reinforcing the local retail offer.

The local planning authorities had all developed innovative ways of ‘de-risking’ brownfield development by working across organisational boundaries, within the council and with local, regional, and national partners. The key to the success in the sites has been the level of collaboration and discussion across the council [housing development, planning, housing, parks and recreation] and subsequently with key private sector players. A multi-disciplinary approach to external communication was also vital. In all these relationships, the planning service has played a pivotal role as broker and facilitator.

A key lesson from the case studies is the importance of retaining key planning competencies and skills in house. At its most basic, this means sustaining an appropriately resourced planning service. The retention of such competencies – plus related skills in ecology, estates and urban design, and positive working relationships with key partners – confers a degree of agency on the local planning authority; it is not wholly dependent on private initiative to provide new housing and deliver public value, it can act autonomously.

As such, the planning approach adopted by our case study LPAs aligns with the normative ideals of the Ensuring Council (APSE, 2012); the primacy afforded to a role of stewardship of place,

ensuring the social, economic and environmental well being of the area; maintaining core capacity in house; prioritising collaboration over competition; and, ensuring the values of local government intervention are founded on meeting community needs.

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SPACES OF WORK, ENCOUNTER, AND REPRESENTATION OF, AND FOR, CREATIVE INDUSTRIES IN INDONESIA (180)

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Previous research has focused on the relationship between creative industries and urban areas, the reasons behind this relation, and where these industries tend to locate within the city. Less understood is how the spaces intended to support creative industries are used by these industries. This paper questions the role that spaces inhabited and used by creative industries have for their development, and how these different roles are distributed across a city. We focus on the city of Bandung, Indonesia, and inquire (1) What types of spaces are promoted by policies to support creative industries development in the city, and where are these spaces located; (2) Who are the actors behind the development and maintenance of these spaces, and (3) how are the socio-spatial patterns of these creative-related spaces (location in the city, which industries and activities happen in these spaces and how they are used, and relevance of these spaces in the creative-identity-making process) linked with the development of creative industries in the city? The paper allows us to understand the socio-spatial dynamics of creative-related spaces that support creative industries development and how these spaces are embedded in local strategies. The paper is informed by interviews with local policy makers, entrepreneurs in the local creative industries scene, and owners/ managers of some of the spaces occupied by creative industries. We also used structured observation to better understand the characteristics of the spaces being identified by our interviewees as supporting creative industries in Bandung. The paper provides insights about the role, rational, and actors behind the spaces inhabited by and supporting creative industries, and how they occupy the city. Furthering the understanding of the roles and spatial dynamics of these spaces can inform creative-related policies that aim to influence creative industries development through the provision of spaces that these industries can occupy.

Keywords: creative industries, Indonesia, spatial analysis, creative spaces

URBAN SPATIAL EFFICIENCY BASED ON THE SIMULATION OF EPIDEMIC TRANSMISSION MECHANISMS: REFLECTIONS ON PREVENTION AND CONTROL MEASURES DURING COVID-19 IN CENTRAL OF SHANGHAI (190)

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The spread of COVID-19 has brought new challenges to urban planning and governance. The preventive and control measures taken by the Chinese government have effectively suppressed the rapid spread of the epidemic in the short term, but also had a huge negative impact on the urban spatial efficiency (USE) and daily life of the residents. In fact, urban planning places more emphasis on the overall efficiency and resilient variability of urban spatial fabric (USF) in a long-term steady state, as well as the diversification of spatial organization mode, instead of dealing with sudden epidemic diseases. So, it is worthwhile to continuously summarize what valuable insights COVID-19 brings to urban spatial planning. We select the area within the outer-highway-ring of Shanghai central city as the scope, using COVID-19 infection data of the residential quarters where the cases appeared published by the Shanghai Municipal Government from March 6 to May 11, 2022 as the study material. Through complex network analysis, it introduces the important influence of residential closure and control measures on the stability of urban residential space network (URSN), by representing epidemic transmission mechanism (ETM) of COVID-19 among urban areas, and its impact on the URSN. Firstly, this study constructs a complex network with the spatial range of residential quarters in the study area as nodes, which were extracted based on the satellite image by semi-supervised classification method, considering the daily interaction habits of the residents related the possibility of virus transmission. Secondly, the spread way of the epidemic between residential quarters is simulated based on the system dynamics model (SD model), by taking the residential quarters with initial infection cases as the initial infection nodes. Thirdly, the simulation is conducted again by taking the closure and control measures on residential quarters into account, comparing the simulation results with the real situation to summarize the distribution and evolutionary characteristics of reported infection cases in central city. Fourth, this study compares the changes of network efficiency indicators to reveal the impact of closure and control measures on USE, by removing residential quarters with reported cases and closure from URSN. It points out that: 1) The transmission model based on complex network can better simulate the process of natural virus transmission at the early stage in Metropolises and can predict the spatial mechanism of epidemic spread to a certain extent; 2) The closure and control of key residential quarters can effectively reduce the spread possibility of the virus and reduce its impact in the early stage of the epidemic in Shanghai, because the outbreak point of epidemic was located at the edge of the city, and penetrated from the edge to the center. 3) However, with the evolution of the epidemic, the expanding scope of closed residential quarters result in the continuous reduction of the USE, which eventually leads to network paralysis. This research has theoretical value for increasing the resilience planning methods in response to emergent demands to optimize urban residential space planning, and practical value for forming a residential space layout and governance model that interrupts and inhibits the spread of epidemics.

Keywords: urban spatial efficiency (USE), epidemic transmission mechanism (ETM), residential quarters, complex network analysis, system dynamics model (SD), Shanghai

PREDICTING VULNERABLE AREAS FOR CHILD SEXUAL ABUSE USING THE AGENT-BASED MODEL (206)

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The interaction between various actors in a city is complex in terms of various sectors and time and space, which is a challenging area for studies that capture and forecast urban phenomena. This is especially true when the phenomenon in which human psychology and behavior form patterns through space and interaction is connected to social problems. Recently, as a number of sex crimes targeting children and adolescents, who are socially weak, have occurred, it is necessary to have alternatives to prevent them in advance as well as post-policing. The occurrence of crime is a complex phenomenon. Thus, they are the result of a large number of interrelated factors that may include environmental factors as well as complex human behavior.

The purpose of this study is to predict the point at which child sexual abuses are likely to occur using the Agent-based model. In order to build an Agent-based model, it was built in four stages: establishment of a conceptual model, realization of a calculation model, simulation, result analysis and fitting. For agents, rules were established on what data to designate the agent's behavioral characteristics and how to recognize and respond to external influences. Agents are placed in an environment where they can travel through space and time and behave as they would in the real world. The model implies that the city's components are the main determinants of crime levels in the city as a whole. 13 variables were used in this study as the components of the city. The 13 variables are largely divided into three categories: spatial condition, behavioral condition, and number of agents condition. Spatial conditions include polices, elementary schools, the actual residence of a child sexual offender and the location of CCTVs. For behavioral conditions, the traffic behavior of children and adults within the neighborhood was divided and implemented as codes. Finally, in terms of the number of agents, the number of children without parental care and the number of children from low-income households were included.

The Agent-based model of areas vulnerable to child sexual abuse developed in this study was applied to K-gu, S-si in Korea, and compared with the location of actual child sexual abuse. After completing a series of interface compositions to drive the simulation of K-gu S-si in Korea, 11 simulations were run for 8 hours each. Since the Agent-based model contains stochastic elements, it means that the same latitude and longitude cannot always be derived even though the simulation was run several times in the same setting. Therefore, one-way ANOVA was performed to verify whether each simulation result showed a statistically significant difference and the validity of the prediction model. As a result, it was confirmed that all of the simulation sets produced consistent prediction results for the predicted areas vulnerable to child sexual abuse. This study suggests that future urban planning should conform to the norms of preventive urban planning in that urban planning is a practical study that directly affects the formation of urban and regional spaces.

Keywords: Crime simulation, Agent-based Model, Multi-agent system

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Funding

This research was supported by the Presidential Science Scholarship funded by the Government (Ministry of Science and ICT).

EXPERIENTIAL INFORMATION IN CITIES: NATURE, USES AND IMPLICATIONS FOR COMPLEXITY THEORIES AND URBAN DESIGN (236)

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This paper explores the idea of cities as information systems, insofar as they are experiential contexts. It is assumed that the large availability of a multiplicity, intensity and variety of experiential information is a genuine feature of urban complexity. Individuals in cities greatly rely on “experiential information” conveyed by images, sounds, smells, artifacts, and behaviours. These kinds of inputs may be absorbed without any specific conscious focal awareness, although they are able to influence actions and interactions in space in concrete manners. If it is true that for the urban agents operating in the city and using the city (residents, shopkeepers, entrepreneurs, developers, consumers, tourists, etc.), experiential information is crucial, relevant implications derive for urban theories and design. The paper will empirically illustrate the largely spontaneous and non-propositional nature of urban experiential information, showing that information intensity qualifies urban systems as complex. Further considerations will be advanced to demonstrate how scarcity or abundance of experiential information affects individual’s psycho-physical state and human agency coordination across urban spaces. This paper contributes to the debate on the nature of cities by focusing on the distinctive way in which a certain kind of information supports their functioning. It provides further arguments to avoid homogeneity/uniformity and mono-functionality in urban areas, by (i) pointing to “adaptive design” approaches to support a situation of organized complexity; (ii) preferring “urban codes” based on simple, abstract and general, relational, mainly negative, end-independent planning rules. From this perspective, experiential information may be seen as a relevant component to read, and further expand, the notions of the “just city”, “right to the city” and “urban complexity”.

Keywords: experiential information, urban complexity, urban design, non-propositionality

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REVISITING MORPHOLOGICAL REGIONS: A METHODOLOGY TO CLASSIFY URBAN FORM (301)

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The practice of urban planning is fundamentally connected to the sphere of designing and producing spaces. In order to understand, operate and propose changes within the built environment, one must grasp the physical characteristics and spatial dynamics of the cities (Oliveira, 2021; Whitehand & Gu, 2010). The historical perspective, of the city, or its long-term occupation, should be equally considered, as quite often planners are not operating in unoccupied spaces, but rather intervening in fully inhabited areas. Several approaches have been employed to investigate this intrinsic complexity of cities with the intent of providing an informative basis for a comprehensive and integrated planning. Measuring, analysing, and assessing the spatial arrangements in urban space is the subject area of Urban Morphology, which is the scope of analysis presented in this work (Kropf, 2017; Oliveira, 2016). The core assumption underlying urban morphological studies is that the physical arrangements of urban form systems, namely the street network, the plot system, and buildings, are part of a spatial-temporal model which is the product of social, economic, and political processes. A consistent finding in urban morphological studies, is the capacity of cities to physically consolidate cyclical changes in urban space (Gauthiez, 2004; Whitehand, 2009). Such perspective acknowledges that urban settlements are, in fact, a mosaic of patterns or units, encoding unique spatial identities within its formative processes. Classic urban morphology, namely the historic-geographical approach, laid the foundation for the concept of Morphological Regions, which is based on the typomorphological classification of these unitary areas, delimited by their degree of internal morphological similarity (Barret, 1996; Whitehand, 2009; Whitehand et al., 2011; Wang & Gu, 2020; Gu, 2018; Oliveira & Yaygin, 2020). However, from a methodological point of view, the delimitation of these regions remains labour-intensive, grounded on qualitative visual analysis and on the personal expertise of the analyst. The subjectivity of this approach hinders the application of the method of morphological regionalization in a scalable, reproducible, and systematic way. The aim of this paper is to identify fundamental quantitative variables of urban form, which could be used to describe spatial and geometric patterns of urban settlements, as an initial step to support the delimitation of typomorphological regions through quantitative and objective parameters in forthcoming studies. The first part of the paper addresses the underlying premises of the method of morphological regionalisation, trying to produce an objective interpretation of such premises. Next, we introduce a systematic literature review on morphological measures, aiming at producing a rich characterisation of urban space from minimal data input of three elements of urban form (namely: street network, blocks and building footprints). We test these measures empirically in Birmingham-UK, Istanbul-Turkey, and Amsterdam- Netherlands, in order to derive homogeneous regions of urban tissue types. We attempt to contribute to the construction of a more robust method of urban form classification stemming from the revision of a classic concept in urban morphology. Our approach supports the development of a systematic and quantitative approach, applicable to large-scale comparative analysis of contemporary urban forms, which

often elude previous historical typologies (Berghauser Pont et al., 2019; Berghauser Pont & Haupt, 2005; Gil et al., 2012; Serra, Gil & Pinho, 2017). This work is a methodological step towards the definition of Morphological Regions. The relevance of the concept and its informative character to urban planning practice, urban design, and urban heritage conservation highlights the development of a planning tool within an integrated approach between these disciplines and Urban Morphology (Whitehand, 2015).

Keywords: typomorphologies, urban planning and heritage, urban morphology, urban form classification

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Acknowledgements

Mariana Diniz is funded by the Portuguese Foundation for Science and Technology (FCT) through the Doctoral Grant UI/BD/151237/2021.

THE “SUCCESS” AND “SUSTAINABILITY” OF INTEGRATED MEGAPROJECT AND URBAN DEVELOPMENT/MEGAREGIONS (329)

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Megaprojects are defined by a project cost of \$1 billion and construction period of longer than five years. Megaprojects are often evaluated as “unsuccessful” due to its cost- and time-overrun as a result of its long construction period (Flyvbjerg et al., 2003). In the North America, it was accepted that the full social and environmental cost of large infrastructure projects were not taken into consideration (Altshuler and Luberooff, 2004). Flyvbjerg et al.’s conceptualization of Public Private Partnership was to mitigate the impact of cost overrun on public money. Ward et al. (2019) proposes policy-led multi-criteria analysis to improve the decision-making in megaprojects. Flyvbjerg (2021) proposes that modularity in design and speed in iteration decides the success and failure of megaprojects. Dimitriou (2009) discusses how megaprojects improve the global competitiveness of cities and regions. Megaregion as a concept has evolved over Jean Gottmann’s megalopolis (Gottmann, 1957) as the largest urban agglomeration. Megaregion is discussed in two ways: first, a generic term for urban agglomeration defined by 25million population and USD100 billion economic output (Florida et al., 2008), and more specifically megaregion is discussed as urban form of globalization (Ross et al., 2010; Harrison and Hoyler, 2015). One of the main topics discussed in the literature is to maintain a global-local balance in economy and investment, as mega-regions are hotspot for global capital investment. The viewpoint examines the intersection of these two well-established literatures, i.e., megaprojects and mega (-)regions. Landis’ (2021) study is the only one arguing that megaprojects and megacities are compatible as the former are ‘natural fit’ for the latter due to their benefit spillovers. As a contribution towards improving the chances of successful megaproject delivery, the viewpoint argues that megaprojects that are planned in integration with urban development and/or megaregions, are more likely to be evaluated as “successful” in terms of delivery within time and cost; and are more likely to be appraised as sustainable as a result of sharing benefits and drawbacks. It is highly relevant for planning practice as such integrated developments are in trend; and there are chances that such developments can mitigate the challenges of megaproject. The viewpoint draws on planning scholarship and research mainly through the literature on megaregion.

Keywords: Integrated development, Megaproject, Successful, Sustainable

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PLANNING CHALLENGES FOR FORMAL AND INFORMAL URBAN GREEN SPACES (392)

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Urban green spaces (UGS) are most often narrowed down to parks, urban forests, gardens and street trees, however, many other land use categories in urban areas provide ecosystem services comparable to the above formally recognized UGS. They are often called informal green spaces (IGS) and include brownfields, green spaces along railway tracks, unused and recultivated landfills, grasslands, semi-public grounds and orchards. Although IGS typically cover a much larger share of urban areas than formal UGS, they are often taken for granted and not formally protected. This study reveals key challenges that affect integrated blue-green infrastructure planning, such as a complex institutional structure that results in multiple barriers that cut through the increasingly complex urban ecosystem. Formal UGS, such as parks, forests or allotment gardens are managed by city authorities, their maintenance is paid with public funds and follows municipal design standards. In turn, IGS are underestimated in management practice; they have different managers, often with limited financial resources or interest in their maintenance; some of them are abandoned and neglected. With this article, we contribute to the debate on IGS with a detailed inventory of their types and shares in a city, based on a case study area in Lodz (Łódź), Poland. The main goal of our article is to quantify the share of formal and informal UGS. In addition, we analyse whether UGS identified based on publicly available land use datasets comply with vegetation cover map based on an orthophotomap and satellite imagery, what the legal status of the different categories of UGS is, how they are described in the local zoning plans, and what urban structures they represent. Based on a detailed overview of the different categories of UGS, we shed new light on how the different categories of UGS are included in urban planning, and we provide a snapshot of the disturbing urban land use transition – from UGS to other uses – which is partly related to the lack of formal recognition of IGS. The novelty in our study is that we mapped and analysed all UGS in our case study area, following two rivers that cut through Lodz – from one peri-urban area (partly rural), through the city centre to the peri-urban area on the other side of the city. The urban structures and the gradient of buildings in the studied area coincide with the urban structures for the whole of Lodz, therefore our research area is a representative part of the city and its heterogeneity. Out of the seventeen UGS categories that we distinguished, only six are formally recognized and account for 24% of all area covered by UGS. Only 7% of the area we identified as UGS is designated as different types of vegetated areas according to local zoning plans. In our study area, the share of IGS is large, and the scope of unprotected IGS is even larger. Although there is still potential to safeguard urban ecosystems' capacity to provide their services, the trend is the opposite and a large shift in mental models is necessary with regard to what is considered UGS and how to plan the green and blue infrastructure system based on the resources that are still available. Collaboration between public and private actors is particularly necessary because a large share of IGS remains privately owned, and the private actors are typically eager to get involved in planning and managing broader green and blue infrastructures. Integrated planning of formal and informal UGS is crucial, as it ensures comprehensive provision of UGS for inhabitants and ecological corridors for animals and plants.

Keywords: Planning documents; Property rights; Vegetated areas; Spontaneous vegetation

JUSTICE IN THE PLANNING AND OUTCOME OF TRANSIT-ORIENTED DEVELOPMENT: AN ANALYTICAL FRAMEWORK (446)

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Mixed-use, high-density, compact neighbourhoods around transit stations, the core elements of Transit-Oriented Development (“TOD”), have almost become the default approach in transport and urban planning (Thomas and Bertolini, 2020). Alongside its popularity in practice, scholarship on TOD is equally as large and varied, ranging from its design process (Jamme *et al.*, 2019), typologies (Maheshwari, Grigolon and Brussel, 2022), to its effects (Ibraeva *et al.*, 2020). Towards the 2010s, there has been increasing focus on critiquing its adverse effects, including transit-induced gentrification and loss of affordable housing (Padeiro, Louro and da Costa, 2019). While there is a growing attention on specific aspects of injustices of TOD, a framework to examine justice in TOD comprehensively has yet to be seen – whether its planning process and living environment are just, and how can it be improved. This is important not only because of the various facets of injustices arising from TOD, but also since building inclusive, equitable communities was a primary goal in the origin vision of TODs (Calthorpe, 1993).

Therefore, our principal aim is to construct a comprehensive analytical framework for assessing justice in TODs, both in their *planning process* and *outcome of living environment*.

To begin, it is useful to have a grasp on contemporary discussions of justice, especially in transport and urban planning. One main concurrent point among existing scholarship is that the components of planning process, stakeholder dynamics, and actual outcomes are all essential in creating “a just city”, be it distribution of resources, access to opportunities, or living environment. (Hananel and Berechman, 2016; Israel and Frenkel, 2018) Justice must be done, and seen to be done (Fainstein, 2010) – meaning both outcome and process are important.

Then, we proceed to conceptualise these components to assemble the analytical framework. Firstly, I draw from the Institutional Analysis and Development (“IAD”) model conceived by Ostrom and Polski (1999), which captures both (i) *rules* governing stakeholders’ participation and actions; and (ii) *process* describing the stakeholders’ power dynamics and interaction patterns. Afterwards, I incorporate the 5Ds of the built environment (i.e. Density, Diversity, Design, Destination Accessibility, and Distance to Transit) originating from the 3Ds conceived by Cervero and Kockelmann (1997), an all-rounded framework to assess the (iii) *outcome* of TODs, including the built environment and transport dimensions.

With the building blocks explained, we reach the central stage to assemble the analytical framework for assessing justice in TODs consisting of three components, (i) *rules*; (ii) *process*; and (iii) *outcome*, each with their respective evaluative criteria developed from the conceptualisation of justice in planning. For (i) *rules*, they concern the explicit and implicit rules - whether all stakeholders are identified and admitted, their power and knowledge difference recognised, and robust regulations in place to ensure fair engagement among them, with precedence to the disadvantaged stakeholders. As for (ii) *process*, they concern the planning process in practice –

whether it is open, diverse, democratic, inclusive, promotes sufficient and effective agency of different groups, and gives special attention to the disadvantaged. Finally, for (iii) *outcome*, they concern the fairness in the 5D attributes of the TOD living environment in reality, such as whether it provides equal access to primary goods and services, supports fair capabilities and freedoms between all social groups and sub-neighbourhoods, and progressively supports the disadvantaged.

To conclude, we outline the framework's limitations, such as the diversity of TODs, dominance of the Western paradigm of justice, and difficulty in measuring certain criteria. Nevertheless, the framework still offers a comprehensive way to comprehend justice in TODs, even across the various implementations of TOD in different locations, and provides suggestions to more just TODs in the future.

Keywords: TOD, LUTI, IAD, 5Ds, justice

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RETHINKING OF FOOD SYSTEMS-RELATED POLICIES IN THE CONTEXT OF THE WEF NEXUS (492)

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Water, energy, and food are highly interconnected components of a system. These components are highly affected by urbanization, climate change, population growth, and various crises and affect the future/sustainability of cities and urban systems. This necessitates the sustainable use, integration, and management of these components. In recent periods, when the increase in the number of people who cannot access sufficient food and the food crisis have been on the agenda, it has been important to reveal the interrelationship of these components with each other in policies or practices for food systems. Because these components can have many effects on each other, the decision made for one component may risk the sustainability of the other components. The WEF Nexus approach is also a concept that aims to explain the integration and relationality of these components of a system.

This study aims to evaluate policies and strategies related to food systems in the context of the WEF Nexus approach. For this purpose, Ankara, Istanbul, and Izmir, the three largest cities in Türkiye, were chosen as the cities to be evaluated. The documents created by the local governments in these cities were examined with the systematic review method for this study. Aims/strategies, targets/actions related to WEF components that are effective in food systems and processes are defined in these documents.

This review and analysis are important in terms of inferring the extent to which inter-component interrelatedness and integration are achieved in plans of various scales and policies related to food systems in Türkiye's three big cities. The research reveals that there are sectoral divergences and integration problems among WEF components associated with food systems and processes. Considering the need to address these components with a holistic approach to “sustainability”, it is inevitable that the research results emphasize the need for policymakers to adopt an integrated governance approach to ensuring the sustainability of food systems.

This research is a product of the ongoing master thesis written by Ebru Ala and supervised by Gülden Oruç at ITU City and Regional Planning Department

Keywords: WEF Nexus, Sustainability, Food Systems, Integrated Planning, Turkey

OPTIONS FOR SPATIAL ACTION IN THE CONTEXT OF MULTI-LOCALITY AND RURAL AREAS (503)

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The qualitative-exploratory research project (lead by TU Wien) investigates multi-local lifestyles in rural areas and associated potentials as well as challenges. The primary objective is to develop options for (spatial) planning action related to multi-local living arrangements and to identify how different (institutional) actors can contribute to sustainable rural development in this context, as well as adaptation of planning approaches. Multi-locality is a complex and growing research topic that various disciplines are concerned with (e.g. social, spatial and regional planning).

Especially since the pandemic, rural areas have become more attractive and more people are living there again, at least temporarily (Pätzold, 2021; Matzenberger et al. 2021). One reason for this is that land is more affordable here. The constant change between presence and absence leads to specific challenges for and the municipalities in rural regions. There is untapped potential not only in multi-local lifestyles themselves, but also in addressing multi-locality itself. Multi-locality bundles the most pressing issues of rural areas: mobility, land use, affordable and future-oriented housing, social infrastructure, community life, tourism etc. The examination and discussion of multi-locality thus covers all these topics. The existing, more traditional planning approaches hardly understand this very difficult to quantify lifestyle and therefore the planning levels, but especially the rural communities, cannot make the best use of the opportunities it offers. Rather the opposite, they suffer from the challenges that the lifestyle can bring to the community.

By working with specific study areas in Austria and their spatial analysis, the heterogeneity of rural areas in Austria is mapped and the topic of multi-locality is embedded in a spatial context. The choice of methods is very diverse and includes guided interviews, focus groups with multi-locals and workshops with international experts.

The findings contribute to a discussion of a complex subject that is constantly changing. By organizing the multi-local symposium in May 2023 at “Landuni Drosendorf” (a outpost from TU Wien in a peripheral area in Austria), the project team brings not only the results of the research project in the scientific community but also brings the community (scientific, non-academic, students) together to discuss this varied topic. Within the framework of the lecture, the results and findings on the subject of multi-locality in rural areas will be presented.

Keywords: multi-locality, rural areas, spatial planning

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THE WATERFRONTS AS TERRITORIES OF CHANGE: INSIGHTS FROM A BIBLIOMETRIC ANALYSIS (505)

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Waterfronts, particularly in urban, suburban, and metropolitan contexts, have an enormous potential to lead the change that these territories require in the face of the multiple challenges they currently face, such as climate emergency; urban and economic reconversion; qualification of public space; promotion of sustainable mobility; and valorization of environmental aspects (Kostopoulou, 2013; Gordon, 1996; Samant and Brears, 2017). The enormous importance for the urban economy that it had in the past has now migrated to the centrality it has in the challenges that cities and metropolitan areas are facing. An entire paradigm of land use and a new form of land management are at stake, seeking to ensure the urgent transition to a green, fair, and productive city. The complexity of these waterfront spaces can be understood as a metaphor for the complexity of the city itself, as can be proven by the scientific research carried out, visible in the diversity of topics addressed and which we intend to illustrate here with this study. On the other hand, this paper also seeks to identify aspects that seem to be under-explored and that may constitute a future useful research agenda. To contribute to the analysis of the path of research related to urban planning for waterfronts, the methodological steps of bibliometric analysis were adopted. The methodology used was based on the study by Donthu et al. (2021), which suggests four steps for the development of this type of analysis. The first step was to define the objectives and scope of the study. The scope focused on urban planning articulated with waterfronts, to assess the topics privileged the scientific research carried out in the past and up to the present moment, as well as eventual gaps still to be explored. The second step consisted of the selection of techniques for bibliometric analysis. According to Donthu et al. (2021), bibliometric analyses can be of two types: performance analyses and science mapping. The performance analyses evaluated the contributions regarding publications by periods, countries, authors, institutions, areas of study, and journals. Science mapping, in turn, analyzed the interactions and relationships among research constituents, including citation analysis, co-citation analysis, bibliographic coupling, co-word analysis, and co-authorship analysis. The third step consisted of data collection for the bibliometric analysis. For data collection the Scopus platform was used, where two searches were carried out, considering the keywords: urban planning and waterfront; urban planning and riverfront. The searches resulted in 502 papers found, which compose the study sample. The fourth step consisted in conducting a bibliometric analysis and reporting the results. The performance analysis showed that studies on Urban Waterfront Planning have been growing considerably in recent years, emphasizing the actuality of the theme. In terms of countries, the United States, China, and the United Kingdom stand out, followed by Canada, Australia, Italy, and the Netherlands. The main authors and institutions found reinforce the predominance of the countries mentioned. Regarding the areas of study, we observe that the publications are concentrated mainly on the Social Sciences, Environmental Sciences, and Engineering. The areas of study are also confirmed through the journals with the highest number of publications. The science mapping demonstrated the relationships in terms of authors, citations, and keywords,

allowing an overview of the theme. The results of the study were very enlightening about the importance that waterfronts have been presenting in the planning of urban and metropolitan contexts; the perspectives on which they have been studied; and the changes that have been registered in this historical path. Also, in view of the challenges cities and communities are facing, it was possible to recognize very promising research areas.

Keywords: urban planning, urban waterfront, metropolitan waterfront, riverfront, bibliometric analysis

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THE CIRCULATION OF URBAN DEVELOPMENT MODELS AND EXPERTISE: THE EXPORT OF 'SINGAPORE MODEL' AND ITS TRAJECTORY IN URBAN CHINA (555)

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A global export and dissemination of urban planning knowledge is not a recent phenomenon (Larkham & Conzen, 2014; Nasr & Volait, 2003; Ponzini, 2020). As long as it could establish a symbolic image for the urban vision, an urban development experience or model may be loosely defined as an assemblage of urban knowledge and global technology.

In the recent three decades, some cities packaged and exported their brand of urban planning and development as a fast track to a world-class city (Meagher, 2013). At the same time, the gradual integration of global urban planning approaches into local interventions, which shows that local decision-makers use international standards as a reference (Okitasari, 2016). Effective urban development models and expertise are being compiled and disseminated globally (Pow, 2014). Now, Singapore has been established as the most often-used example of efficient urban development for policymakers and urban planners around the world, particularly in Asia (Shatkin, 2014a). Although there are numerous studies that assess Singapore's urban planning, analysis of Singapore's urban planning expertise as seen through the transnational urbanism lens is still lacking.

This research is based on an inductive approach and provides a multi-level insight into the circulation of urban development models and expertise. This study reviews the process of Singapore's urban development and its urban development expertise transferring trajectory, as well as highlighting the cross-border actors. Additionally, this study takes Sino-Singapore G2G collaboration projects as examples with a concentration on its collaboration mechanisms and the changes in different collaboration stages.

In conclusion, the article suggests that while Singapore continues to build on its urban development experience and share its knowledge base, Singapore should consider the sustainability of its urban development knowledge transfer. This study will provide suggestions to ensure sustainable engagement in transnational urban projects.

Keywords: Circulation, Urban Development Experience, Singapore Model, Government Collaboration

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FROM INTEGRATED PLANNING TO TRANSFORMATION PATHWAYS FOR CLIMATE FRIENDLY SPATIAL STRUCTURES: AUSTRIA ON THE WAY (599)

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The change of spatial steering and planning in the context of complex transformation processes requires strategies of integrated, sustainable and resilient spatial development against the background of spatial, social and political-administrative conditions. The Austrian Spatial Development Concept (ÖREK 2030), the joint steering instrument of all Austrian government levels for spatial development, prioritizes climate change mitigation and adaptation as a priority for spatial development in Austria in the coming years. The transformation task to enable climate-friendly spatial structures encompasses all sectors, all spaces and all political and administrative levels. (Austrian Conference on Spatial Planning, 2021) Many municipalities are already implementing concrete measures such as vacancy management or unsealing, and climate strategies also already exist at the level of the federal states. However, spatial planning as a whole must position itself more strongly in the direction of climate protection.

The coordination of the different demands of society on the space is a key function of spatial planning. To implement climate-friendly spatial structures, coordination between sectoral goals of specialized planning and spatial goals as well as goals for climate and biodiversity protection and adaptation to climate change is necessary. Accordingly, spatial planning as a cross-cutting issue is constantly challenged with steering problems in coordinating and integrating divergent interests. (Austrian Conference on Spatial Planning, 2021) A large number of issues such as transport, agriculture, tourism, ecology, commercial law, water law, etc. have an influence on settlement development. These specialized plans are often single-object related and conflicts of use can arise when different sectoral plans refer to the same space. In addition, most sectoral plans generate spillover effects, which are particularly problematic when the sectoral plans mask effects on other land use interests. (Svanda & Zech, 2022b)

To transform spatial planning to create climate-friendly spatial structures, it is essential to push the coordination tasks of spatial planning. (Aigner et al, 2022) Overall spatial, integrated and thus less concrete qualitative requirements of spatial planning can only partially prevail over sectoral goals, interests and technical standards and thus ensure climate-friendly planning. (Kanonier & Schindelegger, 2018)

In cross-sector coordination, it is essential to examine the spatial effectiveness of sectoral strategies and planning and to integrate spatial objectives at an early stage. Conversely, the concerns of specialized planning are to be included in the procedures and plans of spatial planning. (Austrian Conference on Spatial Planning, 2021) Coordination by spatial planning is necessary for the supra-disciplinary steering of sectoral planning and to strike a balance between competing demands on space. In order to fulfill this coordination function, spatial planning must identify areas of conflict at an early stage and make them visible to raise political awareness. Concepts and measures for solving the conflict situations are to be worked out in an integrated spatial development conception. (Svanda & Zech, 2022a)

Spatial planning that is taken seriously by all planning levels and is willing to steer, as well as new forms of planning and participation processes, can make a significant contribution to reversing the trend toward climate-friendly ways of living and doing business. (Svanda & Zech, 2022b)

Keywords: spatial planning, spatial politics, transformation pathway, integrated planning, climate-friendly life

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LENS, LINE AND LANDSCAPE: INTEGRATING METAPHORS FOR A PLANNING ECOLOGY (617)

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In line with the Congress's argument, this paper reflects on means and ways of serving integrated planning and urbanism.

Collaboration is a prerequisite within a planning attitude which includes, besides analysis, research and design, also operational aspects such as action programs and implementation. Many stakeholders need to be informed, motivated, mobilized and activated before they are willing to invest knowledge, creativity, time, money, and other valuable resources. Moreover, actual (global) turbulence urges planners to include knowledge and visions from ever more specialist fields of research and practice (climate, biodiversity, water, energy, health, food, justice...). During the resulting complex quest for concepts, strategies and instruments, collaboration is a crucial factor. Rightfully, it is promoted by many scholars and professionals. But the practice of collaboration is not obvious. The circulation of a multitude of terms which collaboration is dealt with in literature (co-creation, co-production, coalition, collective....) is an indication of some confusion concerning meaning, relevance, and applicability of this concept. Within participatory processes, stakeholders arrive with diverging images of what it means 'to collaborate'. Different attitudes, goals and (knowledge of) means reinforce the tensions between those images. Thus, a central question is: (how) to construct a 'lens' to make diverging 'lines' of thought and action converge during urban planning processes.

One way of grasping the concept of 'collaboration' in a productive way, is to learn from cases. Since collaboration is a practice as well as a principle, valuable lessons can be learned from confrontations/dialogues between facts and frames. Therefore, the paper looks at a public-private-partnership planning practice, where collaboration is a structural condition, and reflects on ongoing practices developed during several years. The case is 'Beringen Mijn', a district in a moderate Belgian city, developed out of a huge coal mining plant. From motor of prosperity, this miner's district became a monumental burden in terms of physical problems (large derelict land, huge empty industrial buildings, abandoned heritage, a worn out garden city, ...), social tensions (spatially isolated and socially divided communities of migrants and newcomers, ...), and mental disruption (loss of work and collective ethos, traumatic history, emptied signifiers, ...). Typically, such burdens also have a huge potential for new developments. To capitalize on this potential, a specific multifaceted planning approach has been introduced within the city government. Typical for this approach, the idea of integration steers heart, head, and hand of the stakeholders. ...

The paper investigates the rationale of this approach, the way it is accomplished in practice, and its results. As an analytical frame, this investigation uses three metaphors to describe, analyze and assess the approach's attitude (making of a collective lens, materialized in stories), its underlying theoretical model (meshworks of relational lines), and its modus operandi (re-making physical, social and mental landscapes). As project-director of the district, I write the paper in dialogue with a multi-disciplinary quality team of external experts and civil servants playing a

strategic role in spatial and social issues. Conclusions focus on the relevance of the approach, on crucial conditions, and on possible improvements, both on the local and on a more general scale.

Keywords: integrated planning, collaboration, metaphor, landscape, meshwork

ATLANTE DEL CIBO DELLA LAGUNA DI VENEZIA. TOWARDS A FOOD POLICY FOR THE VENICE LAGOON (650)

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Food systems and food-related policies are gaining unprecedented recognition in the planning field, advocating for more integrated planning practices (Fanfani et al., 2015; Pothukuchi and Kaufman, 2000). The reasons can be identified in a widespread understanding of the food system as a territorial and urban flow able to transform the environment, economy, and society. At the same time, such a system is subject to contemporary global transformations, above all climate change. A growing interest in understanding the implications of food-related bottom-up practices with planning practices and policies has emerged (Dansero and Pettenati, 2015; Fanfani et al., 2015). In this sense, urban and local food policies navigate a wave of re-growing interest toward bottom-up regeneration processes, stimulating collaborative and action-oriented approaches, to produce new visions, actions, and practices.

At the same time, the debate on bottom-up participation and the role of organised and proactive forms of citizenship within (urban) regeneration processes is starting to critically interpret the major achievements of the last two decades. On the one hand, it is evident that the growing horizontality of social and (in some cases) political relations among actors (Boltanski and Chiapello, 1999) led to the emergence of reticular and project-oriented governance systems as a way to design and implement public policies (Campagnari and Ranzini, 2022). On the other hand, the professionalisation of proactive citizens (or super-citizen) and the institutionalisation of spontaneous forms of participation, impose critical questions on how and why participation is used. Even non-traditional approaches based on experimenting and prototyping can be used as forms of extracting knowledge (often, for free) to produce innovation (Coppola, 2023).

At the intersection of food-related policies and critical stances toward participatory processes lies the project for “Atlante del Cibo della Laguna di Venezia”, i.e. the Venice Lagoon Food Atlas. The Venice Lagoon Food Atlas is part of the activities envisaged by the project “Cities2030 Co-creating Resilient and Sustainable Food Systems towards Food2030”, funded by the EU Horizon 2020 programme. The project’s main objective is to develop processes and product innovation, to support cities and regions in reorienting more resiliently and justly their food systems. Cities2030 proposes to use the Living and Policy Lab methodology, able to involve multi-level subjects in the co-creation of pilot projects to be tested in the financed period. Università luav di Venezia and Università Ca’ Foscari, are engaged in the activation of the labs in the Venice Lagoon through a multi-disciplinary approach, involving academia, municipalities, local associations, NGOs, and civil society. In July 2022, the student and community workshop “Cibo e Laguna. Towards an Atlas” was organised by Marta De Marchi (luav), Amina Chouairi (luav), Chiara Spadaro (Ca’ Foscari) and Cristina Catalanotti (luav). The workshop outcomes will be further discussed as a first attempt to build up the Venice Lagoon Food Atlas.

The Venice Lagoon Food Atlas can be intended as an attempt to give voice to the multiplicity of stakeholders and to non-human agents of the Venice Lagoon. It calls attention to the existing network of bottom-up practices while stressing the urgency for an effective food policy for the Venice Lagoon. Through the case study of the Venice Lagoon Food Atlas, this contribution calls for transdisciplinary integrated methodologies to intersect local – human and non-human– actors and collectively produce food policies in the muds of practice.

Keywords: Venice Lagoon, Food Policy, Living Lab

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WHY DOES POLAND CURRENTLY NOT HAVE A NATIONAL LEVEL SPATIAL PLANNING DOCUMENT? (754)

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In 2020, as a result of an amendment to the Act on the Principles of Development Policy, the National Spatial Development Concept 2030 (NSDC 2030) is no longer in force in Poland. Poland has become one of the few European countries without a spatial document at the national level. This has been criticised by expert circles, including the Committee for Spatial Economy and Regional Planning, Polish Academy of Sciences. The planned National Development Concept 2050 in the new Act does not fully meet the requirements of a spatial document. It focuses on identifying trends and challenges, rather than formulating long-term goals for spatial development. Furthermore, it has still not been adopted. The cancellation of the NSDC 2030 has occurred when the Polish space is facing challenges such as the war in Ukraine, post-pandemic reconstruction, disruption of supply chains, energy transition, adaptation to climate change, depopulation of significant areas and projects for a complete reshaping of the transport system as a result of the construction of so called Central Transport Hub (CPK). Meeting these challenges requires having a reference point in the form of a long-term vision for spatial planning.

The paper presents the history of spatial planning in Poland after 2000, pointing out its shortcomings and limitations. The thesis that the spatial planning system has not met the challenges of the 21st century is presented. It proved to be too inflexible in the face of development. This has resulted in, among other things, spatial chaos, uncontrolled suburbanisation, rising infrastructure costs and increased territorial inequalities at the local level. The realisation of large infrastructural investments (supported by the EU) was only possible thanks to the adoption of special laws (Spec-Acts) bypassing the basic planning system.

The paper attempts to assess Polish spatial policy over the last 20 years at the national level. The degree to which the goals of the National Spatial Development Concept 2030 have been realised was assessed using, among other things, measures of spatial accessibility and the results of the European ESPON IRIE (Interregional relations in Europe) project. The studies presented used the potential accessibility method, as well as matrix analyses covering all NUTS2 units in Europe. Also presented was the basis of the document Spatial Organization of Poland - a long-term perspective, which was prepared at the Committee for Spatial Economy and Regional Planning, Polish Academy of Sciences, as a proposal to fill the current gap in strategic documents. The objectives of the National Spatial Development Concept 2020 and the objectives of the proposed document of the Committee for Spatial Economy and Regional Planning, Polish Academy of Sciences were referred to the new EU Territorial Agenda 2030.

Keywords: Planning at national level, Poland, Territorial Agenda

CAMPUS DESIGN, WALKING PRACTICE AND SPATIAL APPROPRIATION: A PSYCHOGEOGRAPHIC COMPARISON OF THE *ALLE* AT VAN YÜZÜNCÜ YIL UNIVERSITY AND ANKARA MIDDLE EAST TECHNICAL UNIVERSITY IN TURKEY (756)

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‘Street’ constitutes both an essential dimension of urban design and the context of walking practice in urban space; it is not only the constructive spatial unit of public space pattern but also the main artery of urban everyday life. Psychogeography concentrates on ‘walking’ and therefore the differentiated forms of (urban) streets, and as a discipline it examines the influence of the built environment on feelings and attitudes of human beings. This paper focuses on ‘walking practice’ at two university campuses in Turkey and examines the differentiated forms of spatial appropriation at the *alle* via a psychogeographic lens. Middle East Technical University in Ankara (the capital city) was designed in 1960s with reference to a well-defined *alle* and has a long history with an in-depth socio-spatial tradition; Van Yüzüncü Yıl University is located in the eastern part of the country and constructed in 1980s, however the *alle* is attached after several decades of the first construction. This study assumes that the phenomenon of *Alle*, as an extension of ‘street’ in university campuses, is the constructive spatial structure in campus design and as a result it should be the (both physical and mental) spine of design policy. The main question of the paper is: How the spatial hierarchy penetrates the spatial appropriation at *alle*; and how it differentiates in two difference cases of campus design and walking practice. Knowledge on the interrelation between spatial appropriation and design policy would provide a relatively democrat vein of planning which considers the users’ needs, differences and demands.

The body contacts with and at urban space (with other objects and subjects) via its movements and stops, this interaction occurs through the spatial pattern of occupancy and vacancy. Walking practice leads to a set of cognitive mental representations in relation with the repertoire of place attachment and spatial appropriation. University campuses are autonomous and fruitful urban spaces to investigate such an interaction. There are both physical/real and psychogeographic representations on the same urban spaces and urban spatial practices. This separation would indicate the invisible dimensions of the difference between ‘what is conceived’ and ‘what is perceived’. This study aims to compare and contrast the role of *alle* in both campus design and spatial appropriation via walking at two differentiated university campuses through collecting the mental representations, doing in-depth interviews and attentive walks with the interviewees by psychogeographic techniques. Campus design and spatial appropriation will be compared [with reference to the conception and perception of *alle*] in three scales: (1) the historical spatial development stories and design approaches of university campuses, (2) the spatial pattern of campuses on the basis of *alle*, and (3) sub-behavioural regions of the *alle* in campuses in relation with mental representations and psychogeographic attentive walks. The sub-questions of the research are: [1] How and why the design approaches differentiate in two university campuses in Turkey, [2] How the interrelation among *alle* design and spatial appropriation differs in these two cases, and [3] What does the differentiated gaps among real and psychographic maps indicate

about the interrelation between design and spatial appropriation. METU, as a well-designed, readable campus with its *alle*, promise a rich walking practice with in-depth and fruitful spatial appropriation regions; however, Van YYÜ limits both the practice and place attachment with its partial design with an alle which is later added to the campus. This research both displays the role of alle in the campus design, walking practice and spatial appropriation and opens a new methodological path to discover hidden knowledge within urban spaces.

Keywords: Alle, campus, cognitive geography, psychogeography, appropriation of space, urban design, Turkey

RESEARCH ON THE VARIABLES, ACTION SITUATIONS AND DEVELOPMENT MECHANISMS OF RURAL TRANSFORMATION BASED ON SOCIAL-ECOLOGICAL SYSTEM FRAMEWORK: A CASE STUDY OF YU VILLAGE IN ZHEJIANG (769)

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In recent years, driven by the dual-wheel strategy of new urbanization and rural revitalization, some villages in China are undergoing a stage of transformation and development. Social, economic and spatial patterns in rural areas are reconstructed due to the reorganization and interaction of urban and rural population mobility and economic and social development factors in the process of rapid industrialization and urbanization, and the local participants respond and adjust to these effects and changes, making rural areas increasingly become a complex, dynamic and open system composed of social, economic, ecological, political, governance and other subsystems. This rural transformation process is a epitome of the rapid evolution of the global social-ecological systems, and the disturbances from internal and external natural, social and economic environment during this process are complex, uncertain and unpredictable, which leads to the fact that the rural areas will not only successfully complete the advancement from low level to high level, but may also go backwards or even collapse. Therefore, before the comprehensive planning of rural areas, there must be a multi-level analysis and decision-making framework to identify the variables, action situations and development mechanisms, which is the key to promote the sustainable development of rural areas. This paper applies Ostrom's general social-ecological system framework to the transformation and development process of Yu Village in Zhejiang, and the conclusions show that, as an external top-level policy, "Two Mountains" theory has endowed Yu village with a political highland status, which makes the governance system of Yu village more diversified and effective, and guides relevant actors to effectively organize the utilization of various resources through party building and village governance. Four action situations and mechanisms have successively promoted the sustainable transformation and development of Yu Village, and it is now facing some opportunities and challenges of transformation to a new stage of development in the adaptive cycle.

Keywords: rural transformation; social-ecological system; framework; governance system; adaptive cycle

RETHINKING 'CONSERVATION' FOR PLANNING COMPLEXITIES (792)

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The new emergencies and complexities open a path for planning. It is proved that market-based conservation, valuation of ecosystem services and community-based conservation programs did not deliver the expected results in the face of new global emergencies like climate change, water crises and pandemics. As rigid and boundary-specific conservation practices get increased, 'sustainable' economic activities and unlimited consumption are, nevertheless maintained simultaneously. Furthermore, such practices create new inequalities in new territories. The mainstream conservation approach is limited to protect biodiversity, flora, and fauna within specific boundaries without considering the socio-environments. Primitive accumulation has been occurring through land-grabbing and dispossession at the peripheries of the protected areas that have resulted in environmental injustice, socio-economic inequalities, and loss of global commons such as oxygen, water, biodiversity, or soil.

On the other hand, precious debates in the literature about water security, conservation, ecosystem services and resilience may contribute to an efficient conservation approach and planning model. However, they deserve to be politicized and to be considered beyond technical solutions in order to reduce socio-environmental and economic inequalities. The planning discipline is equipped to handle all concepts relationally and politicize them with radical conservation solutions. Such a way of thinking would remarkably contribute not only to new openings for critical thought and practice, but also to decisions of non-governmental organizations and policymakers in conservation.

Reconsidering the concept of 'conservation' through socio-ecological connectivity would contribute significantly to develop planning policies and practices. A wide range of issues from local agricultural production, water to food security get more and more important during the pandemic. On the other hand, reducing deforestation becomes more significant to avoid unforeseeable floods and droughts due to the climate crisis. Planning debates are shaped around vulnerability, resilience, trade-offs, or water-food-energy nexus concepts. Meanwhile, critical theorists put forward that 'structural change' and radical suggestions like 'degrowth' are the only solutions for successful conservation and for removing inequalities. Tackling planning and conservation issues by examining socio-metabolic processes is crucial in terms of understanding urban-nature connectedness. In the planetary urbanization era, problems and conflicts in natural areas such as energy production, waste disposal, and mining extraction that result in inequalities and environmental injustice enable thinking out of scale in case of evaluating their networks, flows, and transformations.

Political, economic, social, and cultural limitations in different contexts and scales create challenges for planning discipline to turn radical solutions into practical models. It is needed to understand the actual needs and actual 'trade-offs' by exposing the networks of production and consumption patterns, actors, and causalities in various scales. Beneficiary and disadvantaged groups and actors should be analyzed. Strategies, limits, and promotions of sectors, needs, and

actors should be defined according to the socio-environmental impacts and distribution of wealth in various scales. Although re-territorialization is problematic, it is obvious that a policy independent of geographical and spatial context is far from being practicable. A planning model targeting flexible and multi-scale boundaries but producing local-specific decisions is to be a beginning of a true solution.

Keywords: conservation, planning, urban political ecology, inequalities

PARADIGM SHIFTS: URBAN DEVELOPMENT AND PLANNING IN BERLIN SINCE 1990 (810)

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Background / Framework

The Seoul-Berlin City Dialogues are a research project conducted by academicians from the Seoul National University (SNU), the Yeosijae Future Consensus Institute, the Brandenburg University of Technology (BTU) Cottbus-Senftenberg, the Berlin University of Technology (BHT) and the Anhalt University of Applied Sciences, Dessau. The project has been supported by the German Academic Exchange Service (DAAD) and the National Research Foundation of Korea (NRF) within the framework of the German-Korean Partnership Program (GEnKo). The cooperative project began in 2019 and was extended due to the pandemic through 2022.

The Dialogues have to date focused on themes of urban development and planning in the two cities and sought a comparative analysis not only of actual urban development but also of planning approaches and strategies as well as specific development issues such as housing. In addition, the research has traced urban planning policies and identified relevant policy-makers within the respective political-administrative context. The temporal focus has been primarily on the “recent” periods of rapid growth, i.e. since 1988 in Seoul and since 1989/90 in Berlin. Watershed events were the establishment of a civil national government in 1988 and the Olympic Games in the same year in Seoul and the fall of the Berlin Wall in 1989 and the subsequent political reunification of Germany in 1990.

Please refer here to abstracts and presentations from the other members of the research consortium: Prof. Youngsang Kwon, Dr. Hanbyul Shim and Dr. Jeongil Seo from the Seoul National University (SNU); Prof. Gernot Weckherlin from the Anhalt University of Applied Sciences, Dessau, Germany.

Paradigm Shifts

In the context of the German city of Berlin, the research has examined the conditions and parameters of urban development and planning in particular since 1989. Three main periods have been identified, each with its own paradigm:

- 1989 – 1999: growth and expansion
- 2000 – 2010: decline and contraction
- 2010 – today: growth and densification.

The paradigms of urban planning will be presented according the following structure:

- 1) major event / milestone initiating the paradigm shift or the new paradigm
- 2) general local, national and international context
- 3) demographics: in the respective period and predicted (when possible)
- 4) planning approaches / paradigms
- 5) consequences for urban development and planning; actual development
- 6) related events, e.g. “watershed” events, exhibitions, conferences, publications etc.

For purposes of illustration, timelines for each period will be shown including actors, major events and milestones etc.

Based on the examination of urban development and planning in Berlin since 1989/1990, it is possible to draw the following conclusions:

- The primary driving factor in determining the respective paradigm has been demographics.
- External events and factors in demographic development, e.g. armed conflicts and the wave of in-migration in 2015 or the current war in Ukraine have played an important role.
- There has been a coincidence of certain developments, e.g. demand for housing and low interest rates, but this is often more a correlation than causal relationship.
- There is a dependency of (public-sector) policy-makers on private investors in housing production.
- Suburbanization is not always linear and one-way, e.g. there occurred a certain consolidation and return to the city in the second period (2000-2010).
- Other market factors have been significant in development, e.g. the period of low interest rates from about 2010 to 2022.

Finally, these conclusions will be critically assessed and subject to discussion in the presentation session.

In the course of less than 33 years, Berlin has undergone far-reaching transformations of significant proportion and, as the paradigms indicate, of varying and practically contradictory character. The paper and presentation will provide an overview of these paradigm shifts, their respective societal-political context and the consequences for urban development and planning.

Keywords: urban development; urban planning; planning paradigms; comparative analysis; international research; Seoul, Korea; Berlin, Germany

THE LOCATION DETERMINANTS OF THE SERVICE FIRMS RELATED TO SERVITIZATION OF MANUFACTURING: EMPIRICAL ANALYSIS AND IMPLICATIONS FOR BALANCED REGIONAL DEVELOPMENT IN KOREA (863)

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The purpose of this study is to empirically analyze the location determinants of service industry that support the manufacturing industry in the recent trend of servitization, and to provide implications for the balanced regional development policy.

Industry is closely related to regional economy, and this can be a key to current unbalanced growth of cities. Traditionally in many countries, manufacturing led national and local growth, generating high added value, productivity and employment, but gradually has entered a decline due to the introduction of advanced technologies. Declining in manufacturing causes population outflow and economic weakening in the region, and this creates a vicious circle that leads to industrial decline again. However, increasing number of manufacturing companies are adopting servitization currently. Manufacturing industry increases productivity or added value through convergence with the service industry or changes its own business model to provide service to customers. However, there are only a few researches about how to attract service firms that are related to manufacturing to promote this trend and revitalize the regions. Ultimately, this paper addresses two primary research questions: (a) What is the classification of service industry supporting manufacturing? (b) What are the location determinants of service industry related to servitization of manufacturing?

To address these questions, firstly, this study explains the definition and mechanism of servitization and classify service industry supporting manufacturing by I-O table. Second, by using a multiple regression model, finds out location determining factors of service firms related to servitization and provides implication for the balanced regional development policy.

Keywords: Servitization, Location determinant factors, Input-Output table, Multiple regression model

HOW TO OPTIMIZE THE URBAN ECOLOGICAL NETWORKS IN CONTEXT OF THE UNEQUAL GEOGRAPHIC DISTRIBUTION OF BLUE-GREEN SPACES? A CIRCUIT THEORY BASED METHOD (896)

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Blue-green spaces have a comprehensive effect on the urban landscape ecology and provide a variety of ecosystem services on which humans depend (Alkama & Cescatti, 2016; Pouso et al., 2021; Zhou et al., 2022). However, we found that the unequal geographic distribution of blue-green spaces was caused by urbanization in some areas, which limited sustainable development (Fan et al., 2022; Wang et al., 2022). It can be optimized through protecting, restoring and building an ecological network to improve their connectivity. In this paper, the combination of ecosystem services, ecological sensitivity, landscape characteristics and morphological pattern analysis (MSPA), landscape connectivity analysis, and the government-protected area was applied to identify the ecological source. Then the urban ecological networks were constructed by Linkage mapper and simulated potential corridors with Circuitscape 4.0. Finally, the ecological networks were optimized by adding stepping stones according to the potential corridor breakpoints and the barrier points identified by the Barrier mapper. The results show that: (1) 35 ecological sources (6096.11 km²) were identified, the western part clustered, the eastern part scattered and connected by Xian Mountain; (2) 73 ecological corridors were constructed, and the current map showed lower values in the northern and southern parts; (3) the maximum and average values of the current map were significantly increased after optimization. The area of blue-green spaces only increased by approximately 1% of the ecological source, while the ecological corridors increased by 65.75%. This study provides recommendations for the optimization of the urban ecological network. It can also provide useful decision-making guidance for urban planners in investigating, analyzing, and adjusting the distribution of blue-green spaces to achieve equitable geographic distribution outcomes, while promoting the harmonious and sustainable development of cities.

Keywords: ecological networks, unequal geographic distribution, steppingstone, urbanization, Xiangyang city

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INVERTING URBANITY: THE SUB-URBAN AS A PRE-CONDITION TO THE CITY (901)

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Taking the case of Thane city, which underwent development due to its proximity to Mumbai, the paper seeks to problematise the idea of what constitutes a city, and whether suburban development (with or without that name) is a necessity for the growth of cities.

Present day Thane has a history of being a centre for trade and commerce that predates (Calman, 1987) Mumbai city as a colonial port town as well as of Pune as the capital of India. Thane re-emerged as an industrial centre in the 1960s. It is a component of the Thana-Belapur development incentivised by Maharashtra state (Shaw, 1990). The state facilitated the development of infrastructure necessary for industrial activity by building a dam and a power station (Chibber, 2008). Yet, like post-1980s Mumbai, industry moved increasingly to the fringes of Thane. The city itself, like Mumbai proper, hosts a residential component along with retail and tertiary sector activity (Indorewala & Ramakrishnan, 2017).

Thane, despite its status as a city, is a suburb of Mumbai. Thane, like Mumbai, has a suburban area. The intent of this study is to shed light on the following

1. The non-urban processes (Harvey, 1978) which led to migration of people to Mumbai and Thane in the 19th (Chandavarkar, 1994) and the 20th (Shaw, 1990) century. Migrants became the early industrial workers in India, but were also engaged in diverse service positions (Rao, 2013). To compare the labour migration to Mumbai to that which came to Thane, is to investigate what non-urban processes are necessary to produce urbanity.

2. Apart from the population parameter, what incentives does the state have to provide the legal designation of 'city' to an area that continues to function as a suburb to Mumbai. What relations of production are necessary for the suburb to function with this dual identity?

In so doing the study will develop a genealogy of the term suburb. The study will investigate whether cities can only be developed with a sub-urban area that while formally unplanned, is essential to the development and entrenchment of capital in the city.

The study will make use of secondary literature on the subject as well as state literature to facilitate the study of the reasons for migration, as well as to investigate the historical precedence for suburbs. To demonstrate that urbanisation of land is an intentional process and to understand state incentives for the same, the study will use policy analysis as a tool to investigate how urban taxation and planning regime undertake urbanisation (Guha, 1987) of the city-fringe.

Keywords: Urbanization, Suburb, Relations of production, Urban processes

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THE LONGITUDINAL CAUSALITY OF GOVERNANCE-IMPACT RELATIONSHIP IN URBAN (RE)DEVELOPMENT (926)

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Research on urban (re)development practices is usually carried out from two dimensions, aiming at unravelling the complicated decision-making and implementation process or intending to profile the profound impacts and consequences. According to definition of governance as “a set of relations and the process of the formation and implementation of collective decisions involving both elected and non-elected organizations as well as individuals” (Goodwin and Painter, 1996, Wu, 2002, Briassoulis, 2019), the main research perspectives on urban (re)development could be categorized as the governance-focused and the impact (outcome)-focused. Cross-sectional studies have constantly elaborated on the positive or negative association of different elements of governance with specific (re)development outcomes. However, such findings contribute little to understanding the causality of the governance-impact relationship for three reasons. First, substantive heterogeneous and dynamic components are involved in the governance-impact relationship. A cross-sectional snapshot of the association of certain governance elements with particular outcomes is easily confounded by unobserved details. For example, recent longitudinal research on participatory governance in China’s Neighbourhood mobilisation has pointed out that the unforeseen informal participation, instead of formal ones, worked more effectively in the negotiation between the society and the state (Cao, 2022). Second, governance impacts differently in different contexts (Wu and Zhang, 2022). It is not clear whether conclusions of a specific case can be directly compared to that of other cases. For example, the concluded state-market relationship in Western contexts has been challenged by cases of China and the global South (Birch and Siemiatycki, 2015, Wu and Zhang, 2022). Third, governance-impact is not a linearly sequential production process but a complex whole. Concretely speaking, ‘impact’ is not a post-product of governance but an active part in the governance-impact relationship network, which is capable of interacting with other impacts and different governance components, and further, exerting new impacts.

Compared to cross-sectional research, longitudinal studies represent a big step forward in terms of uncovering the governance-impact causality by virtue of focusing on within-individual-case variations and dynamics over time. However, despite these advantages, there is an inadequacy of longitudinal empirical research. The insufficiency may come from 1. the complexity of the governance-impact relationship itself (heterogeneous components of governance and dynamics in outcome-producing); 2. an inadequate theoretical foundation of understanding the complexity and dynamics in the governance-impact relationship, thus leading to the further deficiency of research approaches that longitudinal studies can draw on. This research tries to fill the gaps in three steps:

1. To build an integrated theoretical conceptualisation of the governance-impact relationship starting with understanding governance and its related impacts as a dynamic whole.

2. To conduct a systematic literature review driven by the theoretical model from step 1, to figure out how is the governance-impact relationship in urban (re) development understood in current research. While both cross-sectional and longitudinal evidence is under review, a specific observation is conducted in longitudinal empirical research to reveal the patterns of 1) the most linked governance components and impacts; 2) the trend in understanding the causal relationship of governance-impact; 3) the methodologies used to examine the causality of governance-impact relationship. A reflection on the current knowledge is made to answer three questions: (1) What are the inconsistencies between cross-sectional and longitudinal understandings of the causality of governance-impact relationship in urban (re)development and why do these inconsistencies occur? (2) What obstacles are in conducting longitudinal empirical research on the governance-impact relationship in urban (re)development? (3) How have current longitudinal studies empirically examined the governance-impact relationship over time and what are the conclusions reached by these studies?

3. To outline an agenda and potential avenues for future longitudinal empirical research on the governance-impact interdependency in urban (re)development.

Keywords: urban governance; governance-impact relationship; urban (re)development; longitudinal research

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THE DEVELOPMENT OF HEALTHCARE FACILITIES IN RAPIDLY URBANIZING CITIES: A CASE STUDY OF SHENZHEN (928)

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Urbanization is an important social process in the 21st century. In the exploding metropolises, providing medical services has become one of the most significant challenges. The outbreak of Covid-19 has challenged the capacity and ability of the public medical system, as well as the coordination and efficiency of decision making.

Shenzhen is a megacity with tens of millions of people in South China, globally known for its rapid urbanization. Like many fast-growing cities, providing adequate quality medical facilities for a rapidly growing population has become a huge problem in Shenzhen too. The city has been tackling these problems by enlarging existing hospitals or constructing new large ones. However, while the number of medical services has improved, other related issues have occurred.

This research will study the development of hospital buildings during the fast urbanization period through interviews, literature review and GIS mapping. The study concludes that there are four perspectives of the strategies for developing a better urban hospital system: a) governance strategies in the healthcare system, construction mode and related policies; b) urban design strategies in hospital planning and design; c). architecture design strategies in hospital designs; and d) other new technologies in urban hospitals.

Keywords: Shenzhen, urbanization, healthcare, medical system, urban planning, China.

AN OPERATIONAL AND CONCEPTUAL MODEL OF EVIDENCE-BASED DESIGN AND PLANNING (EBDP): REVIEWING THE STATE OF THE ART, EMERGING CONCEPTS AND FUTURE POTENTIAL OF EBDP (939)

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Urban planning and design are called to respond to complex, urgent and multifaceted urban challenges, mitigating environmental burdens and risks and creating the conditions to enable a high quality of life in cities. Addressing such challenges requires different kinds of analytical approaches supported by multidisciplinary expertise, as well as the ability to visualise and communicate research findings to local authorities, private stakeholders and civil society. Evidence-based approaches aim at assisting planning and design with rigorous analytical methods to reduce the risk of failure; as such, they are ever more sought after as necessary tools to ensure that urban challenges are addressed effectively and sustainably, based on sound knowledge and understanding of the impact of design and planning decisions. Evidence-based design (EBD) was brought to the fore by a seminal study by Roger Ulrich (Mullins et al. 2015) and is considered a tool to improve the performance of design solutions. It is defined by the Centre for Health Design as ‘the process of basing decisions about the built environment on credible research to achieve the best possible outcomes’ (Martin 2009). Therefore, it can be extended to urban design and planning as a practice of formulating solutions through researched and documented knowledge. Evidence-based design research models do exist but are so far only focused on architectural interventions, especially healthcare architecture, despite the growing demand for evidence-based urban practices.

In the framework of the Horizon project *Twinning towards Research Excellence in Evidence-Based Planning and Urban Design*, this paper aims at bringing together various strands of EBD theory and practice through a literature review, a reflection on the state-of-the-art of EBD, an assessment of the gaps and future potential of EBD and an exploration of emerging concepts in the field, which can serve as the basis to create new methodological tools to achieve maximum interdisciplinary interaction among different integrated and spatial planning approaches. The paper concludes with a proposed conceptual and operational model of evidence-based design and planning (EBDP), embedding spatial analysis as the key component of evidence-based practice.

Keywords: evidence-based design, planning and design theory, spatial planning, conceptual models

THE CHALLENGES IN INTEGRATING INNOVATION HUBS TO METROPOLIS SEOUL (982)

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Background

This paper is part of an ongoing interdisciplinary research focused on the strategic plans of Berlin and Seoul, conducted by researchers from the Brandenburg University of Technology Cottbus-Senftenberg (BTU), the Berlin University of Applied Sciences and Technology (BHT) and the Anhalt University of Applied Sciences, Dessau, and Seoul National University (SNU). Please refer to the other abstracts from the research group: J. Miller Stevens (BTU). Gernot Weckherlin (Hochschule Anhalt), Youngsang Kwon (SNU), Hanbyul Shimm (SNU).

Abstract

This paper examines the new and complex challenges in integrating knowledge-driven innovative urban spaces in metropolis Seoul. It will show evidences of potential and actual fragmentation in urban function and discuss its main causes and future solution, including the problem of integrating narratives, policies, plans and designs.

The economic initiatives and narratives included in the strategic Seoul Plan 2030 and its sequels (Seoul Vision 2030 and Seoul Plan 2040) emphasize the decreasing population and losing economic resources, which Seoul has enjoyed for its domestic monopoly (its population would increase only by 200,000 from 10 million during 2014–2030 for which the strategy is written). In response to this unexpected transition, the strategy aims to hedge the uncertainties to protect Seoul's competitiveness. Thus, Seoul is aiming to further strengthen its R&D-centered innovative industry by offering its spatial support, though it is unrivalled in the numbers of universities (as many as 50) and research institutions and the size of government budget (Seoul is ranked almost highest globally, for the R&D sector GPCI index). The Seoul plan has set many innovation hubs such as G-Valley, DMC, Magok, the Hongneung, Mapo, and Yangjae as innovation hubs in its follow-up plans.

This paper will discuss in detail the Magok district, the last large tract of land (366 ha.) available for development in Seoul. It attracted R&D facilities associated with large businesses and SMEs, and the entire industrial complex is characterized by a series of features observed in high-density metropolitan cities. LG Science Park, which is a research complex a single large company established at the center of the Magok district, was developed in the form of a massive super block interconnecting unit spaces and associate companies using atrium and linear spaces within the block.

Other districts such as Hongneung, Changdong and Sanggye area have been selected among the old urban districts to be transformed and specialized in the bio industry, but for these areas, the research and entrepreneurship functions and the commercialization function will be spatially separated. For the “Tech-Plus City” that is to be developed in the Yangjae district, an R&D campus will be constructed in the artificial intelligence (AI) innovation. More challenges are ahead such as high-cost structure and the lack of developable land, and the implication is that there are limitations to the potentiality of metropolitan city.

Keywords: Innovation Hubs, Strategic Plan, Seoul, Magok, Fragmentation

QUANTITATIVE URBAN MORPHOLOGY TOWARDS INTEGRATED PLANNING: AN OPEN-DATA METHODOLOGY TESTED FOR ATHENS, GREECE (1006)

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Cities are complex systems that require careful planning to meet the needs of citizens and communities. While traditional morphological approaches have been used to understand and plan cities (Alexander, et al., 1977; Bandini, 1984; Lynch, 1960/1990; Hillier & Hanson, 1984), they are limited in their planning applications as they focus mainly on the symbolic dimension of urban form. In contrast, spatial analysis offers a quantitative and analytical approach to describe the patterns of urban form, making it more suitable for contemporary urban forms and form-based planning (Serra, 2013; Palaologou, et al., 2020; Ye, et al., 2017).

This paper proposes a combinatorial approach of urban morphology and advanced spatial analysis as a supporting tool for urban analysis and planning. Using an open-data methodological framework, the study explores the patterns of urban form in the historic Mediterranean city of Athens, Greece. Three elemental components of urban form - buildings, streets, and land-uses - are identified through K-means clustering and advanced spatial analysis techniques, which quantitatively define the signatures of build density, network centrality, and functional mixture, respectively, following the relevant work of Berghauser Pont, et al (Berghauser Pont, et al., 2019a; Berghauser Pont, et al., 2019b). The methodology was evaluated through virtual focus groups of 20 experts in various fields related to urban planning, urban geography, typo-morphology, sustainable mobility, and urbanism, who demonstrated its effectiveness in capturing the unique character of Athens' neighborhoods and usefulness in the early stages of planning efforts.

The paper highlights two significant contributions to the field: first, the reliance on readily available open datasets for European cities makes the methodology replicable for comparing the urban forms of other European cities, and second, the development of urban types for functional mixture, a fundamental element of urban form, which is currently missing from the relevant literature. The proposed research is tightly linked with planning, as it enables planners to identify modular urban form types and use form-based planning in the various stages of planning efforts. Furthermore, the validation of the results by local experts offers an excellent opportunity to thoroughly assess and advance the methodology and its role in planning practice.

In conclusion, this paper emphasizes the importance of urban form types in planning procedures, and specifically, the need for a combinatorial approach of urban morphology and advanced spatial analysis as a supporting tool for urban analysis and planning. The study demonstrates that the proposed methodology effectively captures the unique character of Athens' neighborhoods and can be helpful in the early stages of planning efforts. It is replicable for comparing the urban forms of other European cities and has significant planning implications for creating a more sustainable and livable environment for citizens.

Keywords: urban form; integrated planning; space syntax; focus group; urban types

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HOW TO MEASURE THE REGIONAL IMPACT OF THE BLUE ECONOMY: THE METHODOLOGICAL INSIGHT (1109)

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Blue economy is one of the key priorities of recently adopted marine spatial plans in almost all EU maritime countries. This is a new factor shaping maritime spatial development. EU is actively supporting growth of its maritime (blue) economy since 2012 although many authors put the beginning of this process forward to 2006 i.e. the launch of the EU integrated maritime policy. Due to external circumstances (climate change, energy shortages) these efforts have recently received additional stimuli.

The problem is, that blue economy impact is mainly analysed in EU at national level. It seems that research on sub-national impact of development of marine economy is scarce and the adequate tools are missing. Sub-national level of analysis takes very frequently form of case studies. The research project that have paved the way for measuring blue economy at local level also limited the spatial range of their analysis to the coastal regions. Also seminal ESPON project ESaTDOR have researched economic and other interrelations between sea and coastal areas.

Thus not questioning the reality of the leading role of maritime regions in the blue growth one should however also note that associating blue economy only with coastal regions is highly misleading. This has been partially (because only for two sectors) proved by Weigand Schultz-Zehden (2019) on the basis of the collected bottom-up data for Germany. They showed that the blue economy is spreading all over Germany. Unfortunately, this article only examines close ("first-order") indirect relationships with other industries. Thus the question concerning the broader spatial incidence of the rapid development outlined in the previous paragraph in EU remains unanswered. This is an important issue since it seems that many of the local development actors are not aware of possible threats and opportunities that might face soon (for Poland see Laskowicz (2021)). The existing analytical methods do not allow for the comprehensive analysis encompassing secondary impacts of blue growth. They miss a large part of the effects stimulated by the blue economy. Input-Output models make it possible to capture these effects. Although, they are heavily used to study the blue economy (see literature review), but they do not show how the upstream and downstream dependencies are shaped in space.

To fill in these gaps we have applied a regionalized version of the Leontief I-O model, where interregional input-outputs relationships are estimated using the Bayesian techniques. The methodological advancement of the proposed research approach is in including the maritime sectors to the standard I-O matrices published by the Polish Statistical Office and by regionalizing their backward linkages i.e. estimation of missing parameters of spatial weight matrices using a Bayesian technique as presented in Torój (2021). The results reveal that the blue economy has a significant impact on Poland's economy (6% of GDP in comparison to below 1% without

considering backward linkages). In addition, the bulk of the upstream supply linkages tends to occur in proximity, i.e. within a range of 200 km, to the location of the maritime sectors confirming the tendency of clustering the blue economy. Among the non-coastline regions, Mazowieckie, Wielkopolskie and Śląskie benefit most from the activity of the blue economy in terms of indirect and induced effects. Importantly, the total impact of marine sectors on the regional economies is nonnegligable in relative terms, that is in relation to GDP. If backward linkages are taken into consideration in the vast majority of the Polish regions the total effects of the blue economy exceed 1% of their GDP. Even economically weakest regions with a relatively large share of agriculture reap benefits from the blue economies. The one of the economically weakest regions, i.e. Podlaskie, is greatly benefited by the linkage with the blue economy. The well-developed agriculture sector is a vital supplier to such marine branches as food processing and aquaculture. The research complements the existing literature by showing the full role of the blue economy in regional development within a coherent modeling framework.

Keywords: blue economy, maritime multiplier, regional impact, Input-Output tables

TRACK 02: SMART AND AGILE PLANNING: SMART CITIES AND REGIONS

IDENTIFYING DECISIVE PLANNING STRATEGIES FOR SMART CITIES: INDIAN SCENARIO (59)

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The field of Smart Cities and City Management Systems encompasses an enormous variety of technologies, including energy management systems and services/transportation controls. The function of City Management Systems is central to 'Smart cities' concepts; its purpose is to control, monitor and optimize city services, e.g., lighting; heating; security, CCTV and alarm systems; access control; audiovisual; ventilation, filtration and climate control, etc.; even time & attendance control and reporting. At this juncture it is evident to dwell upon smart city characteristics and their possible planning strategies before starting any developmental activities. Different typology of cities (like heritage city, Green city, Eco city, Capital City) imposes different kind of problems and therefore they need unique or city-specific planning approach. Govt. of India has earmarked 100 smart cities to kick start this process (Govt. of India, June 2015). Further, seamless communication system, maintenance free infrastructure, disaster mitigation system, instant follow-up action on medical emergencies, rapid response system, enforcement of backup plans are also a must for smart city development. Intelligent features of smart city development are to be identified and earmarked for architects/planners (Sanyal D. 2000). Uninterrupted city services, availability of all basic amenities like health care, education, commerce, etc. should be readily available. These cities should be engines of economic growth rather than acting like an administrative town. It is notable that structures can vary up to 60% in capital energy requirement, as a result of architect's choice of materials (UNCHS (Habitat) 1991a). So, Energy efficiency rather sufficiency should also be a criteria (Sanyal D. 1997). The urban dweller's preferences should directly find their way in the planning. The central idea should be helping the citizens with technology and efficient planning. This paper presents some major planning strategies for consideration of architects/ planners dealing with smart city development.

Keywords: Smart City, Housing, Planning Strategies, Rapid Construction, Infrastructure

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PROBING ROLE OF PERCEPTION IN THE MASS HOUSING MARKET OF DELHI: A SOCIAL MEDIA-BASED APPROACH IN URBAN STUDIES (63)

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The global development agenda outlines housing as the most prevalent sector. Continuous monitoring of housing price developments is essential for the public and policymakers. The good reason behind it is that in developing countries like India, the investment made in housing assets is the single most significant investment done by most households (Glindro *et al.*, 2007). The ultimate critical investment is a loss-making deal if the housing property is overvalued. The overvaluation of housing assets has been encountered in many global real estate markets. Such overappraisals lead to a “Real Estate Bubble” or “Housing Bubble” (Ahmed, Jawaaid and Khalil, 2021). However, these bubbles are unstable and unpredictable. Often, such overvaluation may be due to the availability of any specific service nearby, connectivity of the housing complex with the nearby public transit nodes, and better perception of people towards the locality or lesser crimes. Residents are benefited when a better perception prevails for their local area, while they get negatively impacted if any anti-social activity occurs (Tita, Petras and Greenbaum, 2006).

People, perceptions, and prices act out in harmony in housing markets. Collecting the perceptions through the manual survey is time-consuming and cost consuming. Studies suggest that instead of manual surveying, asset pricing can also be predicted with similar precisions by analyzing the sentiments expressed on social media (Hannum, Arslanli and Kalay, 2019). The study attempts to probe the role of perception in the mass housing market of India’s capital, Delhi. In this study, the perception is quantified using valence and arousal values of tweets by undertaking the sentiment analysis of the social media textual data. The unit price contours and contours depicting the annual shifts in unit prices are prepared by interpolating the sample price data of mass housings in Delhi using geographical information system. The interpolated price and yearly price changes are captured for 75 different locations in Delhi. The average arousal and valence are also derived for these locations. A crosstab analysis and chi-square test are performed to investigate the role of perception in the mass housing markets of Delhi.

The results suggest that the role of perception in the housing market is not persistent throughout. However, it varies over the period. The results show that arousal usually has a short-term impact on housing prices, while valence has a long-term effect. This study is helpful for policymakers in the decision-making process to alleviate the risk of housing bubbles due to the overvaluation of properties. The study also suggests the further scope of research to tackle the bubble risk in rapidly urbanizing cities of developing countries.

Keywords: Housing Bubble, Sentiment Analysis, Housing Prices

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HYBRID SPHERES OF PARTICIPATION: ENGAGEMENT AND MOBILIZATION THROUGH DIGITAL MEANS (125)

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In the face of the diffused practices of civic activism across European cities, in the last few years forms of digital participation have been gaining ground at different level. Moving from this background, the paper will explore how the digital sphere interacts with the analogical one in the activation and mobilization of grassroots organizations, looking in particular at how the new, hybrid spheres of governance and participation are able to shape the basic forms of interface between grassroots organisations and other urban actors, in a citizenship perspective (Isin, Ruppert 2020). In the light of the recent debate (Wilson, Tewdwr-Jones 2022; Vadiati 2022), the paper first explores the theoretical implications underpinning the growing use of digital technologies within contemporary participatory planning, to then critically discuss empirical cases. In particular, the authors aim to investigate the interrelation between the diffusion (and relative success) of digital engagement and participation practices and their implications in the framework of the communicative-collaborative model (Healey 1997; Forester 2009). What kind of critical issues does the experimentation of innovative technologies raise in participatory planning processes, if the traditional collaborative setting is not somehow re-contextualized? Starting from this premise, the paper addresses the following research questions:

1. how to ensure that the knowledge produced by citizens, both independently and via interaction/transaction with institutional actors is correctly conveyed by the digitalised processes?
2. Consequently, who should ensure that the use of new technologies does not end up increasing the risks of manipulation inherent to the process?
3. How can the use of digital technologies affect power relations within the process of interaction between actors? Isn't there a risk that those who control the technological procedure could evade the public scrutiny?
4. Isn't it too much for granted that all those who attended in community engagement experiences know exactly how the technologies introduced into the processes work? Are these new hybrid spheres inclusive or potentially more exclusive (thinking, for instance, about fragile categories such as elderly or people with disabilities: can they really part of the target to which the 'digitized' participatory processes are aimed?)

Through literature explorations and using empirical findings from case study research done by master students in a course on Conflict Management at Politecnico di Milano, the authors intend to highlight the fact that the diffusion of hybrid digital spheres of participation entails unprecedented responsibilities for citizens, experts and institutional actors. It is worth reflecting on the fact that the use of these technologies might represent a deceitful turn, for instance limiting the access of fragile users to participatory processes.

Keywords: Civic Engagement, Digital Participatory Planning, Collaborative Planning Model

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RESIDENTIAL LUDS SWARMING THE CITY: THE DIGITAL POLITICAL POWER OF NEW HIGH-RISE NEIGHBORHOODS (154)

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The new residential large urban developments (LUDs) are widely investigated as a significant global urban transition. They change the skyline and volume of many cities and with them, the way cities function and are experienced (i.e. Drozd, Appert and Harris, 2018; Eizenberg, 2019; Nethercote, 2018). Somewhat unique to residential LUDs is an array of technologies that are embedded in their structure and inscribe their operation, social-spatial relations and in the environment in which they are located (e.g., Garfunkel, 2017; Shilon and Eizenberg, 2021).

Residential LUDs are progressively mediated and experienced through digital devices (Ash et al., 2018), which offer users a different set of abilities for controlling and managing their spatial surroundings. This paper negotiates the complex implications of the emerging digital infrastructure of residential LUDs with other urban stockholders and decision-making processes of spatial planning. Data collection is based on observations, in-depth interviews, and social media analysis conducted in three residential LUDs in the city of Petah Tikva, Israel. All three residential LUDs, built in the last 15 years, inhabit the middle and upper-middle-class population.

We found that digital communication devices (i.e., social media) in the residential LUDs play a significant role within the housing environment as well as in the wider urban context. Therefore, this paper examines the complex role of digital communication in the daily lives of LUDs dwellers, how it constructs new residential roles, new spatial practices, and neighborly relations, and most crucially, how it functions as a new communication platform with the municipal authorities. Thus, we show how the socio-spatial structure of the residential LUDs embedded with communication technologies produces a distinct model of self-organization with capacities to influence municipality's conduct and a plethora of planning actions.

These findings bring to the fore the tension between the distinct, mostly isolated form and function of the new residential LUDs from the traditional city, as privately self-managed extensive urban segments often contain many urban functions (open green spaces, religious, education, and commercial uses, etc.) on the one hand, and the channels of communicating with and influencing the city authority on the other hand.

The vertical, dense, and relatively enclosed environment of residential LUDs, the habitat of the better-off urban groups that are managed mainly through technological communications, presents a particularly interesting urban setting for deliberating the manifestation of digital power that certain groups of residents obtain and its influence on the urban environment. We unpack current urban processes by analyzing the structure, practices, and positions (of residents) as mediated by a technological dimension.

Keywords: Residential large urban developments, digital-political power, social media, socio-spatial process

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EMPIRICAL PERSPECTIVES IN SMART CITIES: UNDERSTANDING COMPLEX VIEWPOINTS IN SMART SUSTAINABLE CITIES FROM THE EXPERIENCE OF SUZHOU, CHINA (173)

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The combination of 'green' and 'smart' technology is notable within the global urbanisation agenda. The development of smart sustainable cities has been seen as a catalyst to transform the socio-economic environments of the city to be more knowledge-based and eco-friendly. However, the concept of a smart city does not fully involve sustainability issues, and smart city practitioners experience numerous operational difficulties with respect to their actual development. Planners face the complex challenge of managing contrasting views, interests, and conflicts among diverse stakeholders in smart sustainable cities. The study of practitioners' views and perspectives is critical because the attitudes of professionals and policymakers may impact the development strategies and directions of smart sustainable cities, especially when there is no clear consensus built on this emerging issue.

The research employs a case study to explore practical considerations in the development process of smart sustainable cities in Suzhou, China. This research aims to investigate the practitioner's perspective and attitude in developing smart sustainable cities and highlight lessons from their experience in the planning practice. The research uses semi-structured interviews and Q methodology as research methods of measuring the different perspectives and subjective opinions to develop new ideas with a capturing of human practice, in this case, from smart city practitioners.

Drawn from the Q analysis results involving 13 smart city practitioners in Suzhou, China, the research found two operant types of distinctive perspectives and attitudes held by participants: 'public sector perspective' and 'private sector perspective'. While the two viewpoint groups revealed some points of consensus, such as the status of public participation provision in smart city development (Statement 25 in Fig 1), the results also show some debated issues. The private sector strongly agreed that smart cities are not sustainable because they use more energy than before, but the public sector expressed their view complete opposite (Statement 4 in Fig 1). The public sector agrees on the potential influence of smart technology on transforming people's behaviour to be more sustainable, but the private sector strongly disagrees (Statement 22 in Fig 1). One interesting discussion from the interview analysis is that the government is concerned about the technology-led approach from the industry, while Q survey results show that both public and private sectors agree that the sustainable strategy of smart cities needs to go beyond smart technology (Statement 27 in Fig 1).

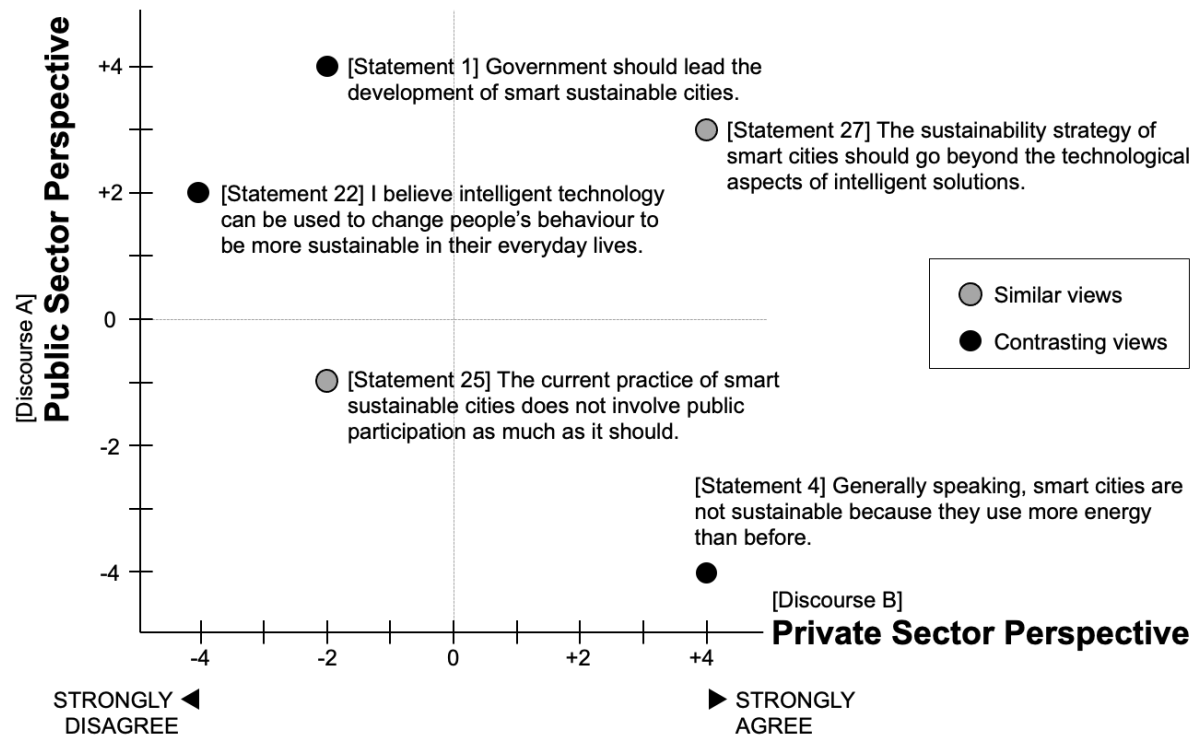


Fig 1. Subjective landscape in smart and sustainable cities in Suzhou, China

Analysing Q survey data in three criteria of the collaborative planning delivery mechanism (Batey and Kim, 2021), the findings highlight that there are more contrasting views toward consensus-building practices (implementing collaborative efforts in decision-making) compared with other delivery types, such as facilitation and open participation. Drawn from the organisational capacity dimensions (Gasco-Hernandez et al., 2022), the Q analysis result also indicates that distinct disagreements are more evident in the knowledge and learning capacity category, which is important for supporting new practices and cultural innovation. The insights gained from this study may assist in enhancing a multiplicity of implementation processes to deal with the complexity and dynamics involved in smart sustainable city development.

Keywords: smart sustainable cities, Q methodology, stakeholder analysis, smart city governance, planning practice

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WECHAT MATTERS: HOW DIGITAL RELATIONS INFLUENCE SOCIAL NETWORK INCLUSION OF CONSTRUCTION MIGRANT WORKERS IN CHINA (176)

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Participation in social networks, including social support, is a prominent aspect of social inclusion (Cohen et al., 2000; Filia et al., 2018). In China, migrant workers' social network exclusion has raised broad concerns, and the situation of migrant workers engaged in the construction industry is notably worse among them. The constrained work environment at enclosed construction sites and frequent migration make it even more difficult for them to maintain or establish social ties and gain social support. The development of Social Network Sites (SNSs) and the popularity of affordable smartphones in China light up the prospect of promoting construction migrant workers' (CMWs) social network inclusion through digital relations. Extensive empirical studies found positive correlations between SNSs use and social network inclusion, including social networks (e.g. network size and contact frequency) and social support (e.g. emotional, informational and instrumental support) (Best et al., 2014; Ellison et al., 2007; Liu et al., 2018). However, the empirical research on the complicated relationship between SNSs and migrant workers' social network inclusion, particularly in Chinese academic circles, is still in its infancy, let alone on CMWs.

This research aims to investigate the role of WeChat, the most popular SNS in China, on CMWs' social network and social support in association with informational, instrumental and emotional support. The study is conducted in Chengdu, the capital city of Sichuan Province, China, by adopting the case study approach and using semi-structured interviews with 34 CMWs recruited by convenience sampling. The results show that WeChat has been the most relied-on communications tool for CMWs and played an essential role in CMWs' social network inclusion. Specifically, in terms of the social network, the findings of this study suggest that SNSs are positively related to CMWs' contact frequency, relationship intimacy, social network size, and network diversity because of WeChat's money-saving, private, and synchronisation.

Regarding social support, the analysis results highlight that SNSs have played a significant role in CMWs' informational, emotional and instrumental support. A wider range of WeChat's functions - especially video chats, group chats, WeChat payments, and broadcasting - enabled CMWs to choose the most appropriate way to self-express, seek, and obtain support across geographical and time barriers. Furthermore, the research found that CMWs have relied more on SNSs under the COVID-19 circumstances for not only more frequent communications with family and friends, but also WeChat functions closely linked to everyday essentials for pandemic controls such as China's PCR test reports, access QR codes and vaccination information. This work contributes to existing knowledge of the impact of SNSs on social networks and social support by providing insights into Chinese CMWs. The findings from this investigation indicate that, besides informational and emotional support, SNSs could also benefit users' instrumental support, like monetary and medical issues. The study also identifies some hidden risks of a digital divide in the older and less educated CMWs who are less familiar with WeChat.

Keywords: social network exclusion/inclusion, social network analysis, SNSs and migrant workers, social support

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ENVISIONING RURAL LANDSCAPE IN THE DIGITAL AGE: DIGITAL AGRICULTURE AND LANDSCAPE (196)

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The information and communication technologies (ICT) has changed significantly the way of production and agriculture is no exception. Variety of digital technologies have been integrated with the farming process to increase the resource/labour efficiency and reduce the negative impact on the environment. Such practices have been labelled as 'digital agriculture' or 'smart farming' and different countries and regions have been developing policies to facilitate the digitalisation of agriculture. Numerous research has focused on the socio-economic and environmental impact of digital agriculture, while few has studied this issue from a landscape perspective despite the fact that landscape is an essential part of human being's surround playing a significant role in sustainability. As an essential driving force for landscape change, technology has contributed greatly to reshape the rural landscape particularly during the period of industrialisation when agriculture has been through a dramatic mechanisation process. Therefore, it raises the question on whether new generation technologies characterised by information technology and digitalisation also have the similar effects on rural landscape. On this account, this article aims to examine the existing research on digital agriculture, trying to understand whether landscape has been mentioned in the literatures and how their relationship has been narrated if the issue of landscape is mentioned in the digital agriculture research.

Keywords: digital agriculture, smart farming, rural landscape, landscape change, review

SMART CITY KUSEL: THE DIGITAL TRANSFORMATION FOR / OF REGIONAL DEVELOPMENT IN RURAL REGIONS (226)

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Digitization is one of the global megatrends of the current century. Compared with the rest of Europe, Germany has a lot of backlogs in terms of digitization of the public sector, the economy and society. In 2022, the level of digitization in Germany according to the DESI index was 52.88, just above the EU average of 52.28. Leading countries such as Finland or Denmark are far ahead with values of almost 70 (Statista 2022). Not least for this reason, the German Federal Ministry of Housing, Urban Development and Construction (BMWSB) has been funding a total of 73 "Smart Cities Model Projects" since 2019. Funding is provided for municipal, interdisciplinary, spatial smart city strategies and their implementation as well as the necessary capacities in the municipalities. The municipalities are supported in adapting to the digital transformation and taking advantage of the associated opportunities. The largest share of supported "Smart Cities" are large and medium-sized cities. "Smart regions" in the form of intermunicipal associations or counties which are located in rural regions are hardly covered by the funding program. However, for municipalities in rural regions in particular, digitization can be an important starting point for improving the quality of life (Wiedmann/Klug 2021). Nevertheless, Digitization in rural areas is associated with different challenges than in cities. In addition to the continuing challenge of the availability of high-speed Internet access in rural areas in Germany, the limited capacities or fragmentation of public administrations and a more widespread sceptical attitude of the population toward digital services compared with the urban population represent further challenges in rural areas.

Thus, this paper focuses on the progress made so far by the County of Kusel as one of the few selected model projects for a Smart Region in the program. With only 69,949 inhabitants, it is one of the smallest and, with 122 inhabitants per km², also one of the most sparsely populated counties in Germany. With its 98 local municipalities, it is very rural, with less than 500 inhabitants living in most of the local communities (StaLa 2022).

By participating in the support program, the district of Kusel is pursuing the goal of using digitization to leverage positive, sustainable development in the region for the benefit of the people who live and work there. The motto is "Smart City Kusel - Land l(i)eben" (live in the country and love country life). The funding program is divided into two phases: the strategy phase and the implementation phase, with Kusel currently at the transition point between the two phases.

Digitization is to be used in several ways: first, to digitize the participation of all relevant stakeholders and the citizenry in the strategy development process; second, for ongoing communication and exchange about public sector plans and projects with stakeholders and citizens; third, to improve the availability, collection, exchange, and visualization of data in public administration; fourth, to simplify administrative action; and, last, to digitize services to safeguard services of general interest. The strategy of Kusel County focuses on the topics of public welfare,

participation and education, mobility and services of general interest, as well as the preservation of the settlement structure and cultural identity.

This paper focuses on the analysis of the strategy process on the way to the "Smart City Kusel" with regard to:

- the challenges of shaping the digitization process in a rural county in all fields of action,
- the approaches to shaping the process towards a smart region and
- first approaches for smart measures for the sustainable development of the county.

Keywords: smart region, rural areas, services of general interests, digitization

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AUGMENTED REALITY AND CITIZEN PARTICIPATION: DIGITAL INNOVATIONS OF PARTICIPATORY PLANNING (228)

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The modern world has been facing growing civilisation challenges such as dealing with climate change, the degradation of environmental resources and increasing technologisation and digitalisation, or global pandemics and geopolitical wars. The task of planning is to adapt cities and regions in this era of transition and to find sustainable solutions to planning issues (Engel & Knieling 2018, 13f.). A smart city strategy of municipalities is a possibility to adapt to the transformation (BMI 2020, 9-12). Digital data and tools support planners in their everyday actions and in decision-making for specific planning content. Additionally, in designing sustainable cities and regions, the interests of different stakeholders are also relevant and need to be considered in the planning process. Traditional analogue participation formats often do not address the heterogeneous population. In times of pandemics, these participation formats reach their limits and a readjustment via the use of digital approaches is needed (Othengrafen et al. 2021, 12; Friesecke 2020, 148).

For example, an innovative approach in the context of the smart city is the participation of the population with an augmented reality (AR) application. By using AR, the groups of people involved can view a virtual adaptation of the newly planned structures for a specific area on site. Here, the representation of digital objects overlaps with reality, meaning that real situations are enriched with additional digital information (Kikuchi et al. 2022; Zeile 2017).

The research project 5G-CityVisAR (duration 2021-2024) first evaluates the use of AR applications in planning participation in German-speaking countries. For this purpose, applications will be tested and supported by interviews with participation organisers who have already used specific applications in urban planning. In a second step, an AR application will be developed in an interdisciplinary project consortium from the fields of software engineering, app development and urban planning and tailored to urban planning for a concrete planning participation in the German city of Schwerte. Since AR applications have not been used much in planning participation processes so far, the application will be tested and scientifically evaluated in terms of applicability, usability and the added value for planning processes.

The presentation shows selected interim results of 5G-CityVisAR and provides answers to the following questions: Where in German-speaking countries do planners use AR applications for planning participation? What are opportunities and challenges of participation with an AR application? What are the requirements for an AR application in participation?

Keywords: smart city, augmented reality, digitalisation, digital transformation, citizen participation

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SMARTQUARTER+: CHALLENGES OF STRATEGIC VISUALISATION OF HOLISTIC SPATIAL ENERGY MODELS (233)

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In addition to energy-efficient buildings and sustainable energy sources, the transportation and mobility sector arguably offers great leverage in reducing energy consumption and greenhouse gases, as it accounts for about 28% of emissions in Austria (Umweltbundesamt, 2023). The efficiency of mobility is directly linked to the structure and design of settlements and cities. It is still difficult to simulate the effects and interactions of measures that affect the settlement structure (densities, distribution and mix of uses), mobility and transport. Increasing e-mobility, decarbonization of building heating (e.g. heat pumps), distributed and decentralized generation of electrical power (photovoltaic) lead to new challenges for energy grids and transformer stations.

The research project *SmartQ+ Bruck/Leitha* (Bindreiter *et al.*, 2022) investigates these effects of variants of municipal planning and development strategies for a small town in the metropolitan area of Vienna/Austria. The project pursues an interdisciplinary approach of transport planners, energy planners, civil engineers, architects, spatial planners, and computer scientists, in which transport demand models are linked for the first time with energy simulations that can depict small-scale phenomena at a local level. For this purpose, forecast models for mobility, the energy network and the building stock are being developed or applied and linked via an open data model (Bednar *et al.*, 2020).

In this paper, the challenges of visualizing are addressed and the model and forecast results are presented in an intuitive decision support tool, in the form of an interactive 3D model of the pilot city. The visualisation should represent a comprehensible digital twin of the municipality to represent the energy consumption and impacts across sectors (buildings, grids, traffic). Thereby, it will be investigated how established domain-specific visualization methods can be combined and how new visualization forms can be developed. The visualization concept created from these findings will be a web-based proof-of-concept tool with interactive 2D and 3D maps, diagrams, and representations.

Building on findings in the representation of energy consumption and load profiles for buildings and grids, the challenges lie in the temporal-spatial representation and the linking of the transport demand model data for a holistic view of the settlement. For this purpose, different approaches are investigated and tested in direct exchange with future user target groups (planning actors of the municipality) regarding their practicability and comprehensibility in the interactive model. The preparation of the data and description of the necessary interfaces for the respective diagrams and visualisations form the basis for the further development of the support tool.

The resulting visualisation will serve as a communication and decision support tool to improve planning and political measures to achieve energy efficient and energy self-sufficient settlement structures.

Keywords: interactive visualisation, holistic spatial energy models for municipal planning, (energy) saving potentials in settlement development

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DO RESIDENTS PREFER EXPERIENTIAL CONSUMPTION IN THE POST-EPIDEMIC ERA? AN EXPLORATION OF THE DECAY PATTERN OF RESIDENTS' CONSUMPTION TRAVEL BASED ON SPATIOTEMPORAL LOCATION DATA (234)

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With the advent of the post-epidemic era, the impact of e-tailing on brick-and-mortar retail commerce has intensified as people's lifestyles have changed and the services provided by commercial centers have shifted more towards experiential consumption. This paper aims to verify the spatial interaction characteristics between commercial centers and different consumption travels of four urban physical commercial centers in Shanghai during the post-epidemic era. Firstly, using Internet location-based service data for data mining, we identify experiential and non-experiential consumption travel purposes and compare the differences in spatial characteristics of commercial centers' two consumption travel purposes. Secondly, the numbers of residents' different consumption travel to four commercial centers are measured by using spatial-temporal big data, and consumption travel times are calculated using the Internet map API, the results are regarded as the measured values. Thus verifying the differences in the spatial decay patterns of consumers for different consumption purposes. And finally, the distance parameter of the Huff model is calibrated using the OLS method.

It is concluded that there is a significant power function relationship between the decay pattern of non-experiential consumer trips, conforming to the spatial decay of the power function. However, experiential consumer trips have shown a trend toward greater stochasticity. The reason for this result is that the epidemic era has intensified the impact of e-tailing on brick-and-mortar businesses, and the business model of commercial centers has shifted to experiential consumption. There is a difference between people's demand for experiential consumption and the service demand for non-experiential consumption. This has therefore caused a difference in the attenuation patterns of the two consumption purposes. For the planning of commercial centers, the principles and methods of commercial center system planning should be changed in response to changes in consumer demands and changes in physical retail formats.

Keywords: COVID-19 pandemic; Physical Commercial Center; Spatial Interaction; Experiential Consumption; Internet location-based Service Data; Shanghai

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SCAVENGER HUNT DATA: THE SEARCH FOR SUITABLE SMALL-SCALE DEMOGRAPHIC DATA FOR GIS-BASED SITE INVESTIGATIONS (238)

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Due to various developments such as demographic change, parallel growth and shrinking processes and digitization, it is necessary to review the offerings of various facilities in different areas. One focus in meeting the demand of the residents is the accessibility of the facilities. For this purpose, accessibility analyses are carried out in the planning process. Differences in the claims of cohorts must be additionally considered.

Therefore, the population structure and its distribution have to be considered on a data basis. Due to data protection, access to small-scale demographic data is difficult in Germany. The smallest-scale data freely accessible are derived from the so-called census and are already aggregated to a hectare grid (100x100m grid cell). The origin of this format lies in the European Statistical System (ESS), established by the Statistical Office of the European Union (eurostat). The aim of the ESS is to provide comparable statistics at the EU level (Eurostat/European Union, n.d.). The common reference plane is the hectare grid.

In addition to data protection, the timeliness of the data also plays a decisive role. The current dataset is from 2011 (Statistische Ämter des Bundes und der Länder, 2020). The census was surveyed again in 2022, the data is available from November 2023 (Statistische Ämter des Bundes und der Länder, 2022). The update period of this data set is usually ten years, in this case eleven. At the same time, many assumptions have to be made in the planning process in order to plan for different scenarios, e.g. walking speeds, potential relocation behaviour etc. These assumptions already result in a certain degree of fuzziness in spatial planning.

In this respect, we have to examine the extent of dynamics in the population structures of different neighbourhoods and the errors which result from such a long update period. It can be assumed that the effects of fluctuations in urban areas differ significantly from those in rural areas, also due to ownership structures. Particularly with regard to the cohort of baby boomers, the natural development is likely to be of great relevance in heavily overaged neighbourhoods over ten years. Current address-based data from residents are in principle available for the municipal registration authorities, but access and publication are strictly limited due to data protection.

As part of the research project "Ageing Smart - Designing Spaces Intelligently", which is funded by the Carl Zeiss Foundation, we examine smaller-scale address-related data.

This contribution examines two questions:

1. How do the results differ when a question regarding spatial decisions is investigated based on hectare grids or based on address-based data?

2. What does the difference geometrically entail inaccuracies and errors and what is the relevance of the difference in results for planning decisions that are already subject to a certain degree of uncertainty due to assumptions?

These questions are explored with the help of a geoinformation system, first on the basis of hectare grid data and later on the basis of smaller-scale address-related data. By comparing the results, it is shown whether the findings of the investigations based on smaller-scale data in comparison with the hectare grids justify the effort to obtain these smaller-scale data.

In addition, we use mathematical reachability algorithms for our analysis, which we implement in python. In particular, the algorithms allow an intermodal analysis and can thus very precisely show the difference between the two approaches described. This allows a further analysis of how well existing commercial programs are suitable for the analyses. In this way, an estimate can be made of what data availability and tools are needed by spatial planners to perform optimal site analysis.

Keywords: spatial analysis, geographic information system, data availability, hectar grid, accessibility

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TOWARDS COMMUNITY-HEALTH PLANNING: COMPLIANCE AND THE SOCIAL SPACE OF CITIES UNDER COVID-19 REGULATIONS (243)

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Cities' planned and built environments are key to healthier communities (de Leeuw, 2022). Cities are regarded as a sustainable form of settlement. The Covid-19 pandemic challenged this relationship, when the issue of communities' compliance with government restrictions to mitigate the spread of the pandemic became apparent (Corren et al., 2021). However, the pandemic provided a chance to further enhance cities' resilience, since identifying community characteristics that motivate individuals to follow health-promoting regimens became a key topic for social research.

Despite the growing literature on such relationship (e.g., Barak et al. 2021), little attention has been paid to the drivers of compliance at the city and community levels. Our study addresses this lack through the Bourdieusian concept of communities' capital resources. The study investigates how economic, social, and cultural capital, as well as its spatial distribution, can be used to explain the factors influencing compliance with limitations and recommendations for the promotion of public health. According to this approach, the 'habitus of place' is a set of dispositions formed by the idiosyncrasies of local communities (Israel, 2021). By defining local capital forms, local habitus can be measured.

By using Israel as a test case, we employed a data reduction technique to assess these capital forms, utilizing several factors pertaining to population characteristics and municipal budgets. Urban municipalities have emerged as the key players in determining morbidity and establishing differential limitations during the outbreak of the pandemic in this country. The investigation specified measures of capital forms at the community level across the country (Israel and Frenkel, 2015). It allowed to build regression models that estimated the relationship between capital and adherence to the limits implemented to curb the pandemic.

The analysis revealed how the spatial dispersion of the components of these capitals explains the likelihood of communities' level of compliance. The results indicated that each of the capital forms contributed significantly to a greater compliance with health regulations. Some of the disparities in responsiveness across various groups in Israel can be attributed to the spatial dispersion of capital forms.

Connecting sociology to geo-urban variations in compliance with Covid-19 laws during the pandemic might shed light on the social mechanisms that drive health behaviors, as well as human practices that may influence morbidity and mortality rates. The study's findings in this regard highlight the explanatory power of local resources in collective spatial behavior patterns and the potential for escalating existing injustices, as well as the significance of the social-community component in dealing with risk situations in general and the COVID-19 pandemic in particular.

Keywords: Compliance; Public health; Covid-19; Spatial capital; Social space; Habitus

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CITIZEN IMPLICATION AND PARTICIPATION IN JAPANESE SMART COMMUNITY ENERGY MANAGEMENT (245)

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The smart-city concept is one known way to improve urban management. It varies in definition, with some focusing on the use of technology such as big data and sensor networks (Batty, 2013), and others the importance of governance and collaboration between different actors (Meijer, Rodriguez, Bolivar, 2016). The main goal is to improve the quality of life for citizens by smoothing traffic, increasing access to public transportation and providing better public services. They also make cities more resilient by providing earlier warning systems in case of natural disasters. In Japan, the government has been funding "smart-communities" projects as a way to distinguish them from other private sector-led initiatives. Smart Communities and Smart Cities in Japan focus on making energy use more efficient, creating sustainable transportation systems and developing new forms of communication between citizens and government (Granier, 2016).

This paper focuses on the user's perspective of urban energy management within smart cities initiatives in Japan. This perspective is less researched on than the technical aspects of smart cities in current literature. Innovative projects (e.g., Lyon Confluence in France, ref. 8), can contribute in changing a user's behavior and habits, and their behaviors can sometimes alter the systems functioning, since the users don't always get informed of how it works. This raises the issue of acceptance, participation, and implication of the citizen in the making and use of innovative systems. In fact, the term of participation is relative: it needs to be defined based on context. The concept of citizen participation in Japan is complex and differs from that in western countries. The idea of "social order" often prevails over individual freedom. Japanese may be accepting of an interventionist government because society's relationship with government is based on trust. However, some academics suggest that the concept of citizen participation can be conflicting (Granier, 2016- Hess, 2014), as debates and taking the initiative are not well accepted in Japanese culture. Others argue that Japan has become more progressive since the end of the Second World War. The mechanisms of citizen participation in Japan are similar to those in the Western world (Granier, 2016- Hess, 2014).

The aim of this research is to understand in depth the residents' behavior within smart-communities and how they adapt to the urban energy related technologies developed in smart cities. Two main case studies will be analyzed: Fujisawa Sustainable Smart Town (SST), in Tokyo's south suburb, and Kitakyushu Smart Community in Kyushu which is one of the four main islands in Japan. Fujisawa SST is a smart-city of private sector-led initiative, developed by two large Japanese companies, Panasonic and Mitsui Fudosan, that constructed energy efficient 1000 households and services buildings. In addition to all the technology-centered aspect, the project aspires to fit comfortable lifestyles. Their urban energy system is developed around improving sustainable energy production and management. Secondly, Kitakyushu Smart Community is a public initiated project, based on a strong partnership with a private company, Fuji Electric Co.

The project shelters around a 1000 “prosumers”, meaning producers-consumers residents. A smart-grid is created there using local energy producing centers.

The paper compares the actors’ dynamics, the energy management systems and mostly the degree of participation of the citizens, and their acceptance and adaptation to the new innovative systems. The main aim is to adopt a more sensible and human scaled approach to users’ daily life within a smart city and overarching the different sustainable energy systems and estimating their adaptability with the residents’ behaviors. This paper underlines how both case studies show different approaches to the citizen participation, through collecting residents’ feedbacks and analyzing existing research on the user’s perspective.

Keywords: Smart-community; Smart-city; Energy management; User Habits; User Participation; Sustainability

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VALIDATING GEOSPATIAL OPEN GOVERNMENT DATA AND “POTENTIAL PROFILE”: MODELS FOR URBAN INWARD DEVELOPMENT SCENARIOS IN VIENNA (298)

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Vienna is growing. According to latest demographic projections (Statistik Austria, 2022) its current population of 1.89 million is set to reach 2 million by 2027, and to increase by further 19% until 2080. Following this trend, many areas of the city are currently being developed or are declared as areas with development potential according to Vienna's city development plan 2025 (Stadt Wien MA18, 2014). Prioritizing developments in proximity to or within existing urban infrastructure reduces land use consumption and has the potential to save large amounts of primary resources. In addition to large central areas on old railway infrastructure and brownfields, the building stock is also being further developed (e.g. addition of storeys, building extensions). Assessing these not-so-obvious potentials is necessary to make evidence-based decisions and design policies that help promote resource-efficient and sustainable developments and allows planning for circularity and material reuse in inward development as opposed to status quo recycling principles.

Taking this into account, the projects M-DAB (Bindreiter et al. 2021) and M-DAB 2 (Bindreiter et al., 2022) consider material intensities for different development variants on a city-wide scale: Modelling Vienna's current building stock and calculating material intensities base upon the open government data provided by the City of Vienna as the basis for building part geometries and associated data. Accurately depicting data of the building stock requires a robust model that can utilize machine learning principles to calculate attributes based on limited data inputs. For this purpose, five urban spatial “settings” (buildings and their embedding in the surroundings) with inner development potential are identified in the urban fabric. In part, they represent important periods in Vienna's building history that continue to shape the urban fabric today and represent a large share of Vienna's building stock. From the analysis of these settings, so-called “potential profiles” are derived, with each featuring a set of archetypal attribute values. Database operations can assign all parts of the city to a potential profile (to a certain degree), resulting in a calculated classification.

To ensure the data model's integrity, those classification results must be validated using common methods for reviewing quantitative data (statistical evaluation and sampling). Assessment of real-world built environments and correlation checks in desired locations are necessary to examine the model's applicability for city-wide deployment. Empirical spot checks and expert reviews of the quantitative results can identify and improve the parameters and thresholds assumed and used in the classification model. Thus, in an iterative process, the model output is improved and at the same time possible weaknesses or quality gaps in OGD are revealed. This iterative approach creates a continuous improvement of the data model. Therefor real-world buildings and their material intensities can be depicted more accurately. Thus, the ex-ante evaluation of the potential of sustainable settlement development for different urban structures can be carried out on a more solid data basis.

Keywords: Material resources, Urban development tools, Building sustainability assessment, Method evaluation, Automation

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DIGITAL TOOLS AND THEIR ROLE IN SPATIAL TRANSFORMATION: DEVELOPING A RESEARCH FRAME FOR COMPARATIVE ANALYSIS (300)

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Around the world, society and the environment are facing increasing strains that threaten the cohesion and live quality in our cities and regions. Often, planning approaches in response to prevailing crises and risks are focused on fragmented and incremental development. This contrasts with the approach of transformations in settlement structures, which are long-term processes, with the aim of a sustainable change. *Spatial transformation* processes are indispensable for the proactive creation of resilient societal structures and spaces and provide a possible way to respond to the socio-cultural, political, economic, and technological challenges, that society faces in the Anthropocene era (Pereira et al. 2018; Bruns 2022).

At the same time, we are also in the age of the megatrend of digitalization. This trend affects all areas of life. Nor did it omit the field of urban and regional development (Pallagst 2022). It can be noted that in recent years more and more *digital tools* have found application in spatial planning practice worldwide. Some of them appear as completely new approaches and have the potential to establish completely new work methods in spatial planning, in which planning decision processes are supported. The approach is completely different and ranges from data-enriched 3D models of cities and regions (digital twins) to dashboards that quantify the state of certain developments, such as mobility or energy.

This development demands the question whether such tools, which can provide decision support for spatial planning, also *serve as an assistance for the transformative creation of future-oriented and resilient cities and regions*. In addition, it is not yet clear how spatial planning will develop in the long term as a result of the increasingly use of new digital possibilities, and *whether new planning instruments and governance processes will be established as a consequence*. As part of the research project "Ageing Smart - Räume intelligent gestalten" (Designing spaces smartly) funded by the Carl Zeiss Foundation, these questions are being investigated and require a *comparative methodological approach*. This can deepen the understanding of policy processes and draw out assumptions (Booth 2011). Different digital tools and their integration into the working methods of spatial planning will be studied. Herby a comparative analysis of the case studies will be conducted. This methodical approach first requires the development of a *systematized research frame* that can be applied to the different cases.

Thus, the focus of the presentation is on the development of that research frame and on which topics are relevant to systematically capture the new digital possibilities in spatial planning, to provide a basis for analyzing the tools in terms of their application as support for a transformative process of cities and regions.

Keywords: Spatial Transformation, Digitalization, Digital tools, Comparative analysis

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XR-PARTICIPATION-SPACES: NEW OPPORTUNITIES OF CITIZEN PARTICIPATION IN CITY PLANNING? CASE STUDIES MANNHEIM AND ROSTOCK, GERMANY (302)

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In the technology debate, cyberspaces are classified as one of the innovations of the future. Nowadays, people are joining each other in virtual spaces by gaming, in concerts, sports events or conferences. XR (Extended Reality) technologies, which include forms of immersive technologies, such as Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR), have already found their way into various areas of life, such as business, medicine or real estate. They can also be used for democratic participation in urban planning in order to, among other things, experience three-dimensionality in a more real way, motivate further actors to participate, and offer them participation formats that are independent of location and time. The 'XR-Part participation space', which is being developed and tested as part of the research project "XR-Part - XR-Participation Spaces for Expanded Social Participation in Urban Transformation Processes", represents such a cyberspace.

The paper focuses on the issue of participation in the virtual-immersive 'XR-Part participation space'. It explores the question which potentials and restrictions can be identified for XR participation formats for social participation in municipal transformation processes. It is discussed to what extent XR participation spaces can qualify citizen participation, how social selectivities in the participation process can be avoided, and how connectivity to existing participation practice can be established.

Experiments of XR-Part participation space are taking place in as part of two living labs in the German cities of Mannheim, here as part of a participation process for the further qualification of a neighborhood square in the Neighbourhood Neckarstadt-Ost, and Rostock as part of an redevelopment in the southern city with the goal of re-densification. The participating residents, representatives of the administration and the housing companies come together as human avatars and work interactively and collaboratively on topics of the planning projects. In addition to a moderated event in the virtual Space in Mannheim a persistent space, independent of time will be offered in Rostock.

Both cities have implemented high quality standards in participatory planning processes with their participation guidelines, which are to be supplemented by additional XR participation formats.

Finally, in the paper theses are derived for recommendations on how to achieve extended communication in virtual, immersive participation spaces that is oriented towards quality criteria, such as legal, ethical, and social requirements (ELSA).

Based on a literature review and the evaluation of interviews, standardized questionnaires and observations, the influence of XR-technology on communication processes and participation is analyzed. The sample under investigation includes the moderators, the technical support as well

as the participating citizens and municipal representatives of the investigated participation processes.

Keywords: public participation, urban planning, extended reality (XR)-participation, virtual reality, Living Lab

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Annotation:

In addition to the contributors, the following 'researchers and institutions are involved in the collaborative research project XR-Part (<https://www.fh-erfurt.de/xr-part>): FH Erfurt: Yvonne Brandenburger, Sebastian Damek, Rolf Kruse; TriCAT GmbH: Gregor Mehlmann, Felix Gaisbauer, Fabian Kersting, Patrick Reipschläger, Lena Schuler, Zebralog GmbH: Sarah Ginski, Christina Kühnhauser.

MULTI-FACTORS EVALUATION OF THE IMPACT OF THE STREET-LEVEL ON SEXUAL CRIME OCCURRENCES USING COMPUTER VISION AND BIG DATA: A CASE STUDY OF MANHATTAN (321)

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In various public domains, incidents of sexual harassment and various forms of sexual assault against women and girls is prevalent globally. The city of New York presents a formidable challenge in guaranteeing the safety and security of people in public spaces (Syeda et al., 2020). Previous literature believes that the spatial characteristics of urban environments may directly impact criminal activity (Quick et al., 2018). As such, there is a need to understand their relationship in order to shape safe streets and gender-inclusive communities (Miranda et al., 2020).

The recent developments in emerging technologies such as computer vision, machine learning, and big data make it possible to quantify the impact of street-level built environments on crime. Multi-scale analysis of street-scape images and urban street information can effectively quantify the impact of the built environment on crime occurrence (Su et al., 2022). However, previous research has concentrated mostly on the specific spatial location or economic features of total crime (He et al., 2022). Or concentrate on the impact of urban physical characteristics on specific crimes (Summers and Johnson, 2017), but little empirical research exists on the street-level environmental features and urban spatiotemporal scale associated with sexual crime (Lee et al., 2023).

We propose a method that combines different analysis techniques (corresponding to different city scale levels) and successfully unifies them at the street level. This allows the results of different analyses to be compared and studied at same level. Further correlation studies on these different analytical data allow us to reveal the potential relationship that may exist between criminal activities and urban space from a data science perspective. Based on these results, we further propose strategies and suggestions on how to intervene and propose safer urban space design.

This study primarily utilized multiple open databases, including US Census, POI data, 21073 Google Street View images, 100252 total crime reports, and 14305 sex crime reports. Through techniques such as spatial syntax (Hillier, 2007), Geographic Information Systems (GIS), and the Pyramid Scene Parsing Network (PSPNet) (Zhao et al., 2017), These techniques allow us to study and process data, mainly from multiple dimensions, in both the physical and the social environments. Specifically, guided by the theory of crime prevention through environmental design (CPTED; Jeffery, 1971), this study considers 38 physical and 10 social environmental variables.

In the physical environmental assessment is focusing on using the PSPNet model based on the ADE20K dataset to extract streetscape pixels, performing physical feature classification based on visual index values and pixel percentages, quantifying the results on a street scale using a GIS

system, on the side to evaluating street-scale environmental connectivity, integration, mean depth using the spatial syntax.

Part of the social environmental assessment focuses on using the extraction of land use and POI data, as well as American Community Survey (ACS) data, to quantify Manhattan's social environmental characteristics at the street level using GIS, and analyzing the spatial and temporal distribution of crime using NYPD crime report data to build a spatial-temporal cube and analyze distribution patterns of crime at the street level.

Finally, based on the aforementioned two catalogs, using a multivariate geographically weighted regression (MGWR) model (Fotheringham et al., 2017), the study analyzed the spatial and temporal correlations between the variables and sexual crime rates.

Keywords: Sexual Violence, Environmental Criminology, Semantic Segmentation, Space Syntax, Spatiotemporal Model, Geographically Weighted Regression

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COVID-19 AND THE RISE OF DIGITAL PLANNING: FAST AND SLOW ADOPTION OF A DIGITAL PLANNING SYSTEM (340)

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COVID-19 has had a traumatic effect on both the way people live and work in their everyday lives, and the way places function. The rapid transformation of employment practices, including the necessity to stay at home for lockdown periods, has given rise to increased digitisation and technological use to enable people to continue to work and to remain in contact with friends and colleagues. Digital planning, and the enhancement of digital citizen engagement, has been one area that has started to inform local government's online activity.

This is coincidental to the governments' interest in transforming planning into a digital and map-based service. This paper examines digital planning activity in English local planning authorities since COVID-19 hit the UK, reporting on two interrelated research studies that analysed statements of community involvement and planners' perceptions of digital planning activity. The article shows that COVID-19 has certainly accelerated the adoption and deployment of digital planning internationally, but it is an activity that has been developing incrementally for more than two decades.

The work opens-up critical questions on how we develop citizen-centred technologies for engaging people in open, accessible and equitable democratic debates in planning, and the challenges and tensions in aligning these to formal requirements and statute.

HOW TO SUPPORT AFFORDABILITY AND SUSTAINABILITY OF HOUSING? SET OF TOOLS APPLICABLE VIA STRATEGIC PLANS OF CITIES (367)

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How people reside influences their quality of life, wellbeing, and health. Lack of suitable housing might cause problems such as homelessness, poverty, social conflicts, and other crises. Unfortunately, the last decade brought the rapid growth of demand on the real estate market accompanied with the decreasing number of free flats/houses and growing prices. As more and more people fail to find adequate places to live, the urge to redirect public policies on how to support the affordability of housing is increasing. Well-prepared housing policies became means to strengthen the competitiveness of individual cities as well as the social, cultural, and economic sustainability of societies.

This article presents the results of project “Sustainable and affordable housing in the strategic plans of cities”. The project researched how municipal strategic planning might be connected to housing policies and brought the set of 30 tools and actions supporting affordability and sustainability of housing on local level. The article presents the developed set together with a few examples of selected tools and actions. When applied individually, however, none of the tools and actions solves the situation; they need to be combined to work and create synergies.

Even though the project focused on the Czech Republic, the developed list of tools and actions might be inspiring for other countries too since the methodology of creating the list included international literature review and the best practice examples from cities across Europe. As the following paragraph shows, the list is rather wide.

The list consists of methodological tools (e.g. audit of housing estate), regulative tools (e.g. urban plans and their regulations), restrictive tools (e.g. progressive taxes of more than one housing estate) and proactive tools (e.g. creating funds for housing development). It divides tools and actions into six categories: political, legislative, and administrative (e.g. establishing a public developer), social (e.g. demographic study), economic (e.g. financial support to reconstruct old buildings), rooted in infrastructure and environment (e.g. management of energies), dealing with planning system and processes (e.g. strengthening the position of housing policies in strategic plans), and based on reputation, marketing, and branding (e.g. goodwill strategies). From the perspective of process, the list stresses the phases of analyses (e.g. social study), setting priorities (e.g. public space and green-blue infrastructure), ensuring prevention (e.g. regulation of potentially harmful activities), implementation (e.g. PPP projects), other connected documents (e.g. supporting tenants’ rights), and other impacts (e.g. valorising the value of municipal lands). Moreover, the list offers short-term perspective (e.g. managing rents from the existing public real estate), mid-term perspective (e.g. investments in social housing), long-term perspective (e.g. strategy of diversity and social mix) and perspective requiring changes in national legislation first (e.g. modifications in building regulations). The article also presents how individual tools and actions support the affordability of housing, the sustainability of housing, and/or the management of housing-related processes.

Keywords: cities; affordable housing; strategic plans; tools supporting sustainability

UNDERSTANDING THE SMALL FOR PLANNING THE WHOLE: PREDICTING COMMERCIAL LAND USE TO ASSIST IN SCENARIO BUILDING USING CELLULAR AUTOMATA AND VOLUNTEERED GEOGRAPHIC INFORMATION (405)

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The digital world offers a plethora of planning tools, from big data to machine learning or digital twins (Batty, 2021). The possibilities for planning are yet to be fully grasped but include using urban analytics and modelling to help evaluate different policies through scenario building (Batty and Yang, 2022). This paper provides a possible framework for using Cellular Automata (CA), cluster analysis and Volunteer Geographic Information (VGI) to predict commercial land use. Starting with a disaggregated geospatial dataset on commercial establishments' location dating from 1995 and going up to 2010, the cluster analysis is used to aggregate, process and project the resulting cells to 2020 using the CA. Since the authoritative commercial dataset stopped being updated in 2010, this projection is relevant since it creates a possibility for scenario building in a context of data abundance turned into data scarcity which is not unusual in urban planning. The aggregation into cells also helps communicate results that can inform decision-makers. Moreover, the cluster analysis is then performed for 2020 using a different dataset enriched with VGI, which is contrasted against the CA projection. Using VGI, in this case, can not only support the projection results but can also be used as a tool for involving different stakeholders since it empowers citizens that contribute to the crowd-sourcing effort of producing and updating the VGI (Goodchild, 2007). Furthermore, the drivers used in the CA prediction can also be related to different aspects of planning, namely urban design and transportation planning, thus integrating habitually distinct spheres of planning and making the analysis multidimensional. Although limitations exist and are assumed, the 2020 results portray credible scenarios that can be used to support decision-making processes within a planning process. Moreover, since the process can be replicated with relative ease, the methodology is transferrable, which can help validate the results. Ultimately, these results can also be validated by data of a more qualitative nature, with the insights gained by using it ultimately counteracting its limitations. Finally, the presented framework shows the potential of city science and urban analytics in scenario building for future planning, considering the specific context of street commerce, which is a promotor of street life, local employment, sustainable mobility and *urbanity* whose role in future cities should be debated and safeguarded.

Keywords: Urban analytics, city science, scenario building, geospatial data

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SPATIAL DYNAMICS OF CREATIVE INDUSTRIES: THE CASE OF COMPUTER PROGRAMMING SECTOR IN ANKARA/TURKEY (431)

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The development of cities and economies in the 21st century has been discussed through creative sectors (Howkins, 2001). The Fordist mode of production, which was dominant until the 1970s, left its hegemony to the post-Fordist mode based on flexible production and specialization. The widespread use of digital technologies and computerized production is one of the most prior features of this new post-Fordist era (Landry, 2010). In the new era, based on knowledge and creativity, development has been undertaken by the sectors that can manage to use these skills. Over the last two decades, the global economy has undergone tremendous change, which may be defined as a Schumpeterian process (1943) of creative destruction, in which dwindling sectors are disrupted by new and emerging business models and trade patterns (Nurse, 2012; Perez, 2004). Therefore, today, especially science and technology-based creative industries are considered as the key to the development of cities and economies (DCMS, 2001; OECD, 2022; UNIDO, 2009), which contribute significantly to the management of the Covid-19 pandemic process that started globally in 2019. Therefore, the importance that needs to be attributed to the digitalization process and the science and technology-oriented sectors has been realized once again (Arıkan, 2020). In addition, when the creative sectors are mentioned, the first thing that comes to mind is the culture and art dimension, and there are many studies on this matter in the literature. However, science and technology-based sectors develop at least as many creative products as generated by the arts and culture-related sectors (ECLAC, 2008; UNCTAD, 2008; Rogers, 1954). Because of all these reasons, 'Computer Programming Activities', counted as one of the science and technology-oriented creative sectors and composed mainly of software industries, was chosen as one of the research topics of this research.

Another research topic is to discuss creative industries' spatial location selection dynamics. In this context, the reasons for choosing a location for the creative sector of computer programming activities (software industries) in Ankara and the reasons for selecting a location in this city were assessed. These assessments are discussed in the context of cluster theory (Morgan & Cooke, 1998; Amin and Cohendet, 2004; Scott and Storper, 1987), which is the matter of economic geography, and externalities created by localization and urbanization economies (Marshall, 1890; Jacobs, 1969; Porter, 2000).

The leading hypothesis of the research is that both localization and urbanization effects determine spatial relation dynamics of science and technology-oriented creative industries as triggering forces of economic and urban development in the 21st century. The main research question is, "How are the spatial relation dynamics of science and technology-oriented creative industries organized in the 21st century?"

In the research process, in-depth interviews, one of the qualitative methods, and cluster mapping analysis, one of the quantitative research methods, were utilized within the scope of the case study research method. Interviews were conducted with the representatives of the creative

industry companies in Ankara/Türkiye under Computer Programming Activities 20 interview sessions before the pandemic and 16 sessions after the pandemic: a total of 36 interview sessions with 31 people.

In line with the findings, it was concluded that the computer programming activities (software) sector, one of the science and technology-oriented creative sectors in Ankara, tends to cluster in urban space and benefit from the externalities of both localization and urbanization economies.

Keywords: Creative Industries, Science and Technology, Software, Creative Clusters, Localization, and Urbanization Economies

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EVALUATION MODELS: FROM METHODOLOGY TO PRACTICE (439)

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The Steinitz' framework for geodesign (2012) proposes evaluation models as culminating act in the knowledge building phase of the geodesign process to support the synthesis of design alternatives so bridging the gap between assessment and intervention. However, geodesign studies place variable emphasis on the role of the evaluation model and its output, that is the evaluation maps.

This paper argues the role evaluation models is of major relevance in the geodesign framework, and to support this hypothesis proposes a critical review of spatial plans and geodesign studies literature (Rivero et Al, 2015; Nyerges et Al, 2016; Campagna et Al, 2016; Campagna and Di Cesare, 2016; Pettit et al 2019; Fisher et Al, 2020) aiming at assessing how far in practice this role is acknowledged. Based on that context, evaluation model examples developed in several geodesign studies by the author are presented and critically analysed aiming at highlighting their impact in the geodesign process in practice. Moreover, this contribution provides practical guidelines and a standard template for building evaluation models in practice (Campagna et Al, 2020) which was successfully tested in geodesign research, education, and practice. The issue digital geospatial data sources for the construction of evaluation model is also discussed with reference to Authoritative, Volunteered, and Social Media Geographic Information (AGI, VGI, SMGI).

Keywords: geodesign, evaluation models, geospatial data, strategic planning, adaptive planning

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A NEW TYPOLOGY ANALYSIS OF MASS HOUSING PROJECTS IN EUROPE: INTRODUCING THE RESULTS OF AN ANALYSIS OF 34 MIDDLE-CLASS MASS HOUSING CASE STUDIES (448)

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This research presents a new typology analysis of mass housing projects, based on analyzing 34 case studies of middle-class mass housing (MCMH) in Europe. The Europe's middle-class mass-housing neighborhoods date back to the second world war and are now relatively 70 years old in many countries. GIS parametric analysis and big data typology analysis were used to identify and categorize different types of MCMH neighborhoods. A typology analysis reveals differences in the types of buildings distributed between east and west Europe, leading to different living environments and neighborhood spatial quality. The differences between east and west Europe were recognized in the design of the buildings and the geometric parameters of length, height, and orientation, as well as in the physical and spatial position of buildings on the ground layout and the variety of construction forms of the buildings.

The result of the research identified a distinguished design language for placing middle-class mass-housing buildings in different patterns. One of the common patterns is a formal and repetitive structure of buildings accompanying a street. This structure is providing a regular structure with minimum diversity of building types. In less common cases, we recognized two types of building shapes that create a more complex pattern and more diverse environments. In several cases of middle-class mass housing, the building pattern was more complex with a mix of several types of buildings and scattered positions of buildings in the space which is typical of suburbs and off-urban-grid neighborhoods. The aim of this research is to develop a typology-based analysis of MCMH neighborhoods for architects and urban planners to simplify future planning and design and organize the next era of middle-class mass-housing renewal.

Keywords: MCMH (middle-class-mass-housing), parametric analysis, neighborhoods, spatial quality, GIS

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EUROPEAN MIDDLE-CLASS MASS-HOUSING: A TOOL TO DEVELOP NEIGHBORHOOD DATA ANALYSIS (449)

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This paper presents outcomes from COST CA18137 that aims to create a transnational network that gathers European researchers carrying studies on Middle-Class Mass Housing built in Europe since the 1950s to develop new scientific approaches. In this framework, as a result, we developed a methodology for documenting diverse MCMH case studies from many EU countries and creating a comparative evaluation of urban and sustainable aspects that are part of the major MCMH ensembles in Europe.

WG1 of CA18137 developed a methodology that allowed around 100 assembles in 27 European partner countries to be mapped on MCMH to accomplish this goal. The scale of the case studies areas extended between 1 hectare to 550 hectares. As a result of the template, each set of characteristics of urban and housing could be arranged in dialogue with middle-class and mass-housing concepts. The data collection includes a short description of the case study, architect developer, photos, GIS location, period of construction, the position of the buildings, number of residential units, number of floors, urban ensemble, number of dwellings, housing policy, and more. The housing policies applied were referred to in an involving way, as well as the raising of intervention or rehabilitation strategies realised. As a result of the analysis, data can be inserted into mapping systems, such as GIS, paving the way for developing an Atlas digital platform. In addition, creating a comparative evaluation of MCMH policy development in different countries; analysing architectural characteristics, urban design patterns, and offering planning suggestions. The information gathered on the selected complexes has allowed launching specific thematic clues that seek to deconstruct the complexity of the MCMH topic into singular aspects, as explored through the networking tools as in the short-term scientific mission carried out throughout 2022.

In addition, the proposal "European Middle-Class Mass Housing - Cost Action: A tool to develop neighbourhood quality", was selected for online exhibition at the Neighbourhood Index in the Oslo Architecture Triennale's Mission Neighbourhood – (Re)forming Communities. In the scope of the Call for projects, as part of the Call for projects, practices, and perspectives that contribute to the creation of more diverse, generous, and sustainable neighbourhoods. The proposal on the initial steps of Documenting MCMH-EU has been selected to be featured on the Neighbourhood Index's website recognising the merit of the methodology defined to achieve progress in the Documentation of the MCMH.

The potential of the gathered material opened a unique opportunity to cross-reference different national and historical experiences, enhancing shared and collective knowledge that can be transferred between different European countries. It aims to inspire the renewal of urban and architectural practices, including environmental comfort, legal/characteristics of public policies and heritage enhancement contributing for a digital transformation of planning.

Keywords: MCMH (Middle-Class-Mass-Housing), urban documentation, urban analysis, GIS

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THE ENTREPRENEURIAL SHADOW STATE DELIVERING A SMART CITY (451)

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Among the many issues that have been discussed under the scholarship of entrepreneurial state, the place of and strategies to mobilise, a shadow state apparatus have so far received little attention. The theme is particularly relevant from state practices in the Global South. This article gives an account of the shadow practices that an entrepreneurial state takes in its attempt to deliver a smart city project. It documents a host of practices by the provincial government of Gujarat in India that essentially blur the boundaries of the formal and shadow state and smoothen business deals to take the neoliberal agendas of the entrepreneurial state forward. Whether or not their shadow practices escalate the speed of the project is one matter, but in the process, a number of the usual bureaucratic procedures are skipped. The paper argues that these shadow practices by formal state actors take place due to the demands of the entrepreneurial zeal of the state, a key facet of neoliberalism.

Keywords: entrepreneurial State, Shadow State, Neoliberalism, Smart Cities

MAKE THE PLAN DATA FLOW! CO-DEVELOPING THE SEMANTIC INTEROPERABILITY OF PLAN DATA WITH MUNICIPALITIES AND SOFTWARE PROVIDERS IN FINLAND (459)

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Interoperable plan data that can flow between processes, organizations, and users while retaining its original meaning is one precondition to efficient data-driven land use planning. The European Interoperability Framework (European Commission, 2017) aims to achieve data interoperability by requiring the Member States to define information models (IMs) for all public sectors, including land use. In Finland, a nationwide information model (IM) for plan data is currently under preparation, which will define the structure of digital land use plans in the future (Ministry of the Environment, 2022).

The adoption of the plan IM results in a shift towards IM-based planning and enables data-driven approaches. In academic research, the topic has been studied from technological and administrative perspectives (Fertner et al., 2019; Hersperger & Fertner, 2021; Hersperger et al., 2021), and recently also from a user-centered viewpoint (Nummi et al., 2022)

It can be argued that IM-based planning is changing the whole planning culture. (Nummi et al., 2022) Furthermore, it has been emphasized in planning support science that co-development with users is needed to bridge the gap between planning practice and technological development (Rittenbruch et al., 2021).

This research aims to explore *how implementing the nationwide interoperable plan IM changes planning culture, and how this change can be facilitated through co-development*. In this paper, the transformation is studied through action research in a project (KAATIO) where the Finnish plan IM is being implemented for the first time in the planning software used by municipal planners.

The research data consists of various data, e.g., material co-produced during the project (e.g., objectives, user needs, and requirements) and blog posts reporting the development progress. Additionally, a questionnaire for the municipalities' experts and the software developers will be carried out during Spring 2023.

While the project is ongoing, this paper discusses the preliminary observations and findings from the project. These findings indicate that co-development can be beneficial for both municipalities and software developers. However, also challenges are identified. For example, the diversity of municipal practices, differences in planning software, and the terminology used by different professional disciplines pose challenges in communication. Nevertheless, a co-development approach can help to overcome these challenges.

Keywords: land use planning, digital plan data, semantic interoperability, co-development, digitalization

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IDENTIFY PARAMETERS FOR DEVELOPING A MODEL TO EVALUATE URBAN OPEN SPACES USING DEEP LEARNING (482)

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Rapid urbanization, urban density, and COVID-19 effects have highlighted the need for a high-quality urban open space within walking distance. A high-quality urban open space maximizes a neighborhood's spatial, safety, and social potential, which are key factors to the well-being of its residents. Most studies evaluating urban open spaces rely on questionnaires, observations, and post-occupancy methods. They are limited regarding the spatial and temporal dimensions as well as the size of the sample under investigation.

In this research we developed a new approach for identifying parameters to evaluate urban open spaces by focusing on the activity patterns of individuals using big data extracted from CCTV cameras. The cameras are located in urban parks in Or-Yehuda, Israel (Remez Garden and Katznelson Garden). The CCTV footage is analyzed in relation to four characteristics of the parks' attendants as follows: (1) gender (2) age (3) activity type and (4) group size, along with spatial and temporal analysis. Thus, activities during different hours of the day, weekdays vs. weekends, and seasons of the year in various parts of the park are identified.

As many cities seek to better design urban open spaces tailored to their residents' needs, these research findings can contribute to planning decisions by paving the way to customizing the design of urban open spaces in accordance with the revealed behavior and preferences of various population characteristics. Additionally, this research may provide new insights for future planning and design in the realm of smart cities.

Keywords: Urban open space, Evaluation model, Parameters, Activity patterns, Deep learning

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DIGITAL DISRUPTION IN URBAN PLANNING: A METHODOLOGY FOR UNDERSTANDING PLATFORM REAL ESTATE (543)

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Digital platforms proliferate across a variety of domains. In real estate and housing markets, platforms deeply transform the actors and processes involved in the use, exchange, and maintenance of property. Platform real estate, denoting a set of digital real estate technologies, hold strong distributional consequences in terms of who owns, profits, gains, or accesses land and housing. As platform real estate transforms governance processes, social relationships and capital flows, it becomes indispensable for planners to understand their operation and consequence (Fields & Rogers 2020; Shaw 2018). This is especially important given the constitutive role of planners in relation to real-estate and property markets (Adams & Tiesdell 2012; Özogul & Tasan-Kok 2020). Although planners and digital applications are both central in the framing and reframing of markets, the emergent work on platform real estate has largely ignored this interdependency. The paper approaches platform real estate not simply as a set of neutral technologies, but rather as a set of sociopolitical processes that are imbued with and interact with existing power relations in market dynamics (Chiappini, 2022).

Understanding the growing role of platform real estate presents an empirical challenge to planners. The operating codes of applications are often closed, hindering an understanding based on the underlying operating code or structure. Media studies have thus proposed paying attention to the embedded social functions, alongside data output and technological features to understand the constitutive role of applications (Light et al. 2018). The paper interrogates the relationship between digitalisation and real-estate markets from a user-centred perspective. It does so through the development of a methodology to help planners understand the governing structure, vision, expected use, and operating model of platform real estate. The methodology facilitates analysis of the distributional consequences of platform real estate.

This paper builds on a digital ethnography of trading platforms (Fields & Rogers 2020). These are platforms that facilitate the search process, list properties, help bid placement, and in some cases even negotiate offers or sale of real estate. We draw on two cases, namely Funda and Biedboek.nl. Funda is the main platform for trading and exchanging owner-occupied and rental housing in the Netherlands. Established in 2001 by the Dutch Association of Realtors (NVM), Funda has deeply changed the way people sell or exchange owner-occupied housing. Meanwhile, Biedboek is a governmental trading platform for public real-estate. In 2012, the Dutch government's national real estate agency (*Rijksvastgoedbedrijf*) has established this platform to facilitate the exchange of public real estate, both in and outside of the Netherlands.

Analytically, the paper builds on and transposes a cross-domain walkthrough method to the study of real-estate platforms for urban planning researchers and practitioners. The contribution to the planning field lies in the development and refinement of a user-centered methodology for the analysis of platform real estate, laying a foundation for future research on how real estate actors

use and adopt digital applications. The paper argues that, in order to understand the transformation of real-estate markets, it is necessary to pay attention to the constitutive role of platforms. Understanding the operation and politics imbued in platform ecosystems is essential given the planner's role in safeguarding public values and shaping market dynamics.

Keywords: digital platforms; real estate; methodology

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THE INFLUENCE OF INFORMATION AND COMMUNICATION TECHNOLOGY ON THE TRANSFORMATION OF INDUSTRIAL SPACE IN HSINCHU SCIENCE PARKS (546)

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In 2009, IBM put forward the basic definition of Smart City, including four aspects of Information and Communication Technologies (ICTs), cooperation, innovation, and integration. By applying Information and Communication Technologies, training knowledge talents, innovating industries, and setting up intelligent infrastructure, the system in the city can achieve integrated and efficient operation. As major cities gradually move towards Smart Cities, Information and Communication Technologies have caused changes in human behavior patterns and urban development patterns. However, the importance of traditional geographical location conditions has gradually decreased.

In recent years, Taiwan 's cities have gradually developed into Smart Cities. Local governments have started to promote smart facilities and construction. As a gathering place for advanced technology development and research, Hsinchu Science Park is more affected by Information and Communication Technologies. The knowledge workers in the science park are frequently exposed to Information and Communication Technologies, which leads to a certain degree of dependence and relatively changes the life mode and behavior of knowledge workers. In the past, the industrial spatial structure of Hsinchu Science Park was composed of cluster network, which created the generation, innovation, and application of knowledge in the region. With the development of Smart City and the influence of Information and Communication Technologies, the location advantage of cluster in the science park gradually declined. Coupled with the change of the behavior mode of knowledge workers, the spatial structure of the industry will change. However, there are relatively few studies on the transformation of industrial space in science parks affected by Information and Communication Technologies. Therefore, this study uses the structural equation modeling to explore the impact of c Information and Communication Technologies on the industrial space of Hsinchu Science Park, hoping that the research results can be used as a reference for the assessment of land use and space needs of the Science Park Administration and local governments in response to the development of smart cities.

Keywords: Smart City, Information and Communication Technologies, Science Park, Knowledge Worker

KNOWING IS NOT ENOUGH: NEW YORK CITY'S VISION ZERO INITIATIVE AND THE CHALLENGES OF URBAN DATA GOVERNANCE (556)

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Initiatives built around the collection, analysis, and sharing of large datasets have been used to improve a variety of urban systems, including traffic safety. What can we learn about the practicalities of “data-driven” planning from one of its notable failures? We focus on Vision Zero NYC, launched in 2014. Vision Zero is a road safety paradigm, or way of thinking about the elimination of traffic fatalities and serious injuries, that began in Northern Europe but has carried on to other places since the 1990s (Elvebakk, 2007). In the New York City case, data was used by city agencies to identify dangerous locations or “hot spots” for targeted changes to street design. It was also used by civil society groups, activists, and journalists to highlight the inequities and failures of past and current interventions. Despite an approach built on open data, that combined top-down, bottom-up and what Burns and Welker (2022) term “interstitial actors”, the project has not achieved lasting reductions in fatalities and serious injuries. Our research asks why this is the case and finds through key informant interviews and document analysis that the translation of data into effective change faces several challenges. We argue that first, the data collection process is inherently biased and law enforcement’s resistance to making such data “open” to the public is often contentious. Secondly, enforcement around the use of new infrastructures to enhance safety is inconsistent and illustrates an unjust culture of automobility perniciously resistant to change (Culver, 2018), even in one of the US’s most transit-linked and pedestrian accessible cities. Finally, community members were often skeptical of the data analyses presented both by agencies and civil society groups. In sum, the collection, analysis, and application of large data sets to the city’s wicked problem of traffic safety engages multiple stakeholders and policy realms. For urban actors to respond to the abundance of data generated by city agencies and emerging smart technologies, they must recognize the ways in which big data is often a misnomer-- the collection of data at the urban scale is embedded in local socio-political relations and processes that are often context specific and require the harnessing of both deliberative processes and hard infrastructures for real change.

Keywords: Data Governance, New York City, Open Data, Traffic Safety, Vision Zero, Civic Tech

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THE POTENTIAL USE OF MACHINE LEARNING FOR THE DATA-DEMOCRATIZATION CONTRIBUTING TO LOCAL TACTICAL ACTIONS: THE CASE STUDY OF DATA PROTOTYPING FOR THE PROMOTION OF ACTIVE TRANSPORT (565)

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In recent years, it has become increasingly essential for citizens to evaluate the local environment and have opportunities to discuss means to improve it further to prepare for the growing risks in the communities by themselves. Japanese communities, where people have experienced many natural disasters, have developed "Pre-disaster recovery planning" in peacetime for coming risk reduction, in which community members create concrete action plans for potential incidents that a community may be suffered. However, the database that can be effectively used in such round table discussions still needs to be examined thoroughly. National policies and system providers have promoted digital transformation for municipal works, which tends to contribute merely to the efficiency of existing conventional tasks. The so-called data democratization, provided in a format of accessible data without necessarily having professional literacy in the infrastructure or learnable data that enhances citizens' literacy, are desirable for tackling uncertain incidents and changing situation with the partnership of citizens and local governments. In particular, data on public streets is crucial, for streets are arteries of people and goods and the most familiar public space in people's daily lives. Such data encouraging citizen-initiated placemaking and tactical urbanism are required, as shown in the responses to COVID-19 in various countries. In Japan, however, ledgers held by the government, such as road registers, are designed for managers' and operators' use. Although they have recently become available on the website, many still follow the same interfaces as in the paper document. In addition, due to administrative sectionalism, different administrators (metropolitan/prefectural, city, ward) have individual channels for each ledger. Under these circumstances, one would rely on publicly available GIS databases. Still, since they are developed based on traditional planning approaches, they are biased toward information on vehicle movement and insufficient for information on pedestrians, bicycles, and place functions. There needs to be a citizens-friendly platform to comprehensively understand the status of the street network in their living sphere. Besides, the guidance for geopolitical judgment regarding the constraints on how much data openness to allow as a defence against anthropogenic hazards is required as well.

Both the shrinking Japanese cities and other Asian cities in rapid growth have a common problem in the provision of current services for these new planning needs; The difficulty of securing administrative staff capacity building and budgets.

The research focuses on data for active transport enhancement, which is indispensable for building a livable urban environment. Following the background above, it clarifies the potential

of image processing and machine learning, whose introducing cost would be restrained lower in constructing efficient and legible data for local communities.

For this objective, it conducts a test case study in a district in Tokyo, Japan. The research applies design thinking methods to propose a prototype of a data set that should be open and integrated for citizens and an interface to make it public, assuming both peacetime and emergencies with the collaboration by city officials in charge of the target district. It then identifies effective methods of extracting the data required to realize the prototype by image processing and machine learning through the comparison of two processing utilizing; 1) aerial photographs published by the government and 2) data in road registers that span metropolitan/prefectural, city, and ward boundaries with detailed dimensions. Investigating residents of the target district, local organization officials, and collaborators from the visitors to the district as subjects, the research conduct in-depth interviews to ascertain the understandability of the data constructed through extraction and its potential for use in reconstruction and other occasions to identify further improvements.

Keywords: Public space, Reconstruction, Placemaking, Pre-disaster recovery planning

URBAN HUBS, PARTICIPATION, CITIZEN SCIENCE AND DIGITAL TOOLS: PATHWAYS TO MORE SUSTAINABLE AND DEMOCRATIC URBAN QUARTERS (596)

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Digital twins of the built environment — i.e. of buildings and cities — enable permanent data exchange and access to information on condition, performance and use in digital format of the physical world. Also, it might become a valuable interdisciplinary tool for multiple users as it can be linked with building registry and other relevant data-bases. Further, digital twin enables testing different scenarios and visualize forecasts by applying models and simulations to it (Kern et al., 2022). Thus, it becomes a tool for communication that is much needed in times when climate adaption is already very present concern for local governments and urban planners (Lenzholzer et al., 2020). To be able to communicate this concern to the wider public as well, like citizens and building owners, climate change based modelling and visualisations in digital twins may help to enhance further collaboration between them to face the change.

In terms of data acquisition and integration, a top-down approach has tended to take place so far. Building owners, operators or city administrations provide data and politicians usually decide which data is used, presented and prioritised in digital twins — for example, whether it is going to be buildings physical performance or safety, in case of cities traffic or building stock data, etc..

Often this information is not accessible to citizens and digital twins are therefore rather designed as "closed systems", so to speak (Charitonidou, 2022). The contribution of citizens or other stakeholders is usually not foreseen and thus, an actual potential of the digital twins stays unused.

In the OPUSH project, the focus is particularly on citizen participation and citizen social science. Within the project, data visualisation hubs are developed in the different partner cities to support the involvement of citizens in order to facilitate more democratic and accessible processes. Digital Twins as visual communication tool that allows to communicate complex topics in a way that leaves no-one behind, urgently needs to be addressed (Dembski et al., 2022). To be able to achieve the UNSDG-s in foreseen timespan, citizen participation is the key (Faivre et al., 2017). We claim that to implement the global goals at the local level and to reduce the complexity of the challenges, digital twins might be the right tool. In particular, this involves visualising otherwise invisible or complex urban data, developing visions, and creating scenarios in a participatory approach. With increasing complexity and the use of different planning languages in interdisciplinary processes, the demands on the comprehensibility of the visualisation also become higher. The potential gap in understanding could be to a large extent be solved by means of collaborative virtual and augmented reality.

As an example, two case studies from the OPUSH project will be presented, describing the set up and opening of data visualisation and co-planning labs in Vienna and Tallinn as prototypes and findings from the process will be analysed, presenting the main obstacles as well as outlooks for further use, development and extension of the hubs.

Keywords: digitalisation, participatory planning, data visualisation, digital twins, citizen science

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THE SMART CITY ECOSYSTEM: ANALYSING AND DESIGNING DIGITAL SYSTEMS IN MUNICIPALITIES (606)

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The paper presents the definition of the term Smart City Ecosystems and an approach to designing and mapping the system of a municipality. The methodology presented here is the result of expert interviews with administrative staff from various sectors, a literature review and exemplary mapping of smart city ecosystems.

At the beginning of the research project, interviews were conducted to develop a definition of smart city ecosystems and a modelling methodology. Once these two tasks were completed, a second round of interviews was conducted to validate and refine the results and to question their real use. Through further applications the assumptions and the method were validated and improved.

The study is designed to enable local authorities to take a holistic view of existing technical systems. In addition, the results of the methodology form the starting point for better strategic embedding of new systems in the existing smart city ecosystem. The starting point is the understanding that a smart city ecosystem comprises the totality of all technical systems, people and organizations in a municipality and their relationships to each other. The results help municipalities identify and also structure their existing systems. Particular attention is paid to showing the municipality Scope for action and how it can shape its smart city ecosystem.

Keywords: Smart city, smart city ecosystem, smart region, digital planning, mapping

FROM POLICY TO PRACTICE: REFLECTING THE SOCIO-TECHNICAL EVOLUTION OF OPEN DATA INITIATIVES THROUGH INSTITUTIONAL CONFIGURATIONS IN BERLIN, SEOUL, AND SURAT (619)

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The availability and release of open data have become a global phenomenon. Currently, numerous open data initiatives are implemented at various levels and scales of government under the slogans of open government (Charalabidis et al., 2018) or smart city (Kitchin, 2014). This paper develops a framework for comparing actors' agency in open data initiatives emerging within the institutional configuration of respective national open data systems in Germany, India, and the Republic of Korea.

The complexity of introducing data-driven approaches into urban government and planning in particular raises concerns about ambiguous and unpredictable outcomes on administrative processes or the engagement of social actors. Beyond the high expectations of the benefits and values that open data promise, there is limited evidence of the actual impact of open data (Zuiderwijk and Janssen, 2014) and little critical reflection has been devoted to the planning, operation, and management processes of open data initiatives. Here, the conceptualization of socio-technical dynamic interactions among social, technological, and institutional variables in open data initiatives and their comparative reflection are highly required.

We suggest the lens of socio-technical systems (STS) with a neo-institutional conception to gather empirical evidence by comparing open data initiatives. Based on an institutional framework as a theoretical background, a comparative analytical framework is developed, in which institutional configuration is presented in the form of a matrix indicating modes of institutional constraint and different levels of regulatory scales ranging from the local to the national level (Lowndes and Roberts, 2013). Using this framework, the open data initiatives in three local case studies are compared, respectively embedded in the open data policies at different government levels. Based on data collected through a discourse analysis of prominent public websites as well as official public documents and 31 semi-structured interviews in three cities, we systematically compare the evolution of open data initiatives, focusing on their implementation and management processes, as well as significant results, in the distinct cases of Berlin, Seoul, and Surat.

The comparison shows both similarities and differences among the open data initiatives, e.g., in how national policies and incentives are turned into local practices. The results provide a clear understanding of how institutions interact to shape socio-technical and local contexts, influence the agency of local actors, and subsequently lead to barriers and enablers of open data in planning. The approach contributes to the comparison of system-specific configurations and sheds light on the significance of the institutional context in which the open data initiatives are taking place. Methodologically, the results show that the institutionalist framework helps to contextualize and provide greater depth for covering the complexity of open data initiatives. This allows for a more nuanced discussion of the benefits and limitations of the future of open data in urban and regional planning.

Keywords: Open Data, Open Government, Smart city, Comparative research, Open Data framework

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ERROR: 'GREEN INFRASTRUCTURE' NOT READABLE: ABOUT THE FUNCTION AND DEVELOPMENT OF A DATA STANDARD FOR DIGITAL LANDSCAPE PLANNING (645)

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The 21st century is characterized by digitization and is changing the way information is communicated and exchanged. Spatial planning in particular faces the challenge of preparing the multitude of available information in a way that is suitable for the target group and communicating it in a comprehensible way. Until now, this communication has been oriented exclusively to the needs of the actors involved and thus to human readability. In the digital world, however, not only people but also machines communicate with each other. Their communication depends on readable and usable data in suitable data formats. A data exchange standard is therefore the basis for all future planning processes and a necessary prerequisite for all digital planning approaches (Benner, 2020).

In the field of spatial planning in Germany, the central coordinating agency XPlanung/XBau has been working on a semantic description of spatial plans. This has resulted in the XPlanung data exchange standard (IT-Planungsrat, 2017). Based on a semantic and hierarchical structure through classification, the standard can build bridges between different systems through a uniform terminology. The uniform handling of standardized data promotes the entire planning process and ultimately serves to accelerate the implementation of activities. In addition, an increase in quality can be achieved through daily updated and complete data (Würriehausen & Müller, 2012).

So far, the development of the standard has focused on binding regional and municipal land use plans. However, the German planning system also foresees Landscape plans as part of the overall spatial planning. Landscape plans aim to depict the existing and expected state of nature. These plans also address spatial challenges such as the expansion of green infrastructure, climate adaptation and flood protection. Landscape plans thus provide important information and data for sustainable spatial development and should be part of digital planning processes. A project recently completed demonstrates the still considerable need for standardization for the transfer of landscape plans into XPlanning, especially for municipal landscape plans (Pietsch et al., 2023). But how is it possible to transfer landscape planning information into a semantic description of an established data standard?

This contribution aims to transfer municipal landscape planning into a data exchange standard as a basis for digital planning processes. This will ensure that all contents and requirements of nature and landscape are considered in the context of smart and agile planning.

For this purpose, municipal landscape plans and green space plans nationwide were selected, analyzed and evaluated with regard to their plan contents. All plan contents were digitized and transferred into a database in order to subsequently structure the contents hierarchically. According to the requirements of the data standard, the contents were then described semantically and standardized step by step. Following the idea of a modular landscape plan

(MARSCHALL 2018), individual contents were defined as modules and necessary additions were developed. These include monitoring, impact regulation and impact compensation.

In summary, an essential instrument of spatial planning is promoted and the information of landscape planning is transferred into digital structures. The semantic description of data ensures that planning statements are machine-readable and can be included in digital planning processes. It is thus an essential prerequisite for meeting the challenges of spatial planning in the digital age.

Keywords: Data Exchange Standard - Landscape Planning - XPlanung - Spatial Planning - Data Legibility

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THE ROLE OF DRIFT IN EMBEDDING PLANNING SUPPORT SYSTEMS (PSS) IN PRACTICE: THE SPATIAL DEVELOPMENT FRAMEWORK (SDF) METHODOLOGY (690)

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Planning support systems (PSS) are geospatial innovations (methodologies, tools and technologies) integrated to support decision-making in the planning process. PSS implementation influences the outcomes in practice. However, research has not ascertained *where, when, how* and *why* such innovations become embedded in the planning process. Studies posit that the mismatch in developer versus user requirements or perceptions of PSS capabilities, usefulness and acceptance in the planning process contributes to the limited use in practice. Recent emphasis on adopting a socio-technical approach to PSS research and development (R&D) has led to more propositions on causes of limited use and questions about how to overcome the challenges of embedding them in practice.

Presently, studies omit details of changes during predefined PSS implementation that can explain what happens in practice. Hence, this study explored a different perspective to investigate how changes in PSS implementation shape embeddedness in practice. First, it built on PSS user approach studies by adopting the technology acceptance model (TAM) to explain how individual PSS acceptance initiates unexpected changes during implementation. Second, it applied the concept of drift from information systems studies to explain how unplanned changes in PSS implementation can explain the outcomes in practice. The research objective is to 1) reduce speculations about causes of limited PSS use and 2) establish the influence of "drift" in the outcomes of PSS implementation, usage and embeddedness in practice.

The research adopted a type of PSS developed in 2011 for regional and urban planning governance in parts of sub-Saharan Africa plagued with data scarcity and weak planning systems - the Spatial Development Framework (SDF) methodology. It implemented a qualitative research approach to investigate context-specific data of the SDF methodology's implementation in Rwanda. It illustrates how users' acceptance or perception of PSS initiates drift in PSS implementation. The findings highlighted how understanding and documenting drift in PSS implementation helps identify required improvisations, adjustments or compromises essential to better strategise PSS adoption and embeddedness in practice. This study confirmed the contributions of drift in PSS use and embeddedness in Rwanda's spatial planning process and set an agenda for future research.

Keywords: Planning Support Systems (PSS); Spatial Development Framework (SDF) methodology; Drift; Technology Acceptance Model (TAM); Embedding geospatial innovations

GIS-BASED DECISION SUPPORT TOOL FOR EVIDENCE: BASED POLICY MAKING FOR BIODIVERSITY PROTECTION (704)

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Geographic Information Systems (GIS) based decision support systems can play a crucial role in protecting biodiversity in spatial planning. These systems use spatial data and analytical tools to help decision-makers identify areas of high biodiversity value and prioritize conservation efforts. By integrating data on species distribution, habitat suitability, and land use, GIS decision support systems can also identify potential threats to biodiversity and assess the impact of different management scenarios. Additionally, GIS decision support systems can be used to monitor the effectiveness of conservation efforts and identify areas where additional action is needed. GIS decision support systems provide a powerful tool for integrating biodiversity considerations into spatial planning and can help to ensure that conservation efforts are targeted to where they will be most effective. A specific challenge comes with ISO standards for GIS data that are not used sufficiently but have potential to deeply improve the quality of the data, its comparability and compatibility and also to its credibility. In the area of biodiversity protection, we are also faced with two phenomena: (1) overflow of data and information from various countries and areas, supported by open data policies and technical solutions (e.g. GIS) for producing and storing copious amounts of data; and (2) challenge to navigate in the data and incompatibility of data due to various methodologies, scales etc. For policy makers, it is increasingly difficult to produce evidence-based policies as it is relatively easy to find arguments to support multiple attitudes and measures. The aim of this paper is to present two tools produced by Interreg DTP SaveGREEN and ConnectGREEN Projects aimed at fostering evidence-based policy making in the field of biodiversity protection. The first tool, CCIBIS (Carpathian Countries Integrated Biodiversity Information System), is a web-based portal presenting various items of biological and environmental information about the Carpathian Ecoregion. This information helps stakeholders to understand the status quo and foresee the conflicts in land use and future investments. This tool is using open-source software and aims to comply with international data standards regarding the data accessibility and quality of metadata. The second tool is Decision Support Tool, an interactive GIS-based support tool prepared as a help mainly in the pre-planning phase of the decision-making process about new investments in the territory. Objective of both of these tools is to help nature conservationists and spatial planners to provide evidence for policy makers in the policy making preparation processes aimed at protecting the biodiversity of Carpathians.

Keywords: geographical information systems, biodiversity protection, decision support tool, ISO standards, spatial planning

PLATFORM CAPITALISM AND URBAN MOBILITY: A LOOK AT THE GROWTH OF ALTERNATIVE APPLICATIONS IN BRAZIL (707)

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Urban mobility is a structural theme in discussions about socio-spatial dynamics in contemporary mega-cities, metropolises and smaller urban systems. In most of the large Brazilian cities, the car-centered model prioritizes the use of vehicles by implementing infrastructures that aim to reduce congestion and increase traffic fluidity. The investment in transportation infrastructure with this focus is one of the elements that contributes to the segregation and fragmentation that are inherent dynamics in the production of urban space (Santos, 2017).

The greater the distance between home and work, the longer the time spent commuting. However, when governments do not make investments in public transportation compatible with the demand, the use of private vehicles becomes the most evident solution. However, as investments are made, the value of land increases and the local inhabitants are not always able to stay in the area. Furthermore, the most socioeconomically vulnerable populations live in areas far from the city center and in areas with little or no infrastructure (Santini, 2019).

App-based solutions like "on-demand ride services" for the intermediation of hiring drivers, as well as for sharing various modes of transportation (bike, scooter, car, etc.) originated as a mobility solution in the early 2010s. Currently, Uber is the main symbol in this type of application, present in more than 70 countries, 10.000 cities worldwide, and more than 500 cities in Brazil, in all state capitals and metropolitan regions (Uber, 2020). The operation of the apps was based on the lack of regulation, restrictions and fees, and on the precarization of workers.

The rhetoric used in its consolidation was based on the offer of transportation as an affordable service, taking advantage of the comfort of the individual vehicle to travel, under the argument that the popularization of the use of this type of application would be a solution to the outdated transportation system and supposedly benefit part of the population that could stop using crowded and disorganized buses.

The Service Platform Model does not contribute to the change of the car-centered paradigm nor does it help solve the mobility problem in large Brazilian cities, functioning as a parasite of the urban infrastructure built and maintained with public resources, externalizing to workers and citizens the social and environmental costs of its activity (Ferreira, 2017).

Brazilian experiences show that the use of digital technologies with no relations and interactions to urban and/or social policies is just another expression of corporate services arising from the reorientation of the business models of large technology companies (Morozov, 2018).

This article aims to examine the emergence of alternative mobility applications and their relationship to confronting socio-spatial exclusion and climate change in Brazil. The research takes as its starting point the understanding of the dynamics of flexible accumulation (Harvey, 2004) and its expression through platform capitalism (Srnicek, 2021), and the platformization of the city under the discourse of smart cities. And it proposes to analyze the alternative applications to the

perspective of Insurgent Planning (Miraftab, 2009), evidencing the role of other agents and the State in confronting social and environmental inequalities.

Keywords: Platform Capitalism; Car-centered Urbanism; Smart cities; Insurgent Planning

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MEASURING URBAN PERCEPTION WITH SOCIAL MEDIA DATA (710)

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Urban vitality, a place-based attribute for liveliness, is at the core of urban planning research and practice (Dovey and Pafka, 2016). Creation of vibrant places is the focus of classic urban theory and the main goal of planning practice (Banerjee, 2001; De Nadai et al., 2016; Carmona, 2019; Qi et al., 2020). Researchers aimed to associate vitality with various urban characteristics across geographical locations (Zhang et al., 2018; Chen, Wu and Biljecki, 2021). However, while the abundance of studies on successful public spaces increases (Lu, Shi and Yang, 2019; Mouratidis and Poortinga, 2020), the holistic understanding towards urban perception and built environment characteristics remains rare (Marshall, 2012).

Gap: Despite a growing body of research literature to study urban perception using urban new data, a limited work was conducted to evaluate urban vitality (Huang et al., 2021).

Aims: The aim of this study therefore is to evaluate to what extent can we predict urban perception by evaluating built environment characteristics and which factors can be considered as success drivers ensuring vibrant places and high quality of urban space.

Methods/Research sample: Urban perception was assessed using a combination of social media – Twitter and Instagram activity database and urban features. A data-fusion framework was applied to assess and recognize places in Gdansk, Poland. The research followed the methodology of urban classics to describe urban metrics regarding morphology, functionality and connectivity attributes, which allowed predictive modeling to enrich the understanding of when places become successful. At the initial phase a deep learning model was used to extract features from online comments, merging multi-source data. We also measured the level of Twitter activity and conducted sentiment analyses to assess the attitudes toward different spaces in the city. We mixed quantitative methods to verify feature importance and to study spatial distribution to assess further urban perception. Calculations were performed on a fine-scale point level, to find urban metrics influencing place vitality.

Findings: At fine point scale, results show that urban perception can be assessed and measured on the basis of new urban big data. Places of specific attributes were found to have high likelihood to attract highest social media activity and/or positive comments on social media.

Value/originality: This study contributed to research discourse on the use of multi-source urban new data to evaluate urban form and to inform place-making decisions. It tests and proves the usability of such tools in urban planning processes.

Practical implementation and beneficiaries: The results can support decision-makers while designing public space as the research recognizes factors influencing urban vitality.

Keywords: urban perception, place-making, social media, urban big data

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METHOD FOR REFINED FUNCTION ZONING PREDICTION OF TOURIST TOWN URBAN DESIGN BASED ON BIG DATA AND CONDITIONAL GAN (727)

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The continuous development and improvement of modern information technology have facilitated the application of big data and artificial intelligence in urban design, which has allowed the realization of new analyses that were previously impossible due to the lack of data aggregation. Looking at the urban design of a tourist town, it is necessary to refine further the function zoning given by the urban plan. However, in the traditional urban design process, this step requires the designers to manually research for similar cases studies to analyze the spatial distribution relationships between businesses and geographical elements such as road networks, water bodies, and topography, which is not only time-consuming and laborious but also lacks reliability and accuracy.

This paper aims to propose a method that uses big data and conditional Generation Adversarial Network(cGAN) to obtain a refined function zoning efficiently and accurately, taking Tangquan Spring Town in Pukou District, Nanjing as an example. For the specific method, after retrieving the target town's characteristic keywords from data sources (such as Ctrip and Baidu map) using big data to obtain the samples for the cGAN model training, a sample pool consisting of filtered samples is built based on similarity and rating score. Afterward, maps with and without point-of-interest(POI) distribution of one square kilometer area at the center of each sample is drawn as the training set for the cGAN model. Subsequently, the cGAN model is trained to learn the relationship between map information and the distribution of POI on the map. Finally, after verifying the validity and accuracy of the model, the map of the target town without POI distribution is used as the model's input, and the map with POI distribution is considered the output, which acts as a guide to refine the function zoning.

The result of this paper is the implementation of a method for generating maps with POI distributions to guide function zoning refinement using big data and cGAN model. Furthermore, this paper illustrates the potential of big data and artificial intelligence to improve the efficiency, reliability, and accuracy of urban design.

Keywords: Urban Design, Big Data, Conditional GAN, Function Zoning, Tourist Town Design

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UNDERSTANDING THE DYNAMIC RELATIONSHIP BETWEEN ENERGY USE AND SOCIOECONOMIC CHANGES IN URBAN RESIDENTIAL COMMUNITIES (747)

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Recent research efforts across social and regional science fields have focused on various energy-related issues to understand and predict energy demand. Identifying the drivers of energy use in an urban environment is a critical aspect of guiding the sustainable development of cities in the climate change era and a vital issue closely related to economic resiliency nationally and internationally.

While abundant empirical findings and information have been produced, the ‘human factor’ in the energy-environment relationship at the local level is essential but difficult to measure due to the data availability and scalability issues. Given the background, this study aims to closely examine the dynamic relationship between residential energy consumption and socioeconomic changes at the community level.

A panel data of electricity and natural gas consumption of 983 apartment complexes housing more than 260 thousand households were collected for 5 years from January 2015 to December 2019. The consumption records were analyzed in relation to a set of community attributes, structural (building) attributes, socioeconomic attributes, and locational attributes. The relationship was modeled based on the STIRPAT framework, a widely used stochastic model of energy consumption, and it was further developed using a panel regression. Lastly, the spatial pattern and variability of the relationship were explored using a spatial model.

This study expands the findings in the urban energy literature in two aspects. First, this study takes an econometric approach to investigate residential energy use on the spatial scale corresponding to the community. Two, this study utilizes micro-consumption data and detailed socioeconomic characteristics while effectively controlling for other drivers of energy use. The study subjects are apartments, a dominant housing type in the study region (by approximately 60%), sharing similar building characteristics and energy systems. This setup effectively controls for the standard determinants of energy use, such as building and energy efficiency, and allows the study to closely investigate the impact of socioeconomic changes on the energy use of a community.

Preliminary results of the study indicated that the proportion of families with children and larger housing areas are the most dominant drivers of energy use besides income. The income effect was also a prominent variable with a significant local effect, identifying that some communities consume more energy than others relative to income. The socioeconomic drivers were directly and indirectly associated with the urbanization rate, as more local effects were observed in the highly developed urban sectors. The study demonstrates a viable guideline for modeling energy use and predicting future demand for the local residential sector and presents crucial information for developing local and community energy policies and strategies.

Keywords: Urban energy planning, Residential energy consumption, Community energy plan, Socioeconomic consumption factors, Smart-city solutions

BEYOND VISUALISATION OF BIG DATA: TOWARDS DYNAMIC DATA-DRIVEN CITY PLANNING IN SINGAPORE (777)

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Cities are complex systems shaped by numerous simultaneous dynamic processes, which either work in harmony and keep the system healthy and thriving or they can converge into conflict, resulting in anomalies and disruptions. With the development in new information, communication and other technologies, we can now gather, use and analyse the dynamic urban data alongside the conventional static or semi-static data to better understand these complex processes and their relationships and city's everyday functioning. With the creation of this vast amount of data, *'what, when, and how'* are the key questions that have become synonymous with its use. Recent studies (e.g., Kandt and Batty, 2021; Liu and Biljecki, 2022; Zhang et al., 2022) have focused on how to analyse and visualise relevant data for creating an effective response to the issues in an urban environment. However, the roadmap of which data to use for analysis is still debatable. Moreover, while recent attempts have been proposing smart new means for big urban data visualisation, they also fell short in data interpretation and planning guidance.

In response, this paper outlines part of the larger study done in Singapore to systematically approach the vast expanse of urban big data and develop an alert system for the city officials and agencies on the underlying anomalies or outliers in the everyday city functioning. The project developed a comprehensive framework "Data Cube" that harnesses on dynamic economic, societal, environmental, health and attitudinal data available in Singapore, including people movement and behaviour, use of public transport, driving behaviour, park use, economic spending, eating out, healthcare centre visits, attitudes, etc. The types of information gathered are of different temporal basis, thus representing the velocity of changes in the pulse of city areas of different granularities. Moreover, we developed a "DataCube-CityScan" platform, which harnesses on GIS, AI, data mining and isolation forest analyses to identify specific trends and anomalies/outliers in real-time and alert city officials to respond, monitor changes, plan their actions and maximise their resources timely. While the platform depends on data availability, accuracy and timely updating, by interlinking real-time analysis of static, semi-static and dynamic data, trend and outlier visualisations and supporting spatial and non-spatial information, it shows great capacity of guiding planning authorities' decision-making processes, strategy- and policy-making. Through examples of outlier detection and further interpretation, we will demonstrate the full capacities of this novel tool and its implications on city planning and management, beyond the traditional static indices, such as density and intensity indexes and land use, among other conventionally used planning indicators.

Keywords: dynamic urban data; big data visualisation; city pulse; city planning; Singapore

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Funding

This work is the result of an on-going research funded by the National Research Fund (NRF) and Ministry of National Development (MND) in Singapore under the "City Scan" grant.

TOWARDS RESILIENT MOBILITY: ASSESSING LIGHT RAIL TRANSIT STOPS AND SURROUNDING URBAN AREAS THROUGH USER-GENERATED DATA (838)

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Urban agendas across the globe face the need for innovative solutions to effectively cope with the complexity of current urban challenges. Specifically, urban mobility is one of the priority themes as it is a crucial aspect of building resilient and sustainable cities. The decision-making process for urban design and transport planning requires diagnosis with a holistic and inclusive approach, which can be offered by the combination of both technological and social aspects. This study aims to examine the extent to which the Light Rail Transit (LRT) stops and surrounding areas are currently enabling a transition into more multimodal and active mobility in cities. Specifically, the methodological approach focuses on three phenomena that have been shown to encourage people to adopt a more sustainable travel behaviour: the amount and diversity of economic and urban activities; the citizen preferences; and the spatiotemporal presence in these areas. For this purpose, a segment of an LRT line in two cities- Alicante and Valencia on the eastern coast of the Spanish peninsula, will be adopted as a case study. Technology-based participatory sources are used as they have proven to be reliable for identifying citizen perceptions, preferences, and opinions, as well as to monitor spatiotemporal changes in the physical and functional configuration of the city. Among the most common user-generated data sources, social media are of special interest to this research due to their participatory, voluntary and spontaneous nature, which are not necessarily the case for other types of sources such as data from mobile phones. The social networks selected are Google Places, Foursquare, Twitter and Wikiloc. The study offers useful insights in two directions. First, the results suggest the extent to which LRT stops surrounding areas potentially promoting resilient mobility; and second, the research contributes to the existing knowledge on assessing and evaluating physical and social aspects that contribute to building a more resilient urban environment through geolocated social media data.

Keywords: Urban resilience, social media data, urban mobility, Light Rail Transit

COMMUTER CONNECTION NETWORK IN SHANGHAI METROPOLITAN AREA FROM THE PERSPECTIVE OF DIFFERENT TRAVEL FREQUENCY (851)

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Cities arise from agglomeration and form functional distribution under the action of centripetal and centrifugal forces. The aggregated negative externalities make cross-city work occur(Cavallaro F,2019). The difference between cross-city commuting in different countries lies in the transport infrastructure behind it. China's model is dominated by high-speed railway. According to the questionnaire survey(Wang,2010), in addition to the daily round-trip from core cities to surrounding satellite cities, the cross-city work mode in China's Yangtze River Delta also includes weekly round-trip between core cities.

Economists have focused on the distribution of labor within a single city and its migration between cities, while planners and geographers have defined metropolitan areas in terms of commuting. They all looked at the daily commute from place of residence to place of work, but the reality is complicated, and the weekly commute from place of work to place of residence has not been included in academic research, probably due to a lack of technological means. We think it's interesting to observe that the weekly commute reflects the extreme distance that the workforce can tolerate to be separated from where they live and where they work, and may provide a new definition of the extent of the metropolitan area.

The research scope of this study is Shanghai and 10 surrounding cities in China's Yangtze River Delta region. The district and county are taken as the research unit, and the Yangtze River Delta mobile signaling data in 2022 is adopted. Each record contains the data of residence, working place and travel frequency. In this study, the network method is used to describe the features, including groups, strong association flow, node importance. Finally, the author uses the function of individual utility maximization in urban economics to explain and puts forward a simplified framework.

The decision to work across cities is mainly influenced by salary, city livability, housing price and commuting cost(Gerber P,2017.). In this study, it is believed that if there is a linear relationship between urban livability (public service input, job opportunities) and housing price, the utility function is an inverted U-shaped curve with housing price as the independent variable, and people with different incomes choose the area that maximizes their utility(Guirao B,2018). So high-income people live and work between core cities, and middle-income people live and work between core cities and suburbs (or between suburbs and suburbs). Directing people to cluster on the outskirts of cities and expand consumer markets ultimately benefits everyone: higher income people get better public services closer to the border, and low - and middle-income people get more jobs at the border.

In general, we believe that the emergence of different frequency data can help us to understand the reality more accurately and find a new theoretical direction for the study of metropolitan area.

Keywords: job-housing separation, travel frequency, labor force differentiation, utility maximization

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PARTICIPATORY SPACE DESIGN: HOW THE 'URBAN DIGITAL TWIN' MODEL PRODUCES A CO-PRODUCTION SPACE (909)

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Over the past few years, Smart City projects have come under substantial criticism for focusing too heavily on the physical fabric of the city and less on social issues (Cardullo, 2020; Nochta et al., 2020; Verrest & Pfeffer, 2018). There are some Smart City technology companies that brand themselves as 'social companies,' working to develop tools that improve the communication between city residents and mayors, for example. Yet these companies meet the neoliberal economic corporate conditions of profit and power relation (Harvey, 2003), leaving the core of most social issues untreated. The outcome is a lack of socio-technological application aimed at assisting and solving problems within the urban systems (Cardullo & Kitchin, 2019; Sadowski & Bendor, 2019).

The lacuna of lacking social applications in Smart City technology is both theoretical and polemical by nature. My Ph.D. thesis leans on this lacuna and complements it by an applied approach with the purpose of: (1) identifying where new digital tools and methods and their usage may significantly advance social applications for urban decision-making; (2) developing methods and digital tools for applying the social turn of the Smart City; (3) validating the methods and tools through the Hadar neighborhood research case study; and (4) providing a new conceptual framework with relation to the developing methods and digital tools.

The study is associated with the significant impact of the Digital Era (Shepherd, 2011), and therefore offers virtual as well as physical innovative tools for social transformation. At the core of this study is the Social Digital Twin (Yossef Ravid & Aharon-Gutman, 2022), a digital 3D city representation of comprehensive social data exchange (Figure 1).



Figure 1 - Social Digital Twin model visualization.
 Top: visualized in Green- Elderly Households that are more than 250 meters away from local gardens.
 Down: Spatial distribution of adult day-care in relation to the home address of centre members.

Its conception and design draw from the Urban Digital Twin – a smart simulation of data collected from the IOT city assets (Batty, 2018), which is considered to be the holy grail of Smart City technology. In this study, I adopted a novel way of using the Urban Digital Twin (such as data visualization, 3D city model, algorithm analysis), and integrated them with sociology methods and values for binding together the city’s social fabric and built environment. As part of this study, I claim that it is not enough to develop innovative digital tools, since researchers points of evidence lack in regards to the usage of these tools and their ability to facilitate collaborative decision-making (Lember et al., 2019). In this research, I created a new protocol for promoting social policy by using the benefits of the Social Digital Twin. The protocol was based on five milestone stages influenced by design thinking methodology, a human-centered approach that brings together different stakeholders for problem-solving (Figure 2).

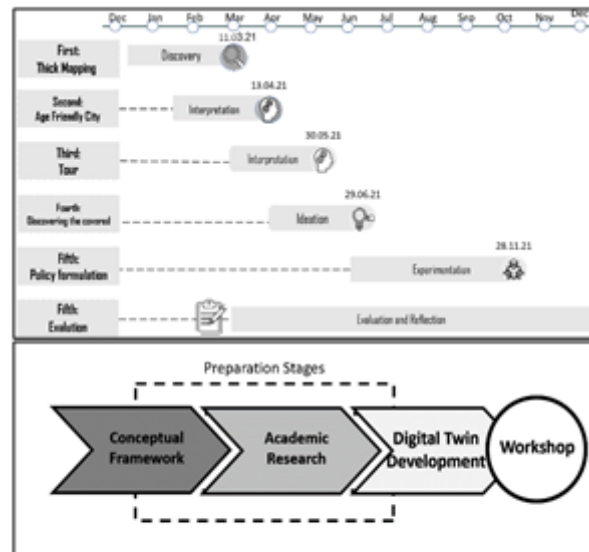


Figure 2- Protocol of utilize social policy by using Social Digital Twin.
Top: five milestone and evaluation timetable.
Bottom: milestone structure.

Each of these milestones was completed with a research collaborative workshop. The research collaborators were the Haifa city municipality and the Hadar neighborhood civic society. The workshops took place in an inclusive physical space that was specially designed for this study (Figure 3). This space is supported by interactive and immersive technologies and takes inspiration from two space designs: CAVE (Cave Automatic Virtual Environment) and Smart City command centers.

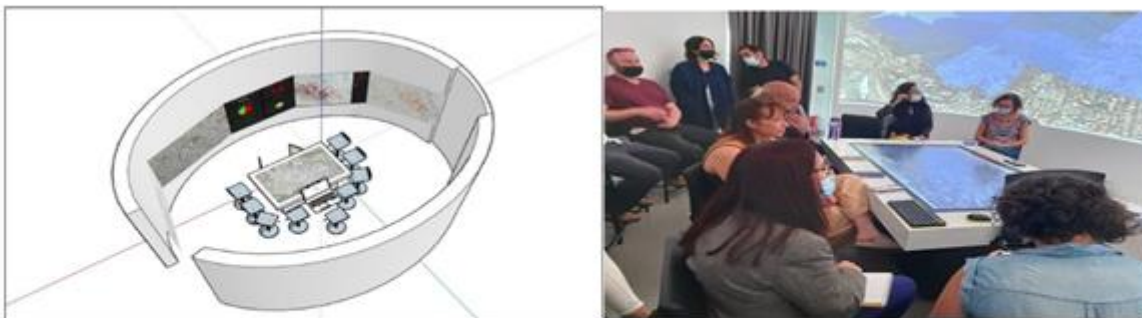


Figure 3: Right- Proportional drawing for data driven decision-making space. It is an oval space of 34 square meters. The space is supported by interactive and immersive technologies.
Left- second milestone workshop meeting which took place in the physical environment

The results of the study are located within the tension of theoretical and practical contributions. In practical terms, the study successfully offered the research partners new technological tools and methods for social data-driven decision-making, as well as a draft for social policy. In terms of the theoretical contribution, the study underlined new conceptual frameworks regarding the economic and social conditions to enable the social turn of Smart Cities.

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PLANNING AND MONITORING SERVICES OF GENERAL INTEREST WITH WEB GIS: WHICH INDICATORS ARE RELEVANT FOR PLANNING PRACTICE? (927)

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The provision of services of general interest (SGIs) is an important part of spatial planning from a European to the municipal level (Clifton et al., 2005). Ensuring access to health care, education, and many other important services is vital for social cohesion within and between countries (Fassmann et al., 2015). However, planners are faced with challenges such as population decline in rural areas, demographic change, and tighter public budgets which require efficient and needs-based planning (Tent et al., 2021). Planning support systems (PSS), in particular web-based Geographical information systems (GIS), can help to identify gaps in the provision of SGIs, planning of new facilities, and continuous monitoring (Bill 2018). In Germany, the development of such PSS is increasingly being pursued by federal states and planning associations (e.g., Klaus et al., 2020).

This contribution aims to identify relevant indicators for the spatial planning of SGIs in the German planning context. First, indicators are collected from existing web GIS, planning documents, and scientific literature. In a second step, the collected indicators will be assessed for their usefulness by planning practitioners from municipal planning authorities and private companies in workshops and expert interviews. Based on the results, recommendations for the development of PSSs to assess SGIs will be given.

The literature review revealed three dimensions which are relevant for services of general interest from a spatial planners point of view: accessibility to SGIs, supply-demand ratio, and (economic) viability of SGIs. Common indicators to operationalize accessibility are the access to a service within a reasonable travel time and the travel time to the nearest facility. The number of facilities within a travel time threshold and potential accessibility indicators are used less frequently. Supply-demand ratios are also measured primarily with very simple indicators that divide the supply within an administrative unit by the demand there. More complex indicators that consider the access to facilities, such as the two-step floating catchment area (2SFCA) method, are only used in particular fields such as in open space planning. Analyses of economic viability are almost non-existent in existing instruments as well as in the literature. The use of Huff models can offer potential here.

The contribution presents the results of two online workshops and multiple interviews with municipal planners and planning consultants from Germany. For this, the various indicators will be implemented prototypically into the web GIS GOAT (Geo Open Accessibility Tool) and presented to the planners. The aim is to identify the relevant indicators on the one hand and the reasons for choosing these indicators (e.g., degree of institutionalisation, ease of understanding, etc.) on the other.

For the development of PSS, the literature review already suggests that a focus on relatively simple indicators that are relevant for multiple disciplines is necessary. Nonetheless, there is an opportunity to create a framework for the integration of more complex and novel indicators into planning through the easier usability of web applications.

Keywords: services of general interest, planning support systems, web GIS, accessibility, GOAT

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A MULTICRITERIA EVALUATION OF LOCAL E-GOVERNMENT IN TERMS OF CITIZEN SATISFACTION (941)

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E-Government is one of the most critical lines of Digital Society and Public Administration modernization. The main benefits described in the literature are related to the decrease in the number of trips, transaction costs and waiting times (see, e.g., Piotrowski, 2009 and Wong et al., 2011) but also to positive impacts on transparency, accountability, and reputation of public authorities. (See, e.g., López-López et al, 2018, Jun et al, 2014, Spirakis, 2010 and Kim and Lee, 2012).

Local E-Government is particularly significant because local authorities are supposed to be the branch of public administration in closer interaction with citizens. They also cover a broad spectrum of services and competencies. However, such a wider spectrum tends to be quite challenging due to the need for integration between them and with many sectors of central administration (Bromberg and Manoharan, 2015).

Furthermore, since the Agenda 21 approval (UN, 1992) and more recently with the 2030 Agenda for Sustainable Development (UN, 2015), local authorities must have an agenda pursuing sustainability. Within this framework, Local E-Government is key in promoting a wide range of initiatives, such as reducing emissions and avoiding paperwork (Saha, 2009).

This importance explains the long list of contributions evaluating Local E-Government websites (see, e.g., namely, Australia: Sterrenberg, 2017; Canada: Reddick, 2012; Europe: Perez-Morote et al., 2020; India: Kumar and Sareen, 2012; Japan: Wong et al., 2011; New Zealand: Asgarkhani, 2005; Sri-Lanka: Deng et al., 2011; Turkey: Karkin & Janssen, 2014; UK: Carter et al., 2016; USA: Carbo & Williams, 2004; etc.).

Mainly, these works tend to focus either: (i) on the website features (see, e.g., Falco & Kleinhans, 2018) or on the organizational aspects of E-Local Government, including models of quality of service (see, e.g., Asgarkhani, 2005). However, they don't focus on citizens' satisfaction using the local E-Government sites, which explains why the objective of the research presented in this paper is the development of a satisfaction model for citizens to evaluate Local E-Government sites (LGS).

Within this framework, three research questions emerge: how can such satisfaction be modelled, which attributes should be considered and described, and how can citizens assess the relative importance assigned to each attribute?

Citizen satisfaction due to the use of a website can be described in terms of (i) the easiness of the website use; and (ii) the benefit stemming from it. These two perspectives should be modelled in terms of a set of attributes, and for each attribute, a descriptor and a score function should be

specified. Then, the problem of integrating the evaluation of such attributes by the citizen must be solved. Several statistical techniques exist to solve it, such as *Principal Components, Factor Analysis or Cluster Analysis* (OECD, 2008). However, they don't consider the relative importance assigned by the citizens to each attribute. Therefore, a multi-attribute approach will be adopted in our research, and such relative importance should emerge from a sample of citizens.

The model developed is based on the MAUT (Multi-Attribute Utility Theory, Fishburn, 1970 and Deyer, 2016), which has a complete theoretical foundation based on the Probability Theory, the axioms of preferences, and the Utility Theory (Loken, 2007).

Summing up, the original contribution of this paper is the development of an instrument of citizen satisfaction related to the use of LGS based on a tree structure covering the most relevant attributes. This instrument is applied to a set of Portuguese municipalities, revealing a high level of disparity and confirming how vital its application can be to assess inter-municipalities benchmarking, diagnose their significant shortcomings and support the design of a road map for improvement.

Keywords: E-Local Government; Citizen's satisfaction; Multi-Attribute Utility Theory; Attributes tree; Benchmarking of websites

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URBAN GREEN INFRASTRUCTURE PLANNING: A COMBINATION OF TECHNOLOGICAL ADVANCEMENT AND SOCIAL PARTICIPATION TO SUPPORT DECISION-MAKING IN SMART CITIES (950)

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Smart cities must integrate both technological and social elements to effectively address the challenges of digital transition. Considering the heterogeneity of urban data, a rapid and accurate diagnosis of the current state, the improvement of information flows and the analysis of future scenarios are essential for facilitating citizen participation and decision-making processes today. Against this background, both digital transformation and social impact require the use of systems for the collection, exchange, processing and visualization of data from urban and regional systems.

One of the challenges that planners in smart cities are facing today is how to plan and manage the green infrastructure in urban areas (Rall 2019). Since this vegetation layer is also living, their representation in urban digital twins (UDT) became a technological challenge. More specifically, how to monitor the existing green elements, and how to extend this data for environmental impact assessment? However, this technological challenge can be combined with numerous other challenges. One of them is how to involve citizens in urban green infrastructure planning. These technological and societal challenges are interrelated when it comes to involving citizens and municipalities in the process of planning urban green spaces (Dos 2021, Palliwoda 2022).

GreenTwins is a pilot project focusing on the challenges of urban green infrastructure planning with a comprehensive approach, which includes both technological and societal aspects. In this regard, a 3D co-planning application Virtual Green Planer (VGP) and a simulation and visualization tool Urban Tempo are being developed from the technological side for visualizing the urban vegetation along with an algorithmic growth model for modelling the changes therein. Besides, a physical space – AvaLinn Smart City Planning hub –has been developed in the city center of Tallinn, Estonia, to enhance digitally aided citizen participation and collaboration. AvaLinn will integrate the applications, developed within GreenTwins, and provide citizens and decision makers with the opportunity to use these technologies in real planning cases. It also supports visualization using collaborative virtual reality, which allows interactive and immersive stakeholder interaction and participation in multiple scenarios. Thus, GreenTwins provides the opportunity for developers, decision makers, citizens, and other stakeholders to cogenerate ideas, analyze their impacts, and visualize their future perspective through developed platforms and visualization tools. This may result in a synergetic improvement in both technology and social aspects and data-driven-planning in smart cities.

This research will discuss how to achieve synergy in tackling technological and social challenges by congregating them together through piloting projects. In other words, how the technological development in planning of urban green can be influenced by the engagement of urban

stakeholders and how the social challenges, such as the challenges in urban planning to meet the sustainability goals, can be supported by technological advancement. We are using an action research approach, closely collaborating with stakeholders, and regularly collecting feedback from the stakeholders on the process through interviews, observations and questionnaires. The preliminary results show that UDT related technologies should be developed in close collaboration with all relevant stakeholders to ensure the fit between digital tools and the user needs and preferences. Thus, it is essential to integrate technological advancements together with civic engagement while aiming to transition towards digital planning, and achieve greener, more sustainable and democratic smart cities.

Keywords: Smart City, digital transformation, Civic Engagement, Digital Participatory Planning, Collaborative Planning Model, Digital participation, Digital twins, Green infrastructure, sustainable city

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WHEN THE SMART CITY MEETS THE REAL CITY: THE INNOVATION DISTRICT OF BEERSHEBA, ISRAEL (966)

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In 2018 the city of Beersheba (aka Beer Sheva) won the international tender for the establishment of a new Innovation District. By a joint effort of the municipality, Ben-Gurion University, Soroka Hospital and the local High-Tec Park, the district territory and main goals were defined. This successful achievement of Beersheba was breaking news, and the city was declared 'Israel's Cyber Capital'. Later, a team of representatives of these institutions, accompanied by the support of international experts, and foundations from Israeli's public authorities and international philanthropy bodies, started working on the promotion and formation of the district, and the transformation of the area to a 'heaven' for companies and institutions that develop innovation and technology. A part of this transformation included planning interventions in the immediate residential space.

However, the contact point of the innovation district with the immediate residential space is the Gimel neighborhood of Beersheba. Beersheba, the capital of the Negev, the southern region in Israel, is considered to be a rather peripheral city, in geographic, economic and cultural terms. Additionally, the city's social-economic status is lower than the national average, and the Gimel neighborhood, after years of deterioration and negative emigration, is the most careworn neighborhood in the city, spatially and socially.

The presentation will deal with this interface. It will shed light on the tension between (a) the efforts of the municipality and residents, over the last decade, to promote long-term planning for spatial and social rehabilitation and regeneration, to (b) the vision of the innovation district, that is managed by joint powerful institutions, who are interested in a rapid transformation of the urban space and its adjustment to the new district's needs. Through this space, I will discuss what actually happens when the smart city meets the real city, and how it influences the social justice in the urban space.

Keywords: Smart City, Innovation districts, social justice, beersheba

A PLANNING AND URBAN DEVELOPMENT PERSPECTIVE ON DIGITAL SOVEREIGNTY: DIVERGING DIGITAL VALUES IN CITIES (974)

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Over the last decade, digitalization penetrated urban life, planning and development in different ways. Amongst the negative impacts were e.g. injustices, problems with data ethics and privacy, commodification and social control (Hollands, 2008, Coletta et al., 2018). Those effects have resulted in the reemergence of the discourse on sovereignty being reapplied to the digital (Floridi XXX) by various actors. Consequently, research on the underlying aims and actors using the concept of digital sovereignty to promote their views has emerged (Couture & Toupin, 2019; Glasze, Odzuck & Staples, 2022; Pohle & Thiel, 2020; Lynch, 2020; Herlo, 2021). Interestingly, with respect to urban planning and development, the understanding and underlying beliefs, values and norms of social movements is “[...] in sharp contrast if not in rupture with claims by the states of sovereignty over the digital” (Couture & Toupin, 2018: 2315) Thus, European cities are firstly influenced by the top down digital politics under the umbrella of the socio-technical imaginary of European digital sovereignty (Monsees & Lambach, 2022) tripling down to local governments, striving for digital economic independence, strengthening cybersecurity and socio-political order in the digital realm by protecting citizens individual digital sovereignty (Pohle & Thiel, 2020). Yet secondly, the social movement’s notion of digital sovereignty is understood as emancipatory, collective and alternative political economies seeking bottom-up practice from commercial and governmental actors in the digital realm (Lynch, 2020),

Thus, as put by Couture & Toupin (2019, p. 2319) we should explore what is to be gained and lost following diverging norms and values in relation to digitally shaping urban development. Aiming to contribute to this discourse, from a planning and urban development perspective, the contribution follows the research question: “How does digital sovereignty influence planning and urban development?” through a theoretical lens and showcases examples from Hamburg.

On the one hand, planning is a mirror of contemporary change and challenges entailed within the societal, political, economic, cultural and technological domain influencing society and habitat and “planning theory is core to understanding how planning and its practices both function and evolve”(Gunder, Mandanipour & Watson, 2017, p. 1). On the other hand, according to Potts (2020) planning itself, i.e. its ontologies, epistemologies and methods are changed by the digital transformation. Thus, this contribution uses the theoretical lens of planning cultures (Young & Stephenson, 2016, Othengrafen, 2010; Othengrafen & Reimer, 2013; Knieling & Othengrafen, 2015) to trace how the diverging values, beliefs and norms under the notion of digital sovereignty used by governments and social movements are translated into planning artefacts and thereby influence urban development and planning by showcasing examples from Hamburg.

Keywords: digital activism, digital planning, planning theory, values, planning culture

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EXPLORING THE ROLE OF SMART CITY STRATEGIES IN FOSTERING SUSTAINABLE AND INCLUSIVE DEVELOPMENT IN INDIA: A COMPARATIVE STUDY OF INDORE AND SATNA (989)

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Touted to have tech-based solutions, smart cities are a booming global phenomenon often presented as a means to address urban ‘wicked problems.’ In 2015, India, taking cue from other cities in the Global North, launched the 100 Smart Cities Mission as a collaborative effort of the state and union city governments as well as Ministry of Housing and Urban Affairs to spur radical transformation of cities, especially small and medium sized cities (SMCS). The Mission, amongst other developments, is actively devising measures to promote entrepreneurship not only for job creation but also to involve citizens in producing smart urban solutions. Entrepreneurship plays a crucial role in regional as well as local development. Much scholarly attention has been paid to how entrepreneurship can help solve society’s grand challenges and foster social innovation. However, we lack a coherent understanding of how cities, in particular smart city strategies, can foster sustainable and inclusive development.

In order to address this gap, we empirically explore the question ‘What role do the smart city strategies and the institutional context of SMCS play in fostering entrepreneurship?’ based on a longitudinal data collection in Indore smart city (medium-sized city) and Satna smart city (small city). Supporting entrepreneurial activity is instrumental in stimulating innovation and knowledge spillovers that can engender smart development, however, the attractiveness of the cities plays a considerable role in attracting entrepreneurs and organizations. SMCS are often considered as ‘entrepreneurship laggards’ and do not manifest as a top choice for entrepreneurs owing to their institutional framework, physical & technological infrastructure, human and cultural capital as well as the lack of local openness towards diverse and new ideas. Hence, based on our findings, the smart city strategy should support cultural and normative institutions that facilitate or inhibit entrepreneurship, in addition to strengthening regulatory environments.

Keywords: smart cities, entrepreneurship, institutions, sustainable development, small and medium-sized cities

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RESEARCH ON THE REGIONAL SPATIAL STRUCTURE AND CHARACTERISTICS FROM THE SPACE OF FLOWS PERSPECTIVE BASED ON BIG DATA: TAKE GUIZHOU PROVINCE IN CHINA AS AN EXAMPLE (990)

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From the perspective of Space of Flows, taking Take Guizhou Province in China as an example, this paper explores the regional city network from population flow connection (physical connection) and economic flow connection (non-physical connection) by mainly using mobile signaling migration data and enterprise big data.

The following conclusions can be drawn: 1) The overall pattern of the city network in Guizhou Province presents a multi-level Core-Periphery structure. 2)Top two cities in Guizhou Province have formed a strong economic link, but the actual population flow needs to be strengthened. 3)The network hinterland of Guiyang covers the whole province, but the network hinterland of Zunyi is mainly concentrated in its city and has not had a radiation effect on other areas of the whole province.

Keywords: Space of Flows, City Network, Guizhou Province, Population Flow, Economic Flow

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SMART TOOLS AND MANAGEMENT METHODS FOR IMPROVEMENTS OF EFFECTIVENESS IN INTEGRATED URBAN PLANNING FOR SUSTAINABLE DEVELOPMENT (1000)

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The aim of this paper is to show the potential logical relationships and the possibilities of practical application of the smart city concept and its tools, in activities undertaken for an integrated approach to strategic planning of urban development.

Starting from the first issue (integrated planning), it should be noted at the outset that the sustainable development paradigm means the need for a comprehensive, i.e. holistic, approach to development processes in the process of planning and managing organizations, which can also be considered as territorial communities (e.g. local community, municipality, city, region). For management practice, this means the need to move away from a narrow, i.e. sectoral, approach to planning in favor of integrated planning, i.e. one where setting development goals in one of the three basic dimensions of development processes (economic, social, environmental) will take into account the mutual impact, interactions and assessment of the effects of achieving development goals in other spheres. An integrated approach in planning also means taking into account the territorial effects of socio-economic development processes in the sphere of spatial development, as well as ensuring such spatial development that will ensure the sustainability of the use of natural resources, the ability of nature to provide ecosystem services, as well as the spatial continuity (coherence) of natural structures conditioning the ability to reproduce and undisturbed evolution of living natural systems. Already from this very general description of the idea of holistic thinking about development and the resulting need for integrated planning, it is clear that such an approach requires from planning institutions (e.g. public planning services and decision makers) very advanced analytical and forecasting capabilities in order to properly formulate goals and development directions.

At this point, it should be noted that today the basis for planning the development of cities, local communities, municipalities or regions is the strategic planning method. Strategic management and planning – like many other methods in managing public organizations – have been adapted from management in business organizations. However, due to the different nature of public organizations (different nature of the goals set of public and private organisations), as well as the extremely complex nature of "macro" public organizations (such as local self-government territorial communities, which are de facto "organizations of other organizations"), the use of planning methods strategy to territorial communities required far-reaching adaptations. They concerned in particular the method of SWOT analysis in an integrated manner, use of forecasting methods (e.g. the use of the so-called strategic foresight methods), use of the scenario approach, the development of integrated projects as tools for strategy implementation, and finally including in strategic documents the so-called model of the functional and spatial structure of a given territory.

Despite such advanced and far-reaching adaptations of strategic planning to the needs and specificity of territorial communities, strategic planning is not a perfect tool. In this context, two

critical remarks on the use of strategic planning in the development policy of territorial units can be mentioned. The first concerns the fact that in conditions of unpredictability of events, in a turbulent surrounding environment (the problem included in the title of the Congress), it is difficult to make long-term plans, and this is exactly the nature of the strategic approach. Critics therefore point out that strategic planning worked well in conditions of stable development trends, but is of little use in a turbulent environment (geopolitically, climatically, etc.). The answer to this type of criticism may be the indication of the sustainable development paradigm, which by its very nature implies the need to think and plan development in long time horizons. So as long as we accept the paradigm of sustainable development for political, systemic or ideological reasons, we are in a way "condemned" to a strategic approach to planning. The second criticism concerns methodological issues in the strategic and integrated approach to planning. Observing the practice and reviewing strategic plans (documents), it can be stated that at many stages of planning related to the development of strategic documents (SWOT analysis, forecasting, building scenarios, selecting goals, selecting projects) expert methods based on Delphi methods, etc. dominate. This gives rise to a serious accusation of subjectivism when analyzing development conditions, predicting future development trends or setting goals and directions of development. However, the use of expert, Delphi reasoning methods (heuristics) is a necessity and a consequence of the high complexity of problems that require analysis and making choices when developing strategic planning documents. A particular challenge in integrated planning is the ability to simultaneously analyze and organize the processing of data illustrating development processes in various dimensions (social, economic, environmental, spatial), and then, based on this data set, to draw conclusions and make decisions about development goals and directions. Using expert/Delphic methods – in this case, human intuitions supported by experience resulting from, for example, many years of observation of development processes are used. However, no matter how much we value knowledge and human experience, it should be recognized that such an approach is far from perfect and in conditions of changing environment – it usually fails spectacularly.

At this point, we need to point at the second of the indicated issue (smart city) and notice that for over a dozen years, the development of information technology (IT) thanks to the use of advanced IT tools, aimed at improving the processes of collecting, analyzing, organizing data, and then drawing conclusions on based on them, using algorithms based on artificial intelligence, makes it possible to improve various types of processes taking place in the city (e.g. transport, energy generation and distribution, waste management) related to the use of various types of resources (space, time, energy, secondary raw materials). Therefore, it can be said that in this strict sense and understanding of a smart city, this concept (and practice) boils down to the use of IT tools (big data, artificial intelligence) to improve management methods (including decision-making) in order to optimize various processes from the sphere of municipal management, which ultimately contributes to a more optimal, effective use of resources. It should be noted that, as practice shows, a smart city is primarily used in streamlining and optimizing processes that, from the point of view of all issues related to city management, are of an operational and sectoral nature. Examples of areas and sectors where "smart" solutions are used are usually: transport, energy or other spheres of municipal economy. The decision-making processes of public entities managing these spheres of the city are being improved.

At this point, a question can be asked whether it would be possible to use smart city methods and tools not only at the operational level and in sectoral terms in city management, but also in relation to strategic planning in an integrated approach? In other words, the question is whether today there are sufficiently advanced IT tools that would allow the elimination of the subjective "human factor" from the processes of analysis (diagnoses, forecasts) and decision-making (setting goals) in the strategic planning of development processes? This would mean the use of IT for integrated processing of data describing the specificity of development processes not in sectoral terms, but horizontally – i.e. problem-related (economy – society – space – environment) and in an integrated way, i.e. identifying all complex interactions between these spheres/aspects/dimensions of development processes to then allow the appropriate algorithms and artificial intelligence to make decisions regarding goals and directions of urban / territorial development based on hard data, not expert intuitions?

It cannot be ruled out that the complexity of the analysis and decision-making processes at the level of strategic planning for the development of territorial communities is so high that current IT tools are still not advanced enough to do it. Another barrier to practicing this type of solutions may be not so much the lack of analytical capabilities of the technologies used, but lack of the system of adequate monitoring of development processes that would make such data available (data can, for example, be collected only by sectoral approach - "data silo", and not by problem-oriented approach). Finally, it is possible to predict the existence of political (or even social) resistance to the elimination of the "human factor" from the processes of making strategic choices as to the directions of development - which can be considered both in philosophical terms (the final decisions must belong to humans) and more pragmatic terms (subjectivism analyzes and strategic decisions may be convenient for politicians as a less transparent procedure giving more discretion and freedom in exercising political power).

Keywords: smart city, integrated planning, strategic planning, urban planning, urban development, sustainable development

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RUDIFUN DATASET ON SPATIAL DENSITIES AND MIXED USE (1020)

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With the RUDIFUN 2022 dataset, governments, spatial researchers, urban planners, and city planners can conduct research on the relationship between spatial densities and mixing of housing with other functions on the one hand, and urban issues such as mobility, livability, and the real estate market on the other.

In the field of urbanism, density and mixed-use are recurring themes that are related, for example, to sustainability, mobility, livability, and real estate prices. The FSI (Floor Space Index) and MXI (Mixed Use Index) as indicators for spatial density and mixed-use have existed for some time, but were hardly available. It took too much time to determine them on a large scale. The PBL has developed a method to automate the calculation of spatial densities expressed in FSI (Floor Space Index) and GSI (Ground Space Index), as well as their derivatives L (Layers) and OSR (Open Space Ratio), and thus to calculate them in a generic way for the entire Netherlands. These indices are offered in the RUDIFUN dataset at the scale levels of building block, neighborhood, district, and municipality. Additionally, with the new dataset, it is possible to look back in time so that we can monitor where spatial densities have increased or decreased and then relate these changes to other urban issues.

RUDIFUN is the Dutch acronym for "Spatial Densities and Mixed-Use in the Netherlands". These indices not only provide guidance on numerical spatial densities, but also insight into the physical morphological characteristics of the living environment.

These indices can empirically support spatial research related to, among other things, mobility, livability, health, real estate values, and energy. In addition, making these indices available creates a database of reference environments that can be used by the national government, provinces, municipalities, and designers to support future spatial planning and development.

My presentation will look back to the previous versions and look forward to the 2024 version of Rudifun.

Keywords: GIS, Urban Densities, Urban research, Mixed use, Design research

THE WAY TO A SMART NEW URBAN AGENDA? SPATIAL PLANNING AND 'BASIC SMART CITY' APPROACHES IN CHINA AND THE UK (1021)

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The notion of a 'smart city' (and related various connotations such as 'digital city', 'cyber city', 'knowledge city', 'network city' and 'smart urbanism' amongst others) has become an increasingly important narrative for both understanding and for managing the city in the 21st century. Such notions have often been imbued with an almost apolitical positive technocratic capacity to both explain urban phenomena and propose solutions to them, by both public and private actors. At the same time, national governments (such as in China and the UK), and supra-national governance organisations (such as the United Nations), have been placing varying degrees of strategic importance on managing the urban and- within their respective analyses and responses- the notion of a smart city has been increasingly prominent. This paper delimits its coverage to the notion of a smart city- restricting itself away from the multiplicity of wide-ranging subcategories and sweeping definitions that have been deliberated upon and proposed in recent years. It attempts to draw out the key literature specifically related to describing and defining a narrower 'basic smart city' approach (BSC). It discusses what this might mean- when considering the 'basic smart city' category- in the context of the United Nations Habitat III conference's 'New Urban Agenda' and the approach of the governments of China and the UK. Four cities across the two countries are considered.

Keywords: smart cities, planning, New Urban Agenda, UK, PRC

TRACK 03: PLANNING AND LAW FOR TURBULENT FUTURE

PV UTILITY-SCALE POWER GENERATION FACILITIES: THE CAPACITY TO PLAN ACTORS' PREFERENCES (64)

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Power generation based on Photovoltaic (PV) technologies composes an important share of the world's renewable energies (RE). Statutory planning and implantation of PV utility-scale power-generation facilities have been boosted internationally in many countries, including Israel. However, despite being a sunny state, Israel has never fulfilled its national RE power generation goals, set at 30% of the total of its national electricity production. The reasons include the inadequacy of the state's National Solar national Outline Plan and decisions made by the ILA (Israel Land Authority), the inability of the national electricity transmission network, and the contradictory policies pursued by various government bureaus/agencies.

In 2010, a specific National Outline Plan (10/D/10) focusing on PV was approved. The plan aimed to encourage the approval of ground PV facilities buildup, among other aims. The plan thus determined instructions for detailed planning of PV sites with a maximum area of 75 hectares, including prioritizing the designated facility locations. Using a seven categories ladder, the plan defined the preferred locations ranging from an "in an area which is defined for building" to the least preferred option, "an open land and non-adjacent to built area." The various options gradually move away from areas within the built environment to those adjacent to existing built areas and infrastructures. Only if these were unavailable will it allow to locate PV facilities in remote and detached places. The national plan obligates the commissions approving the PV plan to explain and justify their location preference.

This study examines the entire list of detailed plans approved in Israel during the years 2016-2020 based on the National Outline Plan 10/D/10. We do that through reviewing the approval of PV facilities, examining more than 100 transcripts of official discussions within dozens of District Planning and Building Commicommisions' (DPBCs) meetings, official consultations and dozens of guiding district policy frameworks. The analysis focuses on the planning phase within the "detailed plan life," including the facility siting and the deposition of the plan for public objections.

The research shows that the majority of plans approved by the commissions met the lowest standard listed by the National Outline Plan, "in an open land and non-adjacent to built area." Moreover, the study found considerations that are not articulated in the national master plan yet greatly influence the siting planned PV facilities. Such considerations include property issues and power relations within agricultural societies. In some cases, these considerations were responsible for offering solutions contradicting the statutory national master plan prception, yet approved by the DPBCs. In addition, contradictory policies and norms pursued by governmental agencies prevented the approval of PV facilities in preferable areas. At the same time, poor synchronization between plan approval and actual PV development also hindered the accomplishment of the national plan's goals and policies.

This study thus analyses the fundamental gaps between Israel's official planning policy and the actual approval of detailed plans for PV utility-scale ground-mounted facilities. The study also compares the situation in Israel with a broad worldwide literary review and offers points where leaders should consider a change. The concluding discussion relates to the utility of such pre-defined rungs to guide decision-making and provide a sound framework in the face of complex property considerations and uncoordinated governmental apparatus.

Keywords: PV power generation; Planning instructions; Planning implementation

LAND POLICY AND THE CONSTRUCTION OF VALUE BY ACCOUNTANCY REGULATIONS (194)

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Governments active in land development may buy and sell land to pursue public aims. Accountancy regulations are important for defining the position and the room local authorities have to do so. In the Netherlands, the valuation of land is based on accrual-based accountancy (Korthals Altes, 2010). Insight in the economic position of local authorities is not based on cash flows, but on the valuation of debit and credit. Important to this is the valuation of the land portfolio. Traditionally, this has been based on historic costs and not on exchange value. Losses foreseen must be taken immediately; profits can only be booked after they have been made. There have been changes in these accountancy regulations over time having impact on the economic position of local authorities. This paper discusses the development of accountancy regulations and the analysis of the economic position of local authorities against the background to key developments in the environment, which includes economic development as the global financial crisis, policy ambitions relating to spatial planning and housing development, ideas on the central position of the council in managing the financial position and the idea, promoted by EU harmonization efforts (Palea, 2017), to move accountancy practices towards exchange value instead of historic value. It discusses the impact on land policy in a spatial planning context.

Keywords: land policy, valuation, accountancy, Netherlands

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TIME AS PLANNING INSTRUMENT: INSTRUMENTAL COMPARISON BETWEEN FINNISH BUILDING REMINDER AND SWISS BUILDING OBLIGATION (262)

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Failure to implement plans is a significant barrier to effective planning. The majority of the studies on plan implementation have focused on assessing the extent to which the quality of plans is met. The timing of actual development – and how it can be influenced by policy instruments – has received much less attention in the literature. Due to differences for instance in planning cultures and governance and administrative structures, the public interventions to plan implementation vary from country to country. To create shared conceptual language and to better understand policy instruments available to local authorities to impact the timing of plan implementation across jurisdictions, this study investigates such instruments. We present a heuristic analytical frame that deconstructs the design elements of such instruments and analyse and compare a Swiss policy instrument called building obligation and a Finnish instrument called reminder to build. Switzerland and Finland were selected as their planning systems provide instruments explicitly addressing these issues. We observe that in both country contexts these instruments that interfere with the private property rights institution in a strong way are primarily designed to work as a big stick whose mechanism of action is meant to rely more on the existence rather than the actual usage of the instrument. While both instruments can be categorized as strict and coercive policy instruments, we also observe dissimilarities in their technical characteristics. Overall, our findings point that even though seemingly similar instruments across jurisdictions should not be treated as straightforward equivalents of each other, the essence of plan implementation instruments that utilize time as a power tool can be captured through a simple heuristic. This way, our study contributes to a better understanding of factors that influence the actual spatial outcomes in relation to the planned development beyond the Swiss and Finnish context.

TOWARD JUST RENEWAL ENERGY POLICY: ANALYSIS OF EQUITY IN BENEFITS FROM DECENTRALIZED GENERATION (281)

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Renewable energy is a key solution to the global climate crisis. Nevertheless, and despite the significant benefits that renewable energy has, like any other public policy, the development of renewable energy infrastructure can have far-reaching and long-lasting distributional ramifications. Depending on policymakers' decisions regarding goals, target population, policy design, policy instruments and implementation, renewable energy policy can either be used to promote social and economic equity, exacerbate existing inequities, or even create new societal fault lines. This, in turn, can have major implications for societal and political support of the energy transition.

Renewable energy has thus become a new domain of energy justice research within a much broader tradition of environmental and energy justice studies. Given the rapid changes happening in energy policies, it is critical to understand which populations are more vulnerable to climate change, who suffers from energy poverty, and who is being listened to regarding energy decision-making processes. However, while a renewable energy revolution is essential for combatting climate change, can help enhance access to energy in energy poor regions, and can strengthen citizen participation, done the wrong way, it can create new or widen existing social gaps.

The focus of this proposal is on policies and programs designed to address energy poverty and enhance public ownership of energy transitions, by promoting decentralised renewable energy generation (also called distributed generation), such as through distributed solar PV or wind. Decentralized small-scale generation by communities, households, firms, enterprises and farms has enormous generation potential and is already beginning to play a major role in meeting renewable energy targets globally.

The aim of this study is to examine how different countries are approaching burden sharing, and the distribution of benefits associated with renewable energy transitions provides opportunities to learn about just energy transitions that could be of global significance.

We examine to what extent policies that promote decentralized (primarily small-scale generation), are promoting inclusion in decision-making about energy futures and social and economic equity. With the rush to renewables, it is particularly important to understand what room is being created for more decentralized electricity systems, how populations which to date have been largely left out of the renewable energy transitions can be better integrated, and how policies can be designed so that more vulnerable populations see benefits, and existing socio-economic gaps are narrowed, rather than broadened. The question is relevant at the household, community and regional scales, since decentralized generation can affect inequality across all such units.

Given the rapid pace at which governments are designing and implementing policies to promote decentralized generation, it is urgent and crucial to provide policy makers with both a theoretical framework and a sound body of empirical evidence on the extent to which these policies are

inclusive, and reduce or enhance economic or social inequality, and how they may be designed to do better in these respects. The research program proposed here will aim to fill this important knowledge gap.

Keywords: Renewal energy, decentralized generation, social equity, distributive justice

DELEGATION IN THE NEW DUTCH PLANNING AND ENVIRONMENT ACT (368)

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Today, Dutch cities must deal with several environmental and planning challenges, such as housing problems and the degradation of environmental qualities. In order to address these urban challenges, it is increasingly believed that municipal action should be flexible and quick. The aim of the new Environment and Planning Act, which enters into force in the summer of 2023, is to promote flexible and effective municipal action. To this end, the new Act redistributes the regulatory powers between municipal councillors and executives, by granting executives greater authority. It is hoped that the redistribution of power will lead to more effective responsiveness to the rapidly changing and complex urban challenges (Ministry of the Interior and Kingdom Relations, 2020). However, little notice has been given to whether this power transfer is consistent with the idea of representative democracy. The Netherlands has a long history of representative democracy. At the municipal level, council members are directly elected and legitimately act in the interests of the public. Constitutionally, the council is the head of government. To ensure the highest position of the council, the regulatory power is almost entirely allocated to them by constitutional rules, with rather strict restrictions on the delegation of this power.

The aim of this article is twofold: first, to investigate the distribution of regulatory power between councillors and executives under the new Environment and Planning Act, and second, to explore if this power distribution is constitutionally valid. Based on a qualitative legal analysis, the findings show that the new Act mainly supports flexible and effective municipal action by allowing the physical environment plan to be delegated almost fully to the executives, without the Act clarifying the limits of delegation. The physical environment plan, allocated to the council, is the most important municipal instrument as it regulates activities that (may) affect the physical environment (Ministry of the Interior and Kingdom Relations, 2020). But with this broad delegation option, the regulatory power can be transferred almost entirely to the executives, meaning that their authority is significantly increased. Even though this may (though not necessarily) lead to more flexible and effective municipal action, there is a higher chance that the democratic legitimacy of municipal regulations and decisions on how to address urban challenges declines. The article concludes with the statement that the delegation option does not sufficiently respect the constitutional principle of representative democracy. Lastly, I advocate that it is important to set limits on delegation in the new Act in order to ensure that urban challenges are legitimately addressed.

Keywords: democracy, urban planning, environmental law, representatives, local government

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FROM CONTROL TO REGULATION: EXPLORING THE RULE OF LAW IN TERRITORIAL SPATIAL DETAILED PLANNING IN CHINA (464)

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At present, the implementation of use control for the whole territorial space has become a basic requirement of China's planning management system. Detailed planning serves as a tool for the planning implementation, in which land use control techniques such as zoning and classification have become the key technical methods. Regulatory detailed planning under the urban and rural planning system has formed a relatively systematic control method for the development and construction of urban construction land in the context of market economy. However, in the face of the expansion of the scope of territorial spatial planning and the expansion of planning objectives and control contents, the control ideas and technical methods of detailed planning are facing serious challenges.

Land subdivision based on the overall territorial spatial planning, combined with the real needs and based on the criteria of land classification is the basic feature of detailed planning, and land classification and zoning are the basic methods of planning control. Among them, zoning is a common element of general planning phenomena, reflecting the essential characteristics of planning behavior, and is an important entry point for studying planning ideas and control tools. In order to discuss the rule of law in detailed planning in the transformation of territorial spatial planning system, and provide the theoretical framework and the implementation path for detailed planning in the territorial spatial planning system, the paper covers the following three aspects.

First of all, the differences between "rule by law" and "rule of law" are analyzed. From the perspective of the relationship between power, right and law, this paper deeply explains the planning and implementation dilemma of Chinese detailed planning as a kind of "control zoning". Second, combined with the international practice, compare the differences of "control" and "regulation", explain the behavior logic and attribute of "regulatory zoning", analysis he influence and challenge of the current urban complexity theory on the planning. It makes clear that regulatory zoning has greater potential and adaptability in dealing with the complexity and unpredictability of urban development. Finally, according to the goal and status of detailed planning in China's territorial space planning system, starting from the difference between the bottom line and the goal, it is clear that detailed planning must have the dual attributes of both control and regulation, and puts forward the two-layer structure and the coordination mode of use regulation zoning and development control zoning.

The paper focuses on the universal scientific approach and the general attributes as a technical tool of "zoning". It is proposed that the rule of law of the detailed territorial space planning should not be simply equivalent to the legalization of the planning results, but rather to deepen from the thought and implementation logic of the rule of law. This paper expounds the transformation direction of detailed planning in the territorial spatial planning system, from "control" to "regulation", and provides the legal form and the implementation path of detailed planning,

which lays a theoretical foundation for the optimization of technical tools of territorial spatial planning.

Keywords: rule of law; detailed planning; zoning; control; regulation

CRAFTING REGULATORY TOOLS: THE ROLE OF LAW AS THE FACILITATOR IN PLANNING CONVIVIAL MIXED-USE PUBLIC SPACES (514)

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Regulatory tools construct the state of the art of spatial planning. Spaces are subject to regulatory tools— sets of laws, regulations, guidelines, and mandates— as backbones in the process of spatial production, distribution, and the use of spaces. However, the role of regulatory tools that serve as structural conditions in shaping public spaces is rather less discussed in planning scholarships than in taking it as a given framework. This research takes upon the lens of new institutionalism and legal pluralism to interrogate the epistemology of law in spatial planning.

Using the urban street market as a case, this research explores the complexity of planning mixed-use public spaces. Inspired by the new institutionalism, I propose the concept of the ‘governance regime’ as an analytical framework. It provides law and regulation a visible stage in the process of spatial production and further socio-spatial dynamics. Theoretically, I define the governance regime as the network of organizations connected through formal institutions (such as law and regulations) and informal institutions (oral agreement, customs, and political negotiations) at multiple governance layers which interact with mixed-use public spaces. Empirically, I took 12 months of organizational and spatial ethnography fieldwork to investigate the socio-spatial dynamics, as well as map out institutions, organizations, and their relational nuances in urban street markets in the city of Amsterdam and Taipei.

Research findings reveal that to plan convivial mixed-use public spaces, both formal and informal institutions matter. As formal institutions pave out substantial foundations of social and physical infrastructures. Informal institutions take upon the role of horizontal negotiations, and cross-departmental coordination, creating rooms for innovation and developing implicit knowledge to adapt to emerging socio-spatial dynamics. Without any of them, mixed-use public spaces can either fall into total chaos or have too many regulations that cause the loss of users’ interests. Since mixed-use public spaces would only be functional once they can incorporate the multi-usages from different users. The finding raised the question to challenge rule-making in facilitating socio-spatial dynamics.

Carmona (2014, 2019) demonstrated a full life cycle of the production of urban public spaces from planning, design, use, and management. Specifically, he pointed out that planning for urban public spaces is very much about designing the process of spatial production. Reflecting upon the challenge of rule-making in planning mixed-use public spaces, I argue that it’s necessary to take a close examination of the social context of rule-making in producing urban mixed-use public spaces.

To do so, I engage the analytical tool ‘reglementation’ proposed by the legal anthropologist Sally Falk Moore (1978). Moore proposed to see the law as a process instead of a static tool. In certain ‘semi-autonomous’ fields, one can observe the rule formation and enforcement take place. This resonates with my findings on how formal and informal institutions interact with each other and makes an impact on the socio-spatial dynamics of the public space. In the same line of thought

on legal pluralism, Blomey stated the interplay that law produces the space but is also influenced by the socio-spatial dynamics of the space (Blomey, 1994). In this respect, I aim to draw attention to reflect on how the spatial planning profession and research can approach the role of regulatory tools as the facilitator in bridging both socio-spatial and the formal and informal institutional dynamics in serving the conviviality of public spaces. And to reposition the relationship between spatial planning and law.

Keywords: mixed-use public space, governance, new institutionalism, legal pluralism

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COURT-IMPOSED “DISTRIBUTIVE JUSTICE” CRITERIA AS INHIBITORS OF PRODUCTION OF RENEWABLE ENERGY (523)

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The paper recounts how national land ownership, instead of promoting renewable energies, has become an impediment. Further, harnessing a “distributive justice” argument can sometimes create the converse effect.

The Israeli renewable energy (RE) goal was initially set at 5% of electricity production to be reached by 2016, and updated to 10 percent by 2020. Neither of these goals have been reached, even though Israel has optimal sunshine resources. Note that Israel does not possess significant hydro-energy or wind capacities.

One of the major reasons, as described in comparative research by Alterman and Taschner (Alterman et al., 2021), is the complex and ever-changing land regulations imposed by the Israel Lands Administration. These are fed mainly by the charged debate regarding farmers’ property rights and their capacity to negotiate contracts with energy developers.

The State of Israel has a land regime unique amongst advanced-economy countries: The vast majority of the country’s land area is defined as “Israel Lands” and is national property managed by the Israel Lands Authority (ILA). An increasing diverging trend has occurred in recent decades: While the leasehold contracts held by urban dwellers have been fortified to become tantamount to private ownership, the leaseholds held in farming communities have been gradually weakened, and have become insecure.

This disparity has even reduced the capacity to locate photovoltaic projects on agricultural land. We are referring to situations where the planning authorities would agree to the temporary conversion of farmland to solar energy plants, but the ILA places a series of constraints on such contracts. One of the issues in dispute surrounding Israel Lands is the farmer's right to use a portion of the national land for non-agricultural enterprises.

The ILA adopted a series of rules determining the farmers’ capacity to contract with developers (who already hold a permit quota from the national energy authorities). Even though these decisions were already highly restrictive, they were petitioned to the High Court of Justice. The argument was that by granting farmers the right to contract with energy developers, the ILA was infringing on “distributive justice” because the farmers were given an unjustified advantage compared with their urban counterparts. (Petition 446/12) This is an especially strange argument in the Israeli context, given that urban Israel is extremely densely developed and any tracts of open land suitable for PV farms exists only in farming villages. (Note that the issue did not encompass with PV on rooftops, parking or other installations, which are indeed relevant to both sectors).

The petition was eventually rejected for technical reasons, not for its negative impact on fulfillment of Israel’s renewable energy goals. The Court’s reasoning, and some further

regulations, further exacerbate Israeli farmer's property rights, compared to their peers in advanced economy countries. The paper will try to unravel the counterintuitive underlying factors that have led to this situation.

Keywords: Agricultural Land, Distributive Justice, Property Rights, Solar Energy, Planning Law

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DEATH AND LIFE OF COOPERATIVE HOUSING: COMPARATIVE STUDY OF LEGAL FRAMEWORKS FOR COOPERATIVE / COLLABORATIVE HOUSING (554)

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In recent years there is a resurgence of research and practical interest in cooperative or collaborative housing [CoH] in several advanced-economy countries. This type of housing was rampant in countries in the Soviet Block and East Europe. Much of this housing stock was privatized or changed to other forms of tenure and management. Importantly, CoH is not a single, uniform type of housing tenure. It can take on many legal and design formats, probably with many different social, economic, and environmental implications.

The renewed interest in cooperative, collaborated and related format of housing also harps on the boom in the seemingly related concepts of “sharing economy”. And yet, the body of research about CoH as a whole is still modest. Interestingly, the legal aspects and their possible impacts have hardly been addressed by systematic research. Other aspects have drawn more research attention: architectural design, sociological, psychological, economic, and spatial planning, but they lack a systematic cross-national perspective.

The first paper with a cross-national perspective was a meta-analysis of 195 previous papers on any aspect of CoH (Czischke et. al., 2020). While scanning all aspects of analysis, the authors note the void in legal aspects research. They express surprise, noting the essential role of the legal frameworks for initiating and maintaining CoH projects. We did find one recent paper (Bossuyt, 2021) that does focus on the legal aspects in depth, but it pertains to the Netherlands only. The author notes the importance of cross-national research.

Comparative legal analysis can shed light not only on the variations across countries, but can also attempt to hypothesize about whether, and how, legal-format differences relate to differences in functioning in practice at different locations.

At the current stage of research, the focus is on developing an analytical tool to classify and systematically compare the details of legal frameworks across a large sample of countries. The hypothesis is that there are discernable differences among countries as to the legislative frameworks. At a later stage, the project will delve into differences in implementation of different legal frameworks in selected countries.

The initial comparative framework of the research is based on two main categories and several sub-categories. Each subcategory encompasses several variables, to be elaborated in the:

1. Legal alternatives for establishing and maintaining CoH property rights: Three subcategories of variables: (1) Alternative legal definitions of each dwelling unit. (2) Alternative definitions of the communal areas (yards, staircases, roofs, etc.). (3) Manner of governmental registration and monitoring of CoHs.
2. Degree of freedom of members of the cooperatives to define and determine further rules: (1) Degrees of freedom for self-determined rules allowed by the national legislation (2) Extent of de facto self-initiated cooperative housing in practice. (3) Extent of Are there

CoH projects based on regular agreements of tenants' partnership in land property rights, as we may find in any other kind of land use.

Keywords: cooperatives, housing tenure, housing legislation

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SPATIAL PLANNING ON THE LOCAL LEVEL AS THE TOOL FOR DIRECTING LAND USE IN ESTONIA (569)

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Urban areas are growing faster than the population (Li et al., 2022). The Roadmap to a Resource Efficient Europe has defined a goal to achieve no net land take by 2050 (European Commission, 2011); however, Estonia is far from this goal. In Estonia, the built-up area per capita increased by 18% from 2000 to 2014; at the same time, the Estonian population decreased by almost 5% (OECD, 2022). It is predicted that if this trend continues, the area of artificial surfaces will increase by 1.33% from 2019 to 2030 (Mozaffaree Pour et al., 2022).

One of the factors driving urban sprawl and land take is inadequate planning (Colsaet et al., 2018). It could also be the case in Estonia because new residential areas are often built on agricultural land; these developed areas are small and not connected with previously developed areas (Roose et al., 2013). Estonia has four levels of spatial plans: country, county, municipality, and detailed level for smaller areas. According to Estonian Planning Act, a higher-level spatial plan forms the basis for creating a lower-level spatial plan. Principal purposes of land use are regulated on the municipality level in the comprehensive spatial plans, which are also the basis for creating of detailed spatial plans. Detailed spatial plans' primary purpose is to implement the comprehensive spatial plan and form the construction basis. Nevertheless, there is a possibility to change the principal purpose of land use determined in the comprehensive spatial plan with a detailed spatial plan (Parliament, 2015).

This study determines how common it is to make detailed plans that change land use and cause the land take not foreseen by the comprehensive plan. The study analyses detailed spatial plans approved from 2015 to 2022 around Pärnu city. It examines if land take follows comprehensive spatial plans or if it is followed with detailed spatial plans that change a comprehensive spatial plan. The thoughtfully considered comprehensive plan means that there is no need to make changes to the comprehensive plan with detailed plans. Results for the study are derived from documentary studies and GIS analysis. For the documentary analysis, spatial planning documents are used. The spatial plans, WFS service provided by Estonian Land Board and the ArcGIS Pro program are used for the GIS analysis.

Keywords: land take, spatial planning, Estonia

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PUBLIC RESTORATION POLICY AND IMPLEMENTATION OF DEVELOPMENT INTERESTS IN CHINA URBAN RENEWAL: A CASE STUDY OF GUANGZHOU (571)

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With the urbanization in China, uneven distribution of benefits caused by imbalanced public restoration in urban renewal has gradually emerged. Based on the logic of "change of development right - conduct development - generate of development benefits - public restoration", the urban renewal in Guangzhou can be divided into three categories: demolition and reconstruction, change of use and environment renovation. According to the categorizing above and the "1+3" urban renewal policy in Guangzhou as the foundation of this research, after analysing the composition of public restoration policies and implementation means, this paper summarized "development fee and compensation" as the main tool, supplemented by "social obligation", "constructing infrastructure" and "handing over land or buildings". Based on three typical cases, this paper analyzed the implementation effect of public restoration and demonstrates the importance and effectiveness of public restoration through the planning permission process under the current land system and development control system in China. The paper proposes to construct a theoretical model of public restoration with the development right as the core, establish public restoration evaluation in the planning permission procedure of development control, and improve public restoration tools to balance benefit distribution.

COMPENSATION AS A PLANNING COMPASS (609)

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Typically, when one considers how money influences planning processes, profits and revenues are the first thing that comes to mind. Conversely, in this study, we will examine how compensation, or the fear of compensation claims, can influence the planning process and system as a whole. We use Israel as a case study, for its generous regime of compensation rights for decline in property values due to planning decisions (Alterman, 2011).

In 2003 Tel Aviv's city center was designated as a world heritage site, by UNESCO (an area also known as the "White City"). In 2008, the city approved its conservation plan, which simultaneously afforded heritage protection to more than one thousand buildings.

In this paper we take an in-depth look at this plan, addressing how issues of compensation have affected, and in many cases driven, decision making during the approval and the implementation process of the plan. To do so we analyze secondary data such as meeting summaries and protocols and draw on information from interviews with key stakeholders.

Built heritage is an interesting case study in regard to compensation. This is because on one hand, historic assets are individuals' private property, belonging to owners who often wishes to derive unfettered enjoyment from his\her property. On the other hand, heritage properties may be regarded as a public good, subject to public policies and regulation. Thus, owners may face limitations placed on their building in the name of heritage protection. This duality opens the hatchet to many contestations between 'private' and 'public' interests (Mualam and Alterman, 2018).

The paper highlights the notion that the 'tail wags the dog'. How the excessive legalization and the threat of compensation has affected the city, how it has traumatized the planning system, and how it has affected future enlistments of heritage properties and the approval of new conservation plans in other Israeli cities.

The paper begins by addressing how fear of compensation claims affected different decisions by planners and politicians in Tel Aviv. Specifically, we explore the link between these fear (of lawsuits) and the total number of designated buildings. In addition, we ask whether fear of lawsuits for compensation have shaped the incentives incorporated into the plan and how it affected the dialog between experts and the public regarding heritage conservation. Then, the paper continues to show at how, 14 years after the approval of the plan, the issue of compensation still hangs over the city, with millions of dollars at risk, to both parties. The paper concludes with a review of criticisms of Israel's compensation system in regards to heritage protection.

Keywords: hertage, conservation, compensation, tel aviv, property rights

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STRATEGIC THINKING AS BASIS FOR SUCCESSFUL FUTURE DEVELOPMENT: REPURPOSE POREČ: DEVELOPMENT VISION 2050 (612)

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Strategic thinking and development planning of a certain area are of key importance for the course of its development. The establishment of a comprehensive system of strategic planning and development management on the national level and the adoption of legislative and institutional framework for its optimal arrangement are aimed to ensure its social progress, enhanced and more focused territorial development. The Government of the Republic of Croatia initiated a comprehensive reform of strategic planning and development management in 2017, with the aim of implementation of enhanced public policies and projects at all levels in order to achieve synergy links between Croatian and European development policies (Ministry of Regional Development and EU Funds of the Republic of Croatia, 2023).

Beside its favourable geographical position, the city of Poreč is characterized by its extraordinary natural and historical heritage. Its most significant cultural monument, the Euphrasian Basilica with a bishopric from the 6th century, has been included in the UNESCO World Heritage List since 1997. Although historically known for farming and fishing, during the 20th century tourism became the main economic activity of Poreč (Jović, 2021). The City of Poreč envisions the potential for future sustainable development through extended tourist season, the balance between service and production activities and investments in infrastructure and environmental conservation. In accordance with the new legal framework, the city started drafting the Strategic Development Plan for the period from 2021 to 2031 (City of Poreč – Parenzo, 2023).

The aim of this paper is to point out the need for synergy between strategic planning and spatial planning and the importance of education and the role of spatial planners and urban planners as it is set out in The Charter of European Planning (ECTP-CEU, 2013), in order to realize the development planning goals and to achieve the highest possible quality of life in cities and regions of the 21st century.

Keywords: development vision, education, Poreč, spatial planners, strategic thinking and planning

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THE LIMITS AND PROSPECTS OF SPATIAL TRANSFORMATION BY LAW: REFLECTIONS FROM THE 'SPATIAL TRANSFORMATION BAROMETER' PROJECT, SOUTH AFRICA (643)

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Since the dawn of democracy, the rapid and decisive spatial transformation of South Africa's fractured, unequal and unsustainable settlements created during its colonial and apartheid pasts has been a core principle, key driver, and desired outcome in and of spatial planning, land use management and local government legislation. Accordingly, it has featured strongly in strategic, spatial and sector plans prepared in, for, and by municipalities. Despite this, the results on the ground have been far from desired.

Five years ago, the South African Local Government Association (SALGA) began work on indicators by which spatial transformation could be measured and used to assist municipalities in improving on their performance in this regard. This led to the development of a 'Spatial Transformation Barometer' (STB), followed by an assessment of the progress made in a series of municipalities by means of this tool.

In 2022, a research team, including two of the authors, was appointed by SALGA to revise and enhance the STB, and test it in a sample of twenty municipalities, including metropolitan, district and local municipalities. The work undertaken in and for the project has not only served the objectives of this appointment, but also produced a rich series of observations, including on the limits and prospects of the law in pursuing and ensuring spatial transformation. In this paper, (1) these observations, and (2) the theoretical frameworks that best assisted the research team in engaging, reflecting, and making sense of them, are presented.

While not a European example, (1) the engagements with human behaviour, organisational culture and the role and place of planning in power-dense, multi-stakeholder environments, and (2) the power, scope, and limits of 'the law' in the pursuit of progressive planning objectives, should be of interest to researchers engaging similar phenomena and questions in similar settings.

Keywords: spatial transformation; planning law; South Africa

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CONTRACTING WITH CITIZENS: HOW MORALS, POLITICS AND LAWS SHAPE CITIES (652)

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While the world seems to turn towards autocracy, there are corresponding calls for deepening participatory and democratic processes. Those participatory and democratic processes become more innovative and creative year after year. Think about participatory budgeting, lego design sessions and digital applications. While we think of participatory processes as purely egalitarian, the story is much more complicated. In participatory processes residents negotiate with policy makers about the future of their neighborhood. The last decades this happens increasingly in co-creation sessions where citizens are deemed to have an equal position vis-a-vis developers and civil servants. Negotiation processes between residents and decision makers seem to increasingly shape urban politics. Negotiated contracts replace public law arrangements as the preferred legal tools to steer public policy. Community intermediaries negotiated a position as the representatives of neighborhoods vis-à-vis democratically elected officials. The goal of this research is to understand how these negotiations affect collective action. I will scrutinize the role of contracts, community intermediaries and participatory processes in development projects and planning policies. This will reveal how seemingly fresh and novel planning practices are used to justify processes of capital accumulation.

The research is based on a comparative case study of Amsterdam, Hamburg and New York. Data is collected through desk research (55 policy documents and 237 newspaper articles), interviews (with 108 residents, civil servants, politicians and developers) and participant observations (40 public meetings on participation).

The research presents a novel theoretical approach to studying urban politics, putting emphasis on (private) law and the material arrangements of participatory processes. The fields of urban studies and socio-legal studies lack an in-depth analysis of the relation between participation and (private) law. Moreover, most of the studies on contracts, community intermediaries and participation have either a focus on neoliberalism or managerial approaches. I use the tools provided by sociology of critique and relational contract theory to understand urban politics. Instead of analyzing citizens as powerless or passive actor, I understand them as creative and reflexive actors. Although the forces of capital are strong, resistance against capitalism can be found everywhere. Whereas social inequalities create rigid urban hierarchies, collective action can empower marginalized communities. Hence, Contracting with citizens makes sense of the increased importance of contracts, community intermediaries and participation by understanding how various urban actors criticize and transform urban politics. The research portrays urban actors as reflexive, critical beings that work together through compromise.

Contracting with citizens shows that contracts, community intermediaries and participatory processes are closely interlinked and they change urban politics. In the past decades, the arena of public decision making has shifted towards contractual negotiations. This change has occurred along three lines. First, there has been a shift on the moral side of urban politics. There is a widely established notion that residents ought to be entrepreneurial. They are considered to be able to

negotiate deals, enthusiastically set up projects and organize their neighborhoods. Second, political decision making is increasingly done through intermediaries. Consultants or neighborhood organizations represent residents in negotiations with municipalities or developers. Third, there has been a change in legal methods, from public law arrangements to contracts. Legal arrangements should be flexible and case-specific. Thus allows for an in-depth analysis of how morals, politics and laws shape contemporary cities.

These developments have a profound impact on urban politics. Residents that can navigate contractual negotiations can direct municipal resources towards their goals. These residents are often already socially privileged, which leads to the reproduction of social inequalities. These processes occur in all three cities in varying degrees.

Keywords: planning low, contract, urban development, participation

THE RULE OF LAW AND COMMUNICATIVE PLANNING IN FINNISH PLANNING LEGISLATION (654)

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This paper examines two models of managing land use planning issues, both of which are manifested in the Finnish Land Use and Building Act (132/1999, LUBA). These are the idea of rule of law (or, more broadly, the constitutional state) and communicative planning. There are numerous interpretations of these concepts, but certain defining characteristics of both can be identified. The LUBA is first and foremost a legal instrument but it simultaneously reflects the ideas of collaborative planning which had its heyday at the nineties when the law was drafted (see Mattila, 2020).

There are evident tensions between these models of governance. Communicative planning is usually described as *horizontal* collaboration between stakeholders aiming for consensus through communication and deliberation. At the core of rule of law, however, lies the control of (public) powers – the neglecting of which is a common criticism towards communicative planning (see Westin, 2021). Under the rule of law, these (*legitimate*) powers can only be exercised by accountable public authorities, the relation between authorities and stakeholders thus being *vertical*.

There are, however, also parallels between the two. Democracy and participation can be seen as a fundamental connection when the rule of law is understood as the *democratic* rule of law. Even though democracy is conceptually not a necessary condition of rule of law, they usually exist in tandem and have close connections (see Tamanaha, 2004, Waldron, 2008). Thus, both models set certain common requirements for planning processes, regarding the rights of information, rights to be heard and rights to active participation, for example (see Mäntysalo et al., 2011). Rule of law also requires, for example, that the decisions made by authorities can be called into question and appealed to be reviewed by a court of law. At heart, both pursue justness and democracy in decision-making.

When the rule of law is, as above, complemented with democracy (and in many cases a set of fundamental rights), this complex can be called the *constitutional state*, another concept of numerous interpretations (see Christodoulidis, 2001). There are, for example, differences of opinion about the relations between the elements of the constitutional state (see Ackerman, 1990). These kinds of questions bring forward the complex relations between law, democracy, and deliberation.

The collision of these two models of governance seems to produce practical consequences, too. It has been observed that stakeholders perceive the means of participation in the Finnish statutory planning system as sufficient or even good, while at the same time the chances of having an actual influence on planning decisions are seen as slim. One key reason for this, we argue, is that while planning procedures and practices emphasize communicativeness, the decision-

making itself is defined by the rule of law. The planning process and decision-making are ultimately decoupled.

Keywords: communicative planning, statutory planning, rule of law, constitutional state

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PRESERVING AGRICULTURAL LAND-USE: AN ANALYSIS OF HORIZONTAL AND VERTICAL PLANNING INTERACTIONS IN BERLIN-BRANDENBURG (670)

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This paper is produced in the frame of the research project KOPOS, funded by the German Federal Ministry of Education and Research.

The share of agricultural land use is decreasing constantly in Germany and especially in Berlin-Brandenburg due to the recently growing demand for settlement, commercial, and industrial land uses. The decline in agricultural land contrasts with the increasing need for arable land to match the demand for more regionalized agriculture.

Based on document analysis and empirical evidence from expert interviews and a workshop with experts and stakeholders the paper analyses the existing spatial planning system and instruments and their abilities to preserve agricultural land.

The analysis is structured into three sub-items. Firstly, the interaction of the planning levels. While the common federal state planning of Berlin-Brandenburg only steers the preservation of agricultural land with guiding principles, the regional planning level has more stringent planning instruments. Nonetheless, the municipalities have the decisive planning authority to prevent agricultural land.

Secondly, the role of inter-municipal cooperation. Although or precisely because the municipalities have decisive planning authority, for many local councils and administrations the preservation of agricultural land and more generally sustainable land use are great challenges. While different forms of inter-municipal cooperation exist, they are not used for inter-municipal land use planning in most cases.

Thirdly, the interrelationship between sectoral planning, spatial planning, and rural development is lacking cooperation to preserve agricultural land.

The paper will close with an outlook on recommendations that will be developed out of the analysis.

TENSIONS AND STRESSES IN MULTI-UNIT RESIDENTIAL STRATA (CONDOMINIUM) DEVELOPMENTS: A VIEW FROM MELBOURNE, AUSTRALIA, STAKEHOLDER VOICES (697)

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Tensions in multi-unit residential developments are expected as citizens from all backgrounds reside with proximity. Often there is no say in who can buy in to such private developments. In the Australian state of Victoria, residential tenants in strata buildings have no legal standing even with the day-to-day governance and operation of the development. Melbourne's six pandemic lockdowns exasperated tensions and stresses with strict public health orders including forced lockdowns compelling residents to work from home and restricted outside movement with time and distance curfews. Melbourne continues to be plagued by residential building defects, a cladding crisis, and the social and economic fallout from these stresses. Further, committees of management lack knowledge regarding building maintenance and climate change adaptation. This presentation explores concerns from the voices of strata property managers, unit owners and committee members from a sample of high-rise residential developments and master planned estates. Findings are discussed from stakeholders who participated in focus groups whereby legal and governance concerns and tensions in multi-unit living were raised. The authors suggest such lived experiences are relevant to other like developments and jurisdictions, across the globe. Hence, the findings contribute to the broader learnings in this area of knowledge. The presentation concludes with a call from stakeholders for more crisis and disaster management planning and related regulatory frameworks for residential multi-unit developments to be able to cope with ongoing and future unexpected events.

Keywords: Multi-unit housing, Pandemic, Building defects, Narrative research,

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ANALYSING THE INTERPLAY BETWEEN SPATIAL REGULATIONS AND PROPERTY MARKET DYNAMICS (712)

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Both public sector and the property industry contain dynamic and complex actors and processes. However, spatial regulations and property market dynamics are often not discussed within the same framework. We argue that contemporary socio-economic challenges – particularly surrounding affordable housing – require a better understanding of ‘what shapes the city’ between this interplay. Subsequently, we present a novel approach to analyse property market dynamics in relation to spatial regulations. Empirically, we focus on the wider Amsterdam region. As a rising star of property investment markets and planning in Europe, and as a prominent metropolitan region in the global scene for both fields, Amsterdam has been shaped by the complex and dynamic relationships between property market actors and spatial regulation. Our arguments are based on four years of quantitative (investment transaction analysis, GIS mapping) and qualitative research (regulatory analysis, institutional mapping, and in-depth interviews with planners, policymakers, developers and investors). These in-depth insights allow us to paint a comprehensive picture of where actors of both public and private sectors converge and diverge with their activities, and how these fragmented, yet interlinked activities define the future of metropolitan regions.

Keyword: spatial regulation

ADAPT OR DISRUPT? AN INSTITUTIONAL ANALYSIS OF EMERGING CLT INITIATIVES IN THE NETHERLANDS (742)

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There is a growing interest in establishing Community Land Trusts (CLTs) in the Netherlands. Community Land Trusts are a housing cooperative with a specific ownership model and governance structure. Various initiatives in the Netherlands are currently picking up on the CLT model to reimagine and change existing housing arrangements and the institutions that support them – driven by concerns ranging from gentrification and housing justice to environmental sustainability.¹ In this paper, we focus on two of those initiatives: CLT De Haese and CLT H-buurt. CLT de Haese is developer-led and is located in Sittard-Geleen, in the south of the Netherlands. CLT H-buurt is community-led and is located in Amsterdam's Bijlmermeer neighbourhood. Both of these initiatives are in the early stages of setting up a CLT: they both do not yet have (access to) buildings; CLT H-buurt does not yet own any land; and CLT De Haese does not yet have a community of prospective residents. Yet these initiatives provide an interesting window into how the CLT model is starting to land in the Netherlands, and may help to theorize the type of institutional work that goes into attempts to embed the CLT model in existing institutional contexts.

In this paper, we analyse how CLT H-Buurt and CLT de Haese attempt to embed a CLT within their local institutional contexts. These two CLT initiatives have a utopian pull: they imagine how land governance could be different, more attentive to our communities and our planet. Politically, they draw on thinking about the (urban) commons to imagine forms of living together that are more democratic, more just, and more environmentally sustainable.² They also have a strategic pull: they aim to bring about change, or in any case to get their projects off the ground. We are interested in how they negotiate between these pulls through interactions with their projects' local institutional contexts. We aim to trace how these CLTs navigate local governance arrangements. Using the two initiatives as explorative case studies, we explore the interactions between local CLT initiatives and local institutional contexts, and how these interactions shape (1) the ways different CLT initiatives imagine a CLT and what it does or might do, and (2) the various forms of institutional work that these initiatives engage in. We are especially interested in dynamics of adaptation and disruption: How do the initiatives respond to existing obstacles or enablers? Where do they adapt their projects to strategically mobilize existing or dominant institutional arrangements, or where do they choose instead to push against those existing arrangements and attempt to disrupt and reconfigure them?

We examine the strategies used by these two initiatives to 'carve out the commons' (Huron, 2018) through the lens of institutional work theory. Beunen & Patterson define institutional work as 'those actions through which actors attempt to, or in effect do, create, maintain, or disrupt institutional structures' (2016, 23). Building upon Huron's distinction between maintaining and reclaiming the (urban) commons, we focus on the moment of 'reclaiming space from the processes of capital accumulation' that these initiatives are engaged in (Parr, 2015).

Keywords: social justice, Institutional analysis, Land development model, community resilience

¹ Waddenwonen, H-buurt, De Ceuvel, De Haese

² The term commons encompasses a broad set of social innovations by which relationships around resources and institutions are redefined by social actors who occupy a space between the state and the market – a space that these actors seek to democratize by inventing the rules by which it shall be governed (Dardot and Laval 2015; Hardt and Negri 2009). For theorising urban commons, see Tessa A Eidelman and Sara Safransky, 'The Urban Commons: A Keyword Essay' (2021) 42 Urban Geography 792 <<https://doi.org/10.1080/02723638.2020.1742466>>; Pierre Dardot and Christian Laval, Common <<https://www.ptonline.com/articles/how-to-get-better-mfi-results>>. There are explicit links with theories of the Commons in both initiatives: see Plan van Aanpak CLT De Haese, p. 1; <https://www.clt.amsterdam/betaalbaar-en-inclusief-leven-door-het-clt-model>.

INFORMAL BUILDING IN EAST JERUSALEM NEIGHBORHOODS: LOOKING FOR TOOLS TO ENHANCE QUALITY OF LIVING AND ABILITY TO PLAN (750)

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The fast growth of Informal residential building is a world-wide phenomenon, which can be found particularly in the global south, but also at developed countries. It is estimated that about 30% of the world population is living in informal housing mostly in dwellings that sprawl horizontally (Angel 2012, Atlas of urban expansion).

Scholars argue that the 'regular' planning tools, represent north-western perspectives, that is valid mainly to 'formal' contexts, and therefor might not be relevant under conditions of severe instability, as in urban informalities (Salingaross et.al, 2006; Watson, Dovey, Slaev & Cozzolino). This vibrant discussion urge towards designing policies and tools that are applicable in 'informal' urban structures.

One might suggest that the order that is represented by different types of informalities, is a non-linear one – mainly expressed as a mutual set of values, community-based rules, and internal agreements between local stakeholders. An 'Urban code' and a set of typical socio-spatial patterns that unfold from the local codes.

The local code does not necessarily stand in contrast to the planning laws, and therefore understanding the internal order of 'the unordered' might help architects and urban planners to create solutions that would fit both to the formal order and informal reality. We need a new language to tackle urban informalities, and this humble presentation wishes to contribute one local, hipper conflictual perspective: the example of East Jerusalem:

East Jerusalem is a local case of vast range of informality, which coexists with illegality, and enhanced dramatically by the political conflict. The non-registered land tenure & building, is mixed with issues of political conflict and trust, causes a major setback in the ability to plan and insure building permits.

Within the world of urban informalities, our research examines two main sub-categories in East Jerusalem: A) Vertical slums, and B) internal order of informal sprawl. This presentation will only focus on the phenomenon of 'Vertical Slums'.

Our definition of Vertical slams is: profit oriented mid\high-rise apartment building, built on unregistered land, not complying with planning codes, without building permissions, and without formal funding or mortgages.

The presentation will focus on the day to day living conditions in the East Jerusalem vertical informal housing, focusing on the gap between the actions that the civil society and the community can take to improve living conditions in those neighborhoods, and the hazards from earthquakes, public health, poverty and local violence that need government intervention and formal normative tools.

Other neighborhoods of East Jerusalem are characterize as informal sprawl, with relatively low densities. Our research is gradually reveling the internal order of these neighborhoods and we will be happy to presents the result at the next AESOP conference.

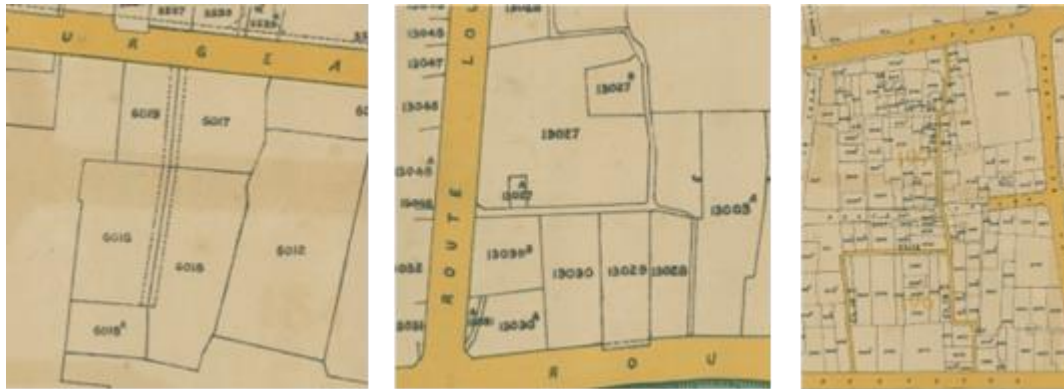
Keywords: un formal non-compliance affordable housing regulation

PUBLIC PASSAGE, MUNICIPAL PASSAGE, SERVITUDE PASSAGE: MUNICIPAL REGULATION AS A TOOL OF URBANISATION IN FORMER SHANGHAI FRENCH CONCESSION (801)

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The former French Concession is a historical geographical category that existed from 1849 to 1943. It is a historic urban area that has been urbanized under the background of land policy, private land ownership and capitalist market economy protected by "extraterritorial jurisdiction" in a special period. It is an important part of the current central urban area of Shanghai.



The passage network system of the former Shanghai French Concession is a planning tool for the public sector to promote urbanization and coordinate public-private relations under the background of private ownership of land. Although after the socialist transformation of contemporary Shanghai, these road networks only play a role in the functional dimension, in the protection of urban historical heritage, these passages are marks of the historical urbanization system and have historical value; In the aspect of planning law, as an attempt of substantive planning law to play a role in macro-urbanization in the form of micro-governance intervention, its establishment purpose, implementation mechanism, and public participation mode are still worth discussing in today's space practice.

Keywords: passage regulation, land policy, property rights, urbanisation

ZONING CHANGES IN RECENT ITALIAN URBAN PLANS FOR SUSTAINABLE REGENERATIONS: THE CASES OF MILAN AND BOLOGNA (906)

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Zoning is a tool that has multiple dimensions and properties and that can have diversified urban and territorial implications and consequences. As is known, when zoning has conformational properties, it affects the *ius aedificandi* and can also be unequal, but despite its close relationship with rent, it is not only a technical instrument for controlling the use, value and market of land. Zoning can affect, in fact, not only the regulation of land rent, but also the morphological design of living places, the location of activities and the uses of public spaces, the distribution of different social groups and spatial justice, the temporalities of use of the different specialized areas and therefore their accessibility through collective mobility. The same zoning can therefore be economic, morphological, functional, social at the same time. It is a tool that, depending on how it is used, with respect to different goals, can guide the government and transformation of territories in various directions.

The spatial planning of the twentieth century expansion showed the possible and different implications and consequences of rigid uses of zoning as a technical tool that determined, first of all, too homogeneous and monofunctional areas. However, in the last twenty years the overcoming of the old zoning has been increasingly present also in the Italian regional urban planning laws and in the most recent urban plans. Obviously, Italian urban planning has also changed its objectives on the territories, today increasingly oriented by the regeneration of existing urbanizations against land consumption: it is very far from the urban planning of the extension that had created and developed this instrument. But how has zoning changed in Italian urban plans in recent decades?

The importance of Strategic Plans, also in Italy, is based on the awareness of the impossibility of forecasts, on uncertainties about the future and on the instability of the present. However, in the context of sustainable European urbanism of the last thirty years, studying some recent Italian Urban Plans, urban planners from other European countries could legitimately ask themselves whether these recent Plans hide a dangerous trend towards an urbanism too oriented by neoliberalism. Overcoming the old zoning, these recent Plans with a mainly strategic nature, have the main objective of orienting sustainable urban regenerations, above all, through public-private operating agreements, but clearly reducing the rules on the necessary compatibilities between different activities and on indispensable alternatives of spatial prefigurations, especially with respect to urban morphology that is always physical and social at the same time.

Will these operational agreements be democratically effective in the transformation of the inhabited territory in all its parts and physical and socio-economic situations? Will these strategic plans be more effective than those of the past in controlling speculative actions? How do they orient urban and territorial transformations while respecting the environmental, socio-cultural and economic dimensions of sustainability?

Starting from these main questions, the paper proposes some reflections by studying some very specific sources: the two most recent Urban Plans of Milan (PGT – Plan of Government of the Territory 2012; PGT 2019) and of Bologna (PSC - Municipal Structural Plan of Bologna - 2008; PUG – General Urban Plan of Bologna - 2021).

Keywords: Italian urban planning; regulations instruments; zoning innovations

HOW THE LAND TITLING PROCESS RELATE TO URBAN SPRAWL: GLOBAL SOUTH CASE (913)

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Suburbanisation without metropolitan organisation in multi-level governance constellations remains a riddle to be answered in terms of its growth management. Particularly in the Global South nations, which are mostly predominantly agricultural society and recently has changed into a decentralised planning system. The phenomenon of Metropolitan Turnaround where the population in the fringe area grows much faster than the core has accelerated urban expansion to suburban areas with mostly rural administration. Differentiation between rural and urban is increasingly blurred as urban housing has occupied many spots within agricultural land. The important question is, why is it difficult to contain urban sprawl in the suburban area which results in massive agricultural land conversion in a decentralised planning system case. Previous research argued two things play a role in overcoming urban sprawl which are the formal institutions (property rights and land use regulations) and the informal institutions (how the decision maker and appropriators interact). Thus, to have a deeper understanding of how formal structure and informal institutions may be related to the difficulty in curbing urban sprawl in multi-level governance constellation, this study explores a study to analyse formal and informal elements of the institutional dimension to understand the practice of land use management. This study argues that by understanding who the planning permission decision-making actors are (hold power in enabling or disabling development) at the lowest level and how the formal and informal arrangement on their strategies, we can better understand what the difficulty in curbing sprawl is.

Keywords: urban sprawl, decentralised planning system, actor, informal institution, property rights

RURAL PROPERTY OWNER PERSPECTIVES AND LAND CONSUMPTION IN THREE BAVARIAN VILLAGES (919)

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The land question in geography and urban planning delves into issues of ownership, use, and regulation of land, as well as the flow of capital and the socio-political ramifications (Safransky 2018, 500). Scholars who study the linkages between property and planning have noted that much urban planning research assumes and oversimplifies certain dominant property regimes (Blomley 2017), even while underlying social aspects may remain largely unexplored. Davy asks, "Is property a thing, a string of norms, a constraint on parliamentary and governmental powers, a bundle of rights, a number of conceptions, a regime, a relation or all of the above?" (2020,41). Ranganathan and Bonds (2022, 198) thus suggest, modern property be theorized as "not only an essential component of capitalist political economy but...also a shifting social formation." Building on this theory of property, we explore the rural, regional dimension to the land question in Germany via a mixed-methods study on infill development potential in three Bavarian villages. The 2020-2023 study was funded by the Bavarian State Ministry for Science and Arts and is situated in the largely rural region of Middle Franconia. Property owner and town council survey questionnaires were designed and implemented in transdisciplinary cooperation with the local governments. Roughly 600 property owners and town council members in these three study villages answered the survey questionnaire, offering their perspectives on land use, vacant space, and infill redevelopment dilemmas in their villages. In this paper, we focus on the unpublished answers from property owners and town council members specifically pertaining to individual property rights (i.e. the freedom to use or not use their property as they choose) versus support of community land use planning and infill redevelopment. We contextualize our findings through the literature addressing: 1) the land question, the meanings of land, and social construct of scarcity (Krueckeberg 1995; Davy, 2016; Fawaz 2017; Blomley 2017; Haila 2017); 2) the village as a subject of social science research and theory (Steinführer, Laschewski and Molders 2019); and 3) rural property ownership amidst the Bavarian state's campaign to address land consumption (Ritzinger 2018; Gerend 2021).

Keywords: property theory, planning, property ownership

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COMPREHENSIVE LAND CONSOLIDATION OF DECLINING TOWNSHIPS AND ITS PLANNING RESPONSE AND LEGAL SUPPORT: A CASE STUDY OF WANBAO TOWNSHIP (925)

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During the transition period when China's urbanization is slowing down, many resource-based townships are facing decline problems such as shrinking population, withered industries and slow economic development. In order to revitalize the low-utility land, comprehensive land consolidation has become an important planning tool. Taking Wanbao Town in Jilin Province as an example, this paper analyzes the problems in land use of declining towns, such as serious hollow villages, dilapidated buildings, unintensive construction land, high pressure on arable land protection, and mine ecology in need of restoration. In order to achieve the goal of smart shrinkage, a comprehensive land consolidation for the whole area is needed. However, planning actions consistently conducted from a development perspective are hardly oriented to the reduction of construction land, and the villagers' willingness to build houses and the weak planning power of township-level governments also hinder the advancement of land consolidation. It should respond to land remediation in terms of planning, clarify the conduction relationship between the layout and scale of remediation projects and township planning, and pay attention to land ownership in the planning process. At the same time, the reconstruction of the legal system of rural land transfer should be promoted so that the policy guidance of planning can be based on the law.

Keywords: declining townships, smart shrinkage, comprehensive land consolidation

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EXPLORING URBAN REGENERATION PRACTICES: EVIDENCE AND POLICY IMPLICATIONS IN SOUTHERN ITALIAN CITIES (937)

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The urban regeneration practices that have affected many cities in Southern Italy, and beyond, over the last twenty years are often the outcome of a slow, but at times profound, process of renewal of urban governance, having contributed to a significant change in power relations and roles between public and social actors. It is a prismatic universe of actions, actors and practices, whose spatial outcomes unfold in the reconversion of abandoned areas into shared urban gardens, in the transformation of commercial containers or former industrial areas into places of cultural and artistic production, or even in the transformation of urban voids in the historic centre into self-produced public spaces capable of reactivating social life, in the multiplicity of solutions for reusing public heritage. They are "the places of social innovation", where both bottom-up organisational and associative forms as well as vulnerable urban populations become collective actors redefining urban imaginaries, experimenting with new forms of "public production" and revealing the potentials and limits of the process in which new post-urban populations are given "[...] the capacity to appropriate, to share and to transform the urban in and through their lives" (Brenner, 2016, p. 188). On the other hand, as argued by several authors (Jessop et al., 2013; Moulaert and MacCallum, 2019; Moulaert and Mehmood, 2020), the concept of social innovation has become a kind of buzzwords that urban planners and policy makers resort to, in order to legitimise various urban regeneration interventions. A multitude of emerging social forms have contributed to the redesigning and implementation of real public policies, as collective action, in many cases rewritten in the absence of qualified public direction.

With reference to the Italian context, and particularly in Southern Italian cities, these forms of regeneration have been carried out by private non-profit organisations and voluntary associations through the concession and reconversion of public property or areas to offer public services, especially to vulnerable sectors of the population. In relation to this question, in Italy, since the 80s the welfare state crisis generated by the increase in public spending by the central state has led to the considerable development of the "terzo settore" (third sector). Although the Third sector has a private juridical nature with a strong social value and is made up of non-profit groups and associations (any profits are reinvested for social or capitalized objectives), in fact today it actually appears as an economic agent that operates on the market as a real business entity. Furthermore, the question of the legitimacy of representation in the participation process, or rather, of the fairness of representation in expressing the needs, desires and expectations of the community or group, implicit in these regeneration practices raises wide doubts and, in many cases, remains an unresolved issue. How can Third Sector organisations legitimately act as representatives of weak categories of citizens? How can the economic interests and values of the social activity of the Third Sector be reconciled in the construction of shared and inclusive planning? What is the role of the public actor? And how is the public nature of regenerated real estate interpreted? Starting from the empirical evidence of social-based urban regeneration experiences in Palermo, the paper intends to reflect on the 'public' nature of these practices in

order to clarify some of the main contradictions revolving around the role that social innovation practices play within urban policies.

Keywords: social innovation, urban regeneration, public sphere

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THE NATIONALISATION OF DEVELOPMENT RIGHTS AND LOW IMPACT DEVELOPMENT: A BRIDGEABLE CHASM? (953)

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‘Development’ as a concept has been a central pillar of the English planning system since the implementation of a comprehensive land use planning system through the 1947 Town and Country Planning Act (Booth, 2016). This has been both through defining the bounds of what development is and consequently what requires a planning application, and through the nationalisation of development rights. Both have significant impacts on dynamics of rural property and land: firstly, through defining agricultural and forestry uses as not development; and secondly through the centralisation of development rights to the state. This dynamic can be seen as a compromise between a desire for control over development held in the state and wanting to retain private property relations through the avoidance of land nationalisation. However, this dynamic sits awkwardly against those who reject private property and seek to live on the land.

My PhD research has focused on how low impact development – defined by Fairlie (2009) as development that through its sustainable value either enhances or does not significantly diminish environmental quality – has faced consistent issues with gaining planning permission in England over the past 30 years (Fairlie, 2009; Halfacree, 2006; Jeans, 1990). As a movement Low Impact Development broadly advocates off-grid and back-to-the-land developments which can draw in permaculture, radical sustainability and anti-capitalism. Planning issues often arise over English planning regulation that effectively prohibits development in open countryside – with only a few exceptions allowed (MHCLG, 2021).

Low impact development sits at the margins of what is considered development in English planning. Practitioners are generally concerned with land regeneration through sustainable agriculture and forestry – which is outside of development control – but also seek to live on the land, seeing humans’ interaction with nature as a critical part of regeneration, which is subject to residential development control. Moreover, historical antecedents of low impact development have been seen as informing the implementation of a comprehensive planning system.

I sought to investigate why low impact development faces such problems in gaining planning permission, to understand how planning policy can foreclose on radical solutions to the climate crisis. Over the course of researching low impact development I have understood the extent to which the climate crisis and the neoliberal break from 20th century social democratic settlement has challenged the legitimacy of the concept of development in English planning and the nationalisation of development rights.

This presentation will explore how low impact development and the planning difficulties faced can be drawn from dynamics of property rights, development rights and historical geographies of rural land and property. Moreover, I will explore how the nationalisation of development rights led to what Ward (2011) describes as planning’s desire to eliminate non-conforming users. This dynamic of property clashes with some of the radical and anarchistic ideals of low impact developers and their usufruct approach to property rights. This radical approach to property and

land demonstrates the impact that property has on democracy and how the feudal roots of the English planning system (Booth, 2016) can be repurposed to democratic ends through genuine collective ownership of development rights.

Keywords: Development, low impact development, nationalisation of development rights

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THE INNOVATION IN ILLEGALITY IN PLANNING IMPLEMENTATIONS: CULTURAL AND SOCIAL DIMENSIONS (1992)

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The phenomenon of illegal construction has attracted a considerable volume of research, in the fields of theory, policy making, practice and implementations. The dysfunctionality of laws, corruption and clientelism of the administration, the impunity of the law breakers, and the inability of the planning system to provide adequate housing and land uses suitable for development, were considered as the main reasons for illegal construction. Consequently, there was a general assumption that illegal construction was mainly met in developing countries. This was proved inaccurate in recent years, where research has shown that developed (or Global North) countries were also experiencing this phenomenon -and in fact, they always had. An interesting approach to this, was the investigation of cases where legal and constitutional frameworks were also imperfect, and enforcement mechanisms were not serving social justice. This was a diversion of the axiomatic rule that laws should always be obeyed, while, at the same time, there was an assertion that in some cases noncompliance should be regarded as justifiable.

The proposed presentation will refer to cases of noncompliance, as described above, but will focus on another dimension of the phenomenon, frequently met in real life situations, but seldom considered as an issue worth scientific research. This aspect deals with the innovation element frequently employed by actors trying to circumvent the existing laws and rules in planning implementations. The degree of innovation invested in the illegal operations, usually transforms the particular action from “breaking the law” to “bending the law”. Researching the innovation element in cases of illegal construction is particularly useful for lawmakers, law enforcers and theoreticians. By analysing these innovative actions, lawmakers can identify the loopholes and deadlocks of legislation which appear in specific cases and under specific conditions and correct them before they provoke generalized judicial complications. Law enforcers can detect weak points in grossly under-researched enforcement functions and improve the related organization processes. Finally, innovation in illegality in the sector of planning implementations can enlighten the researchers in exploring the weak points of planning systems, identify cultural elements in social behaviours -for which the type of innovations described above has encapsulated a high exploratory value- and inject a very much needed sense of humour in the scientific research.

The proposed presentation will examine cases of innovation in illegal constructions in Greece and Cyprus. Illegal construction seems to be an inherent element of urban history in this part of the Mediterranean. It has definitely affected the shape and function of urban formations from the past to the present. Efforts have been made to face the problem of illegal construction, through the production of a series of laws and decrees. Usually, a much elaborated –but also complex and often rigid- legal framework had been synthesized, implemented, and replaced by a new one, and most of the times without any evaluation of the up to then implementation. In the meantime, research on the subject proved that the phenomenon of illegal construction continued exhibiting

the same intensity, with periodic subsidence and peaks. It has also given birth to remarkable samples of innovative actions in noncompliance with legislation and/or with the rules and procedures of implementation. The proposed presentation will present a number of them, aspiring to shed light to the illegal construction culture in these areas, and trigger a discussion about similarities and differences in the equivalent cultures in other European countries.

Keywords: Illegal constructions, Innovation, planning in Greece, planning legislation, illegal housing, informal planning

FUNDING PUBLIC TRANSPORT WITH TRANSIT-ORIENTED DEVELOPMENT-BASED VALUE CAPTURE APPROACHES: COMPARING THE CASE OF THE NORTHERN LINE EXTENSION IN LONDON WITH CASES IN ROME AND TURIN (995)

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This paper focuses on the funding of public transport infrastructures with development-based value capture approaches (Alterman, 2012; Medda 2012). It examines value capture in the stations' catchments of the infrastructure that need funding, where urban intensifications are planned according to the Transit Oriented Development concept. Indeed, this pattern of development is considered to have significant potential in making cities more sustainable. However, it is also recognised, that value capture approaches present important governance capability challenges (Mathur, 2016). This paper builds on a previous research on Italian cases focused on development-based value capture approaches adopted in Italy in the (failed) attempt to fund new metro lines in Rome and Turin (Bonvino, 2019). This research, while confirming the potential of these integrated policies, highlighted their extreme complexity. As they entail a triple integration of transport planning, land use planning and land policy, they require exceptional governance capability for a long period of time, during which the projects are exposed to market fluctuations and political instability. They also need a supportive land policy framework, which is not effectively in place in Italy. For these reasons both Italian cases failed as integrated policies in the value capture quest. In contrast, much easier and, at present, more successful is the case of the Northern line extension to Battersea Power Station in London (UK), which is funded through a loan that should be repaid by the tried and tested British planning contribution system. This 3.2 km extension opened in 2021, while the property development component is still in progress. In this case, of interest is how density, additional accessibility, and planning contribution interplay in this phase of global and London property market turbulence. This paper will present the London case contrasting it with the Italian ones. However, the way in which these policies work depends on the country-specific ecosystem made by the planning system, land policy and institutional framework. This creates barriers to international comparison and transferability of the lesson learned. Hence, this paper start exploring the theoretical implications and limits on how to compare value capture cases across the ecosystem boundaries between Italy and the UK. Particularly interesting is how two substantially different planning systems (prescriptive in Italy and non-prescriptive in the UK) manage development rights in a transit oriented urban intensification process and how this is reflected in respective planning policy and in the availability and performance of value capture tools.

Keywords: Value Capture, Transit Oriented Development, Public Transport Infrastructure Funding

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TRACK 04: INTEGRATED PLANNING OVER THE BORDERS

URBAN-RURAL RELATIONS IN SPATIAL PLANNING: COMPARATIVE EVIDENCE FROM INTERMEDIATE CITIES IN EUROPE (117)

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The proposed contribution analyzes to which degree urban-rural relations appear as a topic in the contents of strategic planning documents adopted by European cities. Urban-rural relations are discussed as a strategic policy objective in European planning discourse (Bengs and Zonneveld, 2002; Healey, 2002; Artmann *et al.*, 2013), however, so far we lack a systematic understanding on whether and how this objective has translated into the contents of planning policy at the city-level. The concept of urban-rural relations accounts for the cross-jurisdictional nature of contemporary city-regions which are characterized by a host of physical and functional linkages between core cities and their adjacent suburban and rural municipalities (Rodríguez-Pose, 2008). Moving beyond a long-standing dichotomous understanding of urban *versus* rural areas, it proposes an *integrated* approach to the spatial development of the city-region, in order to achieve cohesion and to correct for regional disparities in spatial development (Davoudi and Stead, 2002; Bengs and Schmidt-Thomé, 2004; Zonneveld and Stead, 2007). From a theoretical perspective, the concept of urban-rural relations is therefore closely linked to the literature on cross-jurisdictional spatial planning in “soft spaces” such as city-regions (Allmendinger and Haughton, 2009; Allmendinger, Haughton and Knieling, 2015).

In order to explore the degree to which urban-rural relations are a topic in the contents of city-level spatial policy, natural language processing (NLP) tools are applied to a systematically selected corpus of local master plans and city development strategies, adopted by a sample of 133 intermediate cities in 21 European countries. A series of structural topic models (cf. Roberts *et al.*, 2014) are estimated on the corpus of planning documents in order to explore, firstly, if the contents of the planning document incorporates urban-rural relations, and if this is the case, to secondly identify the policy areas (e.g. housing development, economic growth, or environmental protection) in which these urban-rural relations occur. The outcomes of the text analysis are in a second step combined with observational data on the geographic, socio-economic, and institutional characteristics of the city-level territorial context in which the sample cities are embedded. The aim is to identify whether the type of territory (e.g. mountain, coastal, border territories) in which the cities are located, the economical specialization, the financial resources, or the level of institutional fragmentation of the city-region, among other potential territorial drivers, impact on the occurrence and topics of urban-rural relations in the analyzed policies.

The focus of the empirical analysis lies on intermediate cities between 100'000 and 1 million inhabitants. Intermediate cities are discussed as regional centers for the provision of administrative, economic, cultural, infrastructural and planning functions, servicing both urban and rural populations within their broader region. Due to this role, they are regarded as key players in territorial cohesion, at the intersection of urban and rural development (Reuther and Aring, 2008; Cardoso and Meijers, 2017; Roberts, Iglésias and Llop Torné, 2017). It is this

assumption of strong linkages of the intermediate city to its surrounding region which renders it a theoretically interesting category of settlements to focus on in light of the phenomenon of interest. In sum, the results of the analysis will contribute to a deeper understanding of urban-rural relations as an important reference framework for spatial planning and cross-jurisdictional urban governance across Europe, within the context of the intermediate city as a yet under-researched category of settlements. It further contributes to the thin but growing body of planning research which leverages on the potential of natural language processing (NLP) methods for the comparative analysis of large corpora of planning documents (cf. Brinkley and Stahmer, 2021; Fu, Li and Zhai, 2022).

Keywords: urban-rural relations, spatial planning, city-region, intermediate city, NLP

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ADVANCING COASTAL LANDSCAPE GOVERNANCE: AN EVOLUTIONARY PERSPECTIVE ON COASTAL AND LANDSCAPE GOVERNANCE IN PORTUGAL (141)

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The landscape crisis (Antrop, 2017) and the climate crisis (Williams et al., 2022) strongly affect coastal landscapes in many coastal regions worldwide. Several authors have argued for the need for evolved coastal governance systems to deal with the changes and challenges to governance to foster alternative futures (Partelow et al., 2020, Schlüter et al., 2020). On the one hand, the challenges ahead demand the recognition of the coastal zone as a socio-ecological system, where territorial or administrative boundaries cannot limit its governance anymore (Schlüter et al., 2020). On the other hand, landscape governance has been discussed as the spatialisation of environmental governance where the boundaries of the socio-ecological system are the system to be governed (Görg, 2007, Van Oosten, 2021). Gonçalves and Pinho (2022) explored and discussed landscape governance's relevance to advance coastal governance. The authors demonstrated that theoretically and empirically, coastal landscape governance is rarely addressed in the scientific debate, despite its added value (Gonçalves and Pinho, 202X). This abstract addresses this research gap, exploring if elements of coastal landscape governance are already in place in Portugal. In order to do so, we develop an evolutionary perspective on coastal and landscape governance in Portugal since the 1950s. Results will be confronted with the international evolution of coastal and landscape debate and practice and reinterpreted in the Portuguese context to advance coastal landscape governance forward. The discussion of the evolutionary perspective of coastal landscape governance will allow us to better understand the instruments, institutions, and actors in place as well as the changes that are needed to address the coastal socio-ecological system from an integrated perspective.

Keywords: Coastal landscape governance, Socio-ecological boundaries, Policy integration, Landscape sustainability, Evolutionary Governance Theory

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Funding

Carla Gonçalves was funded by the Portuguese Foundation for Science and Technology (FCT) through the Doctoral Grant UI/BD/151233/2021.

A STUDY ON THE FORMATION OF PLANNING STANDARDS OF CHINA'S OVERSEAS INDUSTRIAL PARKS: COMPARISON WITH SINGAPORE (289)

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City planning standards are the common guidelines and effective tools to ensure the reasonable formulation and implementation of urban and rural planning. Since the 1990s, China has begun to build industrial parks in some countries. Some of these countries have applied the planning standards of Europe or America, while others have established their standards based on the European and American standards. The construction of China's overseas industrial parks has had problems in the application of planning standards with local standards, which makes the formulation of planning standards of overseas industrial parks face many uncertainties. In this context, the case of planning standards in China's Overseas Industrial Parks needs to be compared with the successful projects in other countries.

Due to land constraints, Singapore has formulated a number of representative city planning standards. Several industrial parks in China have learned from Singapore's urban planning experience and made some innovations. Firstly, this study takes Suzhou Industrial Park, which was built by China and Singapore, and has met international standards in the field of urban planning, as an example. By means of literature review, survey and interview, this paper teases out new concepts in terms of classification of urban land use and public facilities standards, analyzes the fusion mechanism of planning standards of China and Singapore, and discusses the development logic of planning standards in Singapore's overseas industrial parks.

The experience of Suzhou Industrial Park has been applied in Myotha Industrial Park. Myanmar's planning standards are influenced by the UK, and the planning of the park reflects the standard integration of China, Britain, Singapore and Myanmar. Relevant Chinese planning enterprises have formed a complete system from conceptual planning to master planning, detailed planning to urban design. Taking Myotha Industrial Park and Suzhou Industrial Park as examples, this study compares the similarities and differences in the formulation of planning standards between China and Singapore, and analyzes the practical experience and problems in the planning standards of China's overseas industrial parks, so as to form reproducible planning theoretical achievements.

Keywords: Overseas industrial parks, Planning standards, Evolutionary mechanism, Comparative analysis

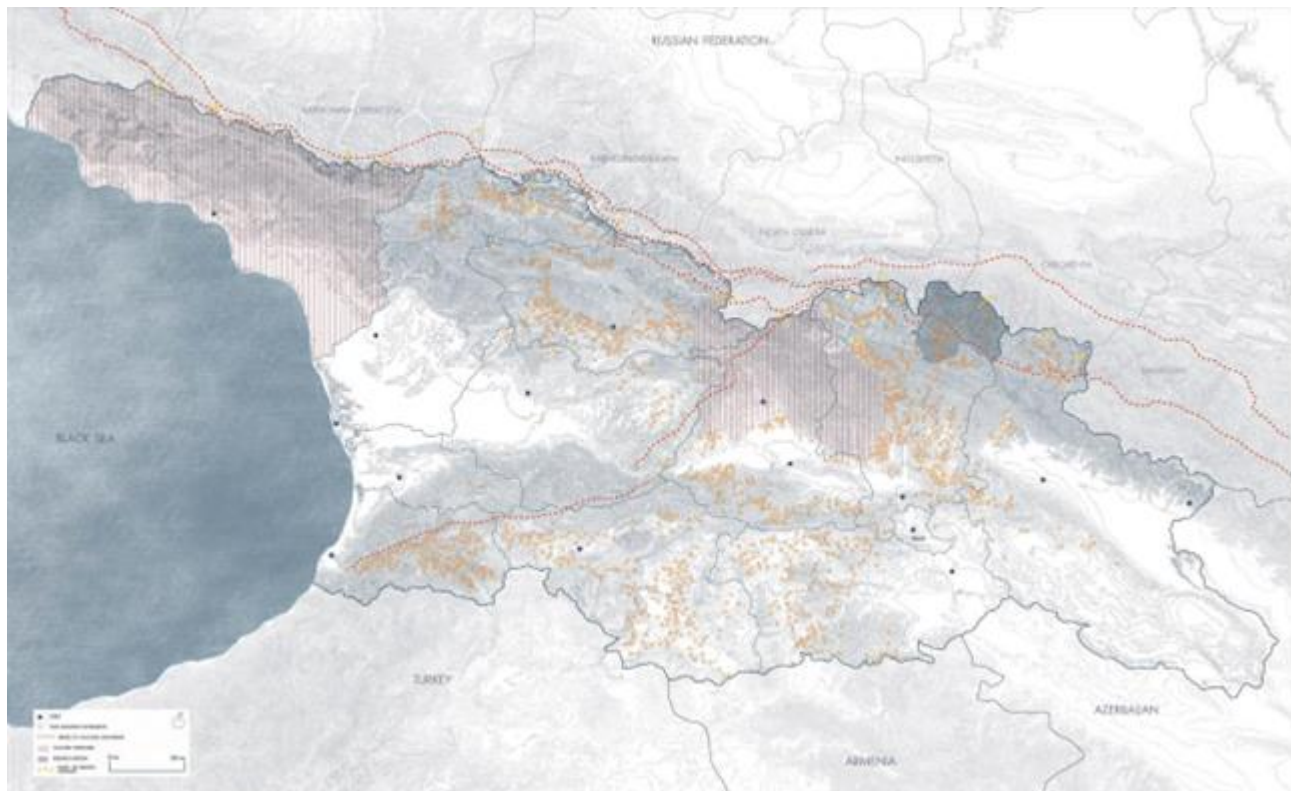
SEASONAL MIGRATION ACROSS THE CONFLICTUAL BORDER IN THE CAUCASUS MOUNTAINS: TRANSHUMANCE AS A TOOL FOR MAPPING LANDSCAPE (307)

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The research explores Landscape and land-governance transformations via transhumance practice throughout border territories between Georgia and the Russian Federation. The study aims to analyze the radical geopolitical shifts that accrued and modified the high mountain landscape in the Post-Soviet era in the Greater Caucasus mountain area. In this gap of thirty years, the territory absorbed all the meaningful changes and drastically transmuted in a brief period.

From the late 20th century, the region faced several conflictual events and war zones (the war between Chechnya and its neighbouring republics (1999-2012), the conflict between Azerbaijan and Armenia (1990-2012) and wars between Georgia and Russia (1991-2008) in Abkhazia and South Ossetia) that continue to have both visible and invisible consequences on the territory and its inhabitants. The research focuses on the alteration of pastoral to hostile landscape and offers a narrative of the modifications by mapping the transhumance movement through the frontier line.



Map of Georgia containing high mountain settlements, Caucasus mountains ridges, border passages and regional division from both sides of the frontier. Author: Salome Katamadze

The broader ambition of the research is to understand how the current socio-political conditions of the Greater Caucasus intertwine with the landscape and its inhabitants. How landscape design

strategies can stabilize a new communal governance model in the frontier areas and how those models can apply in other high mountain territories.

In the 50s, during Communist repressions, from the southern and northern side of the Greater Caucasus, more than 50% of the population was deported from the high mountain settlements, which in consequent years triggered the wide abandonment of the areas. Regional industrialization and forced migration utterly shattered high mountain settlement communities causing a loss of self-sustainable capacities and ethnohistorical identities. Furthermore, forcible resettlement had an important influence on land governance policies and their traditional use. The cultivated areas were transformed into pasture grazing, causing irreversible erosion and later forming serious landslide issues in the landscape.

In 1991, the communal pasture or shared land system collapsed with the Soviet Union. The immense landscape, rich in the pasture typology variety, from mountain meadow (alpine and subalpine) for summer pastures to semi-desert steppe for winter pastures, became a frontier line characterized by multi-ethnic and multi-religious groups with separatist political inclinations.

The study faces changes of different natures. On one side, biological alteration occurs when pasture landscape converts into mountain forests or bushy traceless areas. On the other side, the pasture landscape loses its cultural destination and symbolization by becoming a hostile land. The importance of locating, mapping and profoundly understanding the forcibly abandoned and politically transformed landscape is inevitable to elaborate alternative modes of governance of the Caucasian regions.



Transhumance in Khevsureti, Gerogia. Author of the photo unknown

The investigation of the Landscape alteration within such complex dynamics questions aspects that belong simultaneously to different disciplines. Therefore, one part of the method is based on comparative theoretical research within a highly transdisciplinary framework. The other one offers mapping as a tool of territory study to tackle the operational part of introducing new

cartographic signs for the representation of the conflictual areas focusing on their landscape qualities or actual state of being. The intended result is to give an alternative readings tool to the broader public and underline the importance and complexity of the Caucasus mountains chain in the global geopolitical framework, which has been infrastructurally neglected in the last 30 years and scarcely explored.

Keywords: Landscape, border, land governance, transhumance

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FROM SOFT TO STATUTORY SPACES OF PLANNING: CHANGING CITY-REGIONAL INSTITUTIONAL ARRANGEMENTS IN POLAND (309)

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City-regions in Poland are still a kind of living laboratory that offers insights into the early stages of bottom-up (if in some cases top-down inspired) metropolitan or city-regional planning partnerships. The existing patterns of metropolitan governance show that city-regions in Poland should be treated as weak-institutionalized spaces and therefore it is impossible to analyse them in terms of 'hard' planning jurisdictions. This paper is a comparative analysis of four city-regions in Poland: Krakow, Wroclaw, Poznan and Rzeszow in terms of their organizational arrangements aimed at preparing a new statutory planning document - a 'model of functional-spatial structure' being part of integrated development strategy that is required to be completed by the end of 2025. Previous cooperative planning efforts in these city-regions have achieved only half-hearted results. The soft and voluntary nature of such actions manifested itself in the very titles of the commissioned planning documents, which largely consciously avoid the word 'plan', like a 'study of functional cohesion' (Wroclaw) or a 'concept of spatial development guidelines' (Poznan), while the other approach to city-regional planning is that only areas of cooperation should be identified and conflict problem avoided (Krakow). When faced with the necessity of taking up further planning actions, primary political actors in city-regions have started to follow different institutional strategies to cope with this challenge. Their review in the paper is based on working planning documents and deepened by conducting face-to-face and online interviews with representatives of key stakeholders in each area studied. The main issue under investigation is the relations of city-regional strategic staff with core city planning offices, regional planning institutions, external academic and professional experts and suburban municipal authorities. The crucial research question then is whether analysed city-regions may still be considered still as 'soft spaces' of planning, and if this 'traveling idea' (Purkarthofer & Granqvist, 2021) is adequate to describe the emerging city-regional planning arrangements in Poland.

Keywords: metropolitan governance, model of functional-spatial structure, integrated planning

CHINA'S OVERSEA PLANNING PRACTICE SINCE THE 1990S: A RETROSPECTIVE STUDY FROM THE PERSPECTIVE OF PLANNING KNOWLEDGE FLOW (315)

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China has been exporting its planning experiences to other countries since the 1990s through the development of industrial parks and later other kinds of economic and trade zones(Wang et al., 2021). Such phenomena echo the transnational flow of planning ideas and experiences or traveling planning ideas since the early 20th century(Healey, 2010, Ward, 2000), which has been a hot spot in the international planning study field from the beginning of the 21st century(Harris and Moore, 2013).

Introducing a research perspective of planning knowledge flow, we define the practical planning knowledge as regards to the transnational flow of planning experiences. Correspondingly, we argue the mechanism of practical planning knowledge flow can be studied through its type, flowing channel, participants and their functions, and flowing process in the context in which the planning knowledge is generated. China's oversea planning practice since the 1990s is taken as a case study.

In terms of the key social and economic events and changes since China's Opening-up in 1978, we divide the process from the 1990s to the present into three stages.

Respectively, stage one, in the context of China embarking on the establishment of a socialist market economy, is characterized by the pure export of planning forms, technologies and experiences through study tours and overseas projects organized by government or enterprise. Stage two, in the context of China's active participation in international development cooperation after its accession to the WTO, is characterized by the export of planning standards, systems and experiences through standardized overseas projects, training, and seminars. In this stage, more entities such as planning agencies, colleges, and international training organizations participate in the process of knowledge flow under the increased government support. Stage three, in the context of China's Belt and Road Initiative, is characterized by the export and integration of practical planning knowledge through multiple methods organized by multiple entities under the co-prosperity with the local place of the import country.

We argue that the general trends of China's oversea planning practice development are as follows. Firstly, more and more countries are involved, and the types of planning covered are enriched. Secondly, China's practical planning knowledge flowing overseas are expanded both from the field of planning and construction to that of pre-study planning and post-management operation and from explicit to implicit practical knowledge.

Our case study provides a good Global South example to the transnational planning ideas and experiences study generally. We also have tried to examine the cross-border flow of planning experiences through a distinct and probably new perspective, the knowledge flow. This study may inform integrated planning over the borders in current global context.

Keywords: planning knowledge; knowledge flow; planning experiences; China's overseas planning practice; international exchange

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THE IMPLEMENTATION OF CROSS-BORDER SPATIAL DEVELOPMENT CONCEPTS IN THE GERMAN-POLISH AND GERMAN-FRENCH BORDER AREAS (349)

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The opening of inner-European borders and the resulting cross-border mobility and cross-border activities, especially of the border population, have resulted in new patterns of spatial use. In order to meet future challenges in the border area resulting from this and from new trends and frameworks for spatial development, cross-border development visions and their implementation through cross-border cooperation are necessary (cf. Pallagst et al., 2018). Formal spatial planning is usually linked to administrative territorial entities and borders, with very little visibility and steering impact beyond these borders. In addition to the spatially defined focus, actors in formal planning can only move within the scope of their jurisdiction in terms of content. Therefore, in order to meet cross-border challenges, informal planning through cross-border cooperation is necessary, as these are not bound to the administrative divisions and professional silos, because unlike the responsibilities of the actors, challenges and problems do not necessarily end at these.

In the course of the project "Linking Borderlands - Dynamics of Border Regional Peripheries" (Lehrstuhl Regionalentwicklung und Raumordnung, 2021), funded by the German Federal Ministry of Education and Research, the topic of border spaces is being researched from various aspects in an interdisciplinary research team using the example of the Greater Region and the German-Polish border region. In the sub-project "Planning Borderlands", the research focus is on the role of spatial development in ensuring the provision of public services within the planning cultures that meet at the border and within cross-border cooperation (cf. Lehrstuhl Regionalentwicklung und Raumordnung, 2021).

Both in the Greater Region with the "Regional Development Concept of the Greater Region" (Ministry of Energy and Spatial Planning of the Grand Duchy of Luxembourg, 2020) and in the German-Polish border region with the "Common Future Vision 2030" (Spatial Development Committee of the German-Polish Governmental Commission for Regional and Cross-Border Cooperation, 2016), large-scale cross-border concepts have been developed by (planning-)actors from the two interlinked areas and form a basis for cross-border cooperation. As informal documents, both documents do not have a direct binding effect on spatial development actors, but rely on their participation in their implementation.

This paper analyses the two mentioned development concepts from the Greater Region and the German-Polish border region comparatively with regard to the questions:

- Who initiated the development of the concepts and with what justification?
- How did the development process take place?
- Which topics are addressed?
- What are the central contents?
- How is the implementation planned?

- Which actors are involved?
- What role does spatial development play here?
- Which instruments are used?

Keywords: Cross-border regional development / Cross-border cooperation / Comparative perspectives on planning systems

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TRANSREGIONAL TRAVELING PLANNING EXPERIENCES: AN EMPIRICAL STUDY OF TRADITIONAL INDUSTRY CHARACTERISTIC TOWNS IN CHINA (382)

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Planning ideas and experiences have long been traveled transnationally and transregionally. Academic attempts have been made to study this traveling phenomenon and call it with various terms like traveling planning ideas, cross-border planning ideas and experiences, and transnational planning ideas, among others (Tait and Jensen, 2007, Healey, 2013, Purkarthofer and Granqvist, 2021, Lieto, 2015). However, the current study has mainly focused on transnational traveling, while less attention has been paid to the traveling occurring across regions within a country. Some have studied such phenomena among different countries within the EU region. By contrast, we have observed the phenomenon of planning experiences traveling or diffusion across different provinces within China, as exemplified by the Characteristic Town (CT) planning and construction campaign that began in 2015. In recent years, the CT as a new urban and industrial space (Zou and Zhao, 2018) has gradually spread from its birthplace of Zhejiang province to the whole country, evolving from a local innovation practice into a national central policy activity and then to other local places' practice (Miao and Phelps, 2019), generating a multi-scale urban policy travel phenomenon. The planning experience of CTs, by contrast, traveled on the same administrative regional scale of provinces.

This study builds on a reflection on the phenomena of transregional planning experiences, focusing on the traveling planning experience of Traditional Industry CT, on types of CTs, in China. Three cases, namely Longwu Tea Town in Hangzhou, Zhejiang Province, Tea Fragrance Town in Songyang County, Lishui City, Zhejiang Province, and Yongxing Town (Sea of Tea Town) in Meitan County, Zunyi City, Guizhou Province, are selected as study objects. We have made a critical discourse analysis of the three CTs' plans to explore how the concept of CT and its planning experience cross administrative boundaries and are given different meanings and expressions in the three cases. Our study also tries to infer the mechanisms of such transformation by combining contextual elements including policy, economic and geographic environments. Our comparison reveals that all three cases understand the CT as a kind of urban space combined with industrial revitalization and all propose a route of industrial integration that enhances the value-added strategy of agriculture. However, the means by which they expect to achieve their goals are different, as reflected in their planning positioning emphasizing different values. Likewise, the degree and type of industrial integration produce differences as well. By rethinking the interaction between the contexts and the planning experience's travel results, we also find that the institutionalization, which used to be regarded as misleading to the traveling planning experiences, gave spur for the travel of CT ideas and planning experience.

Keywords: Travelling planning idea, Traditional Industry Characteristic Town, Circuits of knowledge

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LOCALIZATION OF SDG11: A CONCEPTUAL FRAMEWORK TO UNDERSTAND POLICY DESIGN FOR SUSTAINABLE URBAN DEVELOPMENT (387)

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In 2015, all UN member states agreed on 17 Sustainable Development Goals (SDGs) to mitigate climate change and build a better future. Today, the SDGs can be found in policy documents around the globe, including spatial planning laws, strategies and plans at various scales. The ubiquitous presence of the SDGs exemplifies that sustainability and sustainable urban development (SUD) represent goals that everybody can get behind, while the interpretation of and measures for SUD may vary greatly in different contexts (Griggs *et al.*, 2017).

To a degree, these different interpretations and implementations have been acknowledged under the idea of SDG localization (United Cities and Local Governments, 2021). Although the SDGs are global goals, agreed upon by national governments, their implementation needs to be achieved through and with local and regional authorities. The idea of localization recognizes that sustainability is a multi-scalar concern, meaning that actions need to be taken at various levels of policy making, and that a selection and adaption of the SDGs is necessary for them to be meaningful in various contexts. In the context of planning as well as SDG localization, SDG 11 has emerged as “urban SDG”: It covers urban development aspects and acknowledges the importance of involving cities and regions in the pursuit of the SDGs.

SDG localization comprises three aspects: adaptation, implementation and monitoring (Kanuri *et al.*, 2016). To date, the literature has paid more attention to implementation and monitoring than to the crucial step of defining and adapting the SDGs. This blind spot is mirrored in research on spatial planning generally, where the choice, combination and calibration of policy tools is often overlooked despite the significant effects of these aspects on policy outcomes (Stead, 2021).

To address this research gap, this contribution introduces a conceptual framework suitable to explore policy design choices in the context of SUD. We draw on the literature from public policy studies, specifically the hierarchy of policy design elements (Figure 1, Haelg *et al.* (2020)) to explore the localization of SDG11. The conceptual framework serves to test three hypotheses:

1. The concretization of SDG11 is lacking and instead, the same abstract goals are repeatedly used. As a consequence, policies do not produce tangible or measurable results.
2. In the context of SDG11, policy design is shaped by actors and actor coalitions rather than being determined by high-level abstraction goals and instrument logics. Instead of a funnel, the policy design process thus mirrors a decision tree, growing from few high-level goals to a multitude of specific policies.

While high-level goals are exchanged relatively easily, for example to include the strive for SDG11, specific policy settings often remain unchanged, being influenced by existing routines and path dependencies rather than newly set goals. In other words, while the narrative changes, the policies largely remain the same.

Keywords: policy design, policy calibration, policy selection, sustainable development, spatial planning

3.

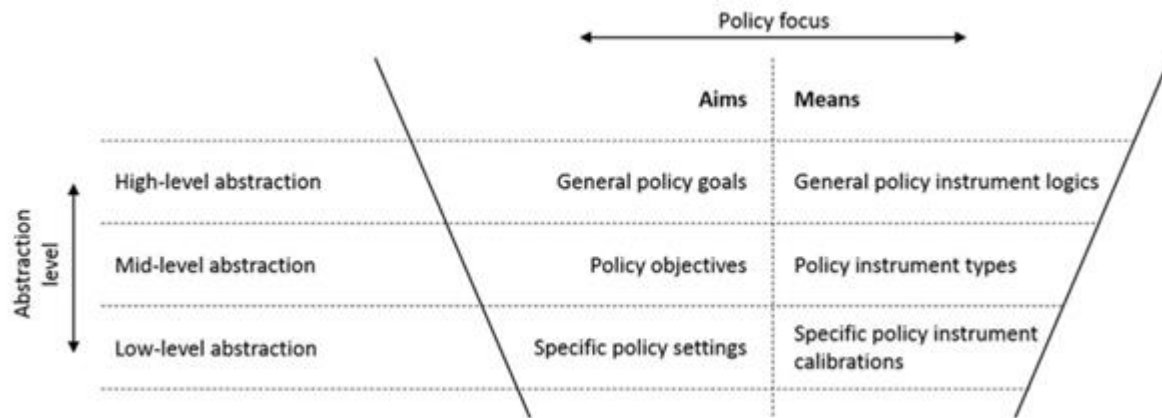


Figure 1: Hierarchy of policy design elements (Haelg et al, 2020, p. 312)

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INTEGRATED LANDSCAPE PLANNING: TACKLING INSTITUTIONAL SILO MENTALITY IN REGIONAL ENERGY TRANSITION IN SLOVENIA (481)

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Many European countries aim to rapidly increase the deployment of renewable energy technologies to meet the ambitious climate targets set by the EU (at least 32% of renewable energy by 2030; net zero GHG emissions by 2050; Directive (EU) 2018/2001, 2018; European Commission, 2020). In most European countries, there is in principal a high support for energy transition and renewable energy source (RES) production, however, the social acceptance is not assured when it comes to implementation. Firstly, there is a strong "not in my backyard" (NIMBY) reaction against the implementation of projects in particular related to wind energy and hydropower, but also large-scale solar energy (Michel et al., 2015). Secondly, there is a strong silo mentality and lack of cross-sectorial cooperation amongst governmental and planning institutions on regional scale. Both problems suggest that a change in planning approach is needed, which will consider RES with other land uses through an integrated landscape planning approach (Cuppen, 2018; Radil and Anderson, 2019; Wolsink, 2010).

The project "Fostering energy transition through integrated landscape visioning: social learning in different regional institutional contexts" is a three year project developed jointly by the Department of Landscape Architecture (University of Ljubljana) from Slovenia and the Institute for forests, snow and landscape (WSL) from Switzerland. Both countries share some similarities in spatial planning such as the absence of regional planning authorities and a lack of cross-sectorial cooperation amongst governmental and planning institutions. The research approach is employing innovative methods and tools in order to address the silo mentality. Firstly, a transdisciplinary steering board for each pilot is established in order to analyse the context and provide the basis for a systematic comparison of the case studies as well as material for the visioning process. Secondly, the visioning workshop employs innovative approach where different visions are brought together into one vision through curated managed process of negotiation. The result is a spatially explicit common vision in form of a plan. The visioning workshop uses advanced public participation GIS tools (PPGIS), which do not require advanced GIS knowledge. Lastly, an ex-ante and ex-post interviews of the stakeholders are conducted in order to evaluate if and how the visioning workshop contributes towards the mitigation of silo mentality and additional social learning.

Conference report at the AESOP will focus on work in progress in Slovenian pilot regions discussing the problems and opportunities for regional transition based on context analysis and interviews. It will conclude with lessons learned from the interviews of regional and municipal stakeholders in order to ascertain the preconditions of success of such integrated planning approach in the Slovenian context.

Keywords: Participatory visioning; Silo mentality; Integrated landscape planning; Regional energy transition

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FOUR CITIES, THREE PROVINCES, TWO STATES, ONE REGION: INTEGRATED INNER-CITY DEVELOPMENT CONCEPT IN A REGIONAL CONTEXT (ISEK⁴) (496)

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ISEK⁴ is a cross-border pilot project for the development of a new planning instrument in Austria. It deals with two spatial realities which - despite obvious needs - are rarely considered in context in existing planning instruments: the inner city and the functional region. An integrated urban development concept for the four inner cities of Bruneck (South Tyrol), Hermagor-Presegger See (Upper Carinthia), Lienz (East Tyrol), and Spittal an der Drau (Upper Carinthia) was designed based on a regional symbiosis as “second” level of action (demonstrating and using synergies between the inner cities, as anchor points of public life in the region). The ISEK⁴ is based on an integrated, interdisciplinary approach and was developed together with the steering groups from the cities: within eight months, knowledge and needs were collected, recorded, and located in different workshop formats. The paper will focus on the lessons learned and the transferability of the project approach and results.

The project of an Integrated inner-city development concept in a regional context was initiated by the South Alpine Space City Network (bottom-up approach). The region is exploring new limits of regional cooperation and is contributing to the implementation of the EU Leipzig Charter (2007/2020) and the Territorial Agenda 2030 (2020). Key objectives of the Austrian Spatial Development Concept 2030 (ÖREK 2030) are put into practice, such as the strengthening of polycentric structures, planning in functional living spaces, as well as the climate-friendly and sustainable spatial development.

These challenges can no longer be dealt with by inner cities alone. Working on selected issues regionally is not only efficient, but also makes sense. One of the basic ideas of the regional symbiosis is to further develop the inner cities according to common regional priorities. Accordingly, seven spatial guiding ideas are formulated in the ISEK⁴ for the SOUTH ALPINE SPACE. They run through all levels of the concept and are always recognizable: in the future images of the cities, in the integrated inner-city development, in the interventions for the focus areas or perspective areas as well as in the regional vision. The symbiosis shows how the spatial guiding ideas are transforming the SOUTH ALPINE SPACE in the future.

The ISEK⁴ is a planning instrument for self-commitment - and thus opens opportunities for a spatially focused and active shaping of the future of the inner city and the entire region. The meaningfulness of regional cooperation is also reflected in the structure and conception of the ISEK⁴: Regional potentials and goals are constantly thought of in combination with local activities and trends. In the city-peculiar parts, the planning focuses on specific sub-areas of the respective city. Idea sketches provide impulses for implementation. The regional symbiosis links the four ISEK⁴ of the individual cities and raises them to the regional level. This creates an overall picture for the SOUTH ALPINE SPACE that is more and - in terms of sustainable local and regional development - can do more than the sum of the four concepts for the inner cities.

The ISEK⁴ actively contributes to saving soil by prioritizing inner city development over outer city development. The ISEK⁴ goes one step further and pursues the strategy of bringing commercial uses from the outskirts back to the inner city. Urban qualities such as mixed use or lively ground floor zones provide flair and a high quality of life in the cities and the region. ISEK⁴ addresses all aspects that are part of a good life for all generations.

Keywords: integrated approach, Cross-border regional development, climate crisis, inner city development, sustainable mobility

INTEGRATED PLANNING OVER THE BOUNDARIES WITHIN CHINA: SOFT PLACE AND SOFT DESIGN (511)

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"One country, two systems", formulated in the early 1980s, is a constitutional principle of the People's Republic of China (PRC) which describes the governance of the special administrative regions of Macau and Hong Kong. Under the principle, each of the two regions could continue to have its own governmental system, legal, economic and financial affairs, including trade relations with foreign countries, all of which are independent of those of the Mainland using socialism with Chinese characteristics system. As a result, this principle has formed special partnerships as well as political and administrative boundaries between the two regions and the Mainland.

Dramatic economic growth and political changes have taken place over the last two decades, which have resulted in a series of territorial cooperation and development strategies between Macau, Hongkong, and the Mainland under the principle of "One country, two systems". Some goals in those documents are quite similar to the spirit of *European Integration*. In 2021, "Strategies for the Construction of Hengqin-Macao Deep Cooperation Zone in the Guangdong-Hong Kong-Macao Greater Bay Area" was launched to support the cross-boundary integration process between *Macau* and *Henqin*. Hengqin (an area adjacent to Macau) is recognized as a soft space, co-administrated by *Zhuhai* (a city of the Mainland) and Macau. Specifically, Hengqin is redesigned as a pilot to (1) provide spaces for the life and employment of Macao residents, (2) diversify the development of Macao's economy and industry, (3) enhance the free flows of logistics, capital, and immigrant from Macau, and (4) create co-governance, co-decision, and co-construction, co-benefit institutional settings for urban management.

Focusing on those territorial cooperation and development strategies, this paper discusses how they are contributing to spatial rescaling in soft spaces and how spatial planning can be seen as a tool to promote cross-boundary development. The paper is divided into three main parts. It begins by describing the historical and cultural context of spatial development in Hengqin and Macau with links to the shapes of boundaries. Second, it discusses the changes in recent development strategies for closer territorial cooperation in the region and the responses from spatial planning. Third, it considers the opportunities and challenges for supporting cross-boundary cooperation.

Keywords: Macau, Hengqin, the Greater Bay Area, cross-boundary integration, soft space, soft planning

THE NEAPOLITAN COAST AS COMMON GOOD: VARIABLE THICKNESS IN SOCIO-ECOLOGICAL TRANSITIONAL PROJECT (531)

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Coasts, as areas of intersection between the land and the sea, are an expression of the intimate relationship between the two elements and are identified as a paradigmatic space for disciplinary reflection. A public good par excellence, a vulnerable and scarce ecosystem, the coast is a fragile transitional thickness, subjected to countless disturbances that have irreparably compromised its balance (Guizio 2022). The combination of these dynamics has progressively taken the coast away from equal enjoyment by citizens, accentuating certain inequalities and identifying the coast as a perpetually contested space: contested in uses, plans, competencies, and tools.

In particular, the paper understands coastal areas by looking at the multiplicity of meanings it takes in contemporary times. On the one hand, these fragile goods, as the intersection of anthropogenic and environmental pressures, are places where the effects of climate change will become most evident (Antonioli et al. 2017; IPCC, 2019). That is especially so at the points of major depression, where sea level rise and erosion processes will lead to rather significant geographic transformations, with which the transition project must contend. On the other, the coast can be considered a particular form of public good: the beaches, and in a broader meaning littoral zone, in the context of state property be part of the category of maritime property and, as such, are identified as a public good of collective belonging with high social relevance (Lucarelli et al., 2021).

Looking at the coast through this dual lens leads to an overcoming of its original meanings, identifying it as a relational sphere with varying depths. The coast is, therefore, understood as a section of land whose geometry depends on different gradients of wetness (Da Cunha 2018), a liminal space of interaction with different spatial boundaries, in a continuous overlapping of possible limits. The current condition of ecological, social, and economic transition requires building a new adaptive and resilient coastal project and a new view, defined within the research as "territory-sea." It refers to an idea of a dynamic area that sees the sea as the way through which the city reinterprets itself and is characterised by the intense concentration of dynamics, pressures, and flows and, in particular, by the use made of it (Crosta 2010). Looking at the coast from this perspective, attentive to the plurality of practices and the rhythms of the use, makes it possible to show its variability and the continuous mutation of its thickness.

Thus, starting from the notion of practice as 'what people do' and the coast as thickness, the contribution investigates new perspectives through which to orient the transformation of coasts, constructing a shared narrative to be the basis of an adaptive coastal project in a renewed balance between land and sea.

Starting with the Neapolitan case, which is emblematic of the intricate relationship between the definition of the coast as a fragile and public good, the paper reflects on the possibility of recognizing the public domain as an intermediate space to be designed to ensure security, with a view to socio-ecological transition and collective reappropriation of denied tracts of coast.

The search for a new balance between the city and the sea can start with bottom-up reclaim actions and experimentation with different management forms.

The reading of informal practices and the narrative of ongoing mobilizations lead to a reflection on the possibility of recognizing the coast, because of its usefulness for the benefit of the community, as a common good, allowing it to fulfill its social function in terms of usability, that is, restoring to it the nature of an asset of collective belonging.



Keywords: transition, coast, land-sea interaction, common good, erosion

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PORT-CITY INTERFACE AND LINKAGE WITH MARINE/MARITIME SPATIAL PLANNING: EXPERIENCES FROM CASES IN ITALY AND THE NETHERLANDS (557)

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Port-city interface is an area in transition that connects the port infrastructure and city through a threefold dimension of changes: spatial, economic and ecological. This interface also characterises the land-sea interaction, where spaces of flows are developed and affected by maritime activities. Abundant discipline-oriented literature already exists on port geography and port-city development. Yet, the question of facilitating sustainable port expansion and city development in a limited space remains unanswered. We need more in-depth exploration of how global flows running through maritime infrastructures reshape the built environment; to comprehend the impact and risk of port-related activities and logistics at the interface between ports, large industrial complexes, urban territories, and their neighbouring regions. Although spatial planning has been used for some decades as a tool to guide land use and development, marine/maritime spatial planning (MSP) has been introduced recently by the EU commission as the tool to manage the use of our seas and oceans coherently and to ensure that human activities take place in an efficient, safe and sustainable way¹.

Within the framework of the EU-funded project 'RePortFlows²' this paper highlights the aspects of the rather new policy tool of marine/maritime spatial planning (MSP) and, more importantly, the current challenges in integrating the MSP and local and regional spatial planning in the two cases of Italy (West Mediterranean) and the Netherlands (North Sea). Data is collected from bibliographic and documentary sources. Geospatial mapping and data visualisation are used to identify spaces of flows that characterise the interface zone and the area of conflict for both land and maritime spatial planning.

Keywords: Port-city interface, spaces of flows, Marine/Maritime spatial planning

¹ https://oceans-and-fisheries.ec.europa.eu/ocean/blue-economy/maritime-spatial-planning_en

² <https://cordis.europa.eu/project/id/101066680>

THE MARITIME SPATIAL PLANNING ACROSS INTRANATIONAL BORDERS: A PERSPECTIVE FOR INTEGRATED AND INCLUSIVE IMPLEMENTATION AT INSTITUTIONAL AND SOCIETAL LOCAL SCALE (585)

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The rise of maritime spatial planning (MSP) introduces a further level of complexity in the interrelationship between different levels of institutional action, bringing attention to the transboundary dimension related to land-sea interaction also within countries. According to the European MSP Directive (EC, 2014), Member States “shall take into account land-sea interactions” but provides little advice or guidance on how to do this (Kidd et al, 2020). The elaboration process of the Marine Spatial Plan for Italy foresees the active involvement of all central and peripheral public administrations in different phases and roles: co-planning with the Regions, consultation with local authorities and other public bodies (MIT, 2022). Local and regional authorities are at various levels competent for the sea in terms of planning and policies: Regions have shared legislation with the State in matters of spatial planning and jurisdiction in some sectoral policies; municipalities do not legislate on marine space and have to adapt their land and coastal planning to the superordinate regulatory framework.

Nevertheless, not infrequently the articulation of competences still generates overlaps in decision-making power (CC 39/2017; CC 235/2018; C-110/20). Furthermore, municipalities and Regions, as the closest institutions to local communities, are the addressees of concerns and criticalities expressions which in turn report to the central State. This demonstrates the demands from the components of society to interact more directly in the decision-making process, and that the application of the guidelines and strategies defined by the plans take place in timescales appropriate to the speed of the phenomena and dynamics ongoing in the territories. Moreover, these relational dynamics and information flows relating to expressions of needs and desires occur in parallel with – but outside – the statutory planning systems and practices, by lacking environments of interaction, confrontation and friction resolution between the local communities' concerns and the national collective interests.

Beside the main coordination paths between countries – essential to ensure coherence and effectiveness as well as to cope common challenges – initiatives are setting out in order to support the EU Member States and Maritime Regions in the implementation of their MSP plans and processes (EC, 2022), but the phase following the approval of the national management plan and the posthumous dialogue with the actors on whom the relevant choices will impact has not yet been addressed.

Within this framework, the planning culture assumes a crucial importance: in fact, while improving the participation allow lower administration levels, local communities and citizens to be part and contribute to the implementation, the first suffer from the sectoral divisions of existing administrative procedures that hinder policy integration, the last experience the reality in an integrated way, independently of jurisdiction and sectoral competences. Since the strategic objectives of the MSP are defined on the basis of integrated goals and transversal principles, with which strategies and tools can the implementation of this integrated inter-scalar approach

harmonise the different levels of the plan and multi-level governance, and contribute to a greater inclusion of societal actors in sharing and contributing to the MSP implementation?

This contribution aims to discuss the perspectives of the MSP governance implementation in the Italian context, with regard to two topics: the first explores the role of a planning culture in which cities and regional planning support the achievement of linking maritime spatial planning with coastal and land interactions. The second addresses the relationship between statutory planning systems and practices and the mechanisms of democratic control and participation, by outlining planning practices for expressing the potential of stakeholder involvement and cooperation for the full application of the MSP, in the perspective of an inclusive path design crossing administrative and sectorial siloes.

Keywords: Land-sea Interaction; Multi-level Governance; Social Participation; Integrated Planning; Marine/Maritime spatial planning

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FROM VISION TO IMPLEMENTATION: THE CASE OF THE COMMON FUTURE VISION FOR THE GERMAN-POLISH INTERACTION AREA (636)

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Following the analytical framework proposed by Haselsberger (2014), the German-Polish border provides rich evidence for sociocultural, economic and biophysical boundaries, leading to particular challenges for integrated (cross-border) planning approaches. In this situation, the Spatial Development Committee of the German-Polish Governmental Commission for Regional and Cross-Border Cooperation (2016) has elaborated and adopted the *Common Future Vision for the German-Polish Interaction Area – Horizon 2030*. According to its objective, the *Common Future Vision* is a spatial planning vision, aimed at facilitating the integrated development of the area on both sides of the German-Polish border through further strengthening of socio-economic, communicational and administrative links.

Since the adoption of the *Common Future Vision*, manifold activities have been undertaken to support its implementation. But what does implementation mean in case of a large-scale spatial vision that covers an area of 160,000 km², and which – especially in the closer neighbourhood of the German-Polish border – is predominantly rural? Which specific contributions can be expected from national, regional and local actors? Which resources, instruments and networks are available, and how can they be activated?

The paper outlines the position of the *Common Future Vision* in the German and Polish planning systems, considering complementary approaches and initiatives for integrated (cross-border) development. Connections between different arenas of action are being described, and possible synergies and opportunities for intensified cooperation analysed. Additionally, the influence of current crises (Corona pandemic, energy crisis) is being highlighted, and which inspiration can be gained from spatial planning cooperations in further European border areas, such as the Greater Region/SaarLorLux region.

With this regard, in particular the preliminary results of the joint project *Linking Borderlands: Dynamics of Cross-Border Peripheries* will be applied and reflected. The project is focussing on European border regions as zones of contact and transition, highlighting continuing development paths and upheavals in so-called *borderlands*. The common ground is provided by the field of *Border Studies*, allowing for an interdisciplinary approach to border issues.

Keywords: Common Future Vision, German-Polish border area, cross-border cooperation, border studies

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INTRODUCING ‘INSTITUTIONAL ARRANGEMENTS AND STRUCTURES’ FOR CROSS-BORDER REGIONAL SPATIAL/TERRITORIAL GOVERNANCE IN SOUTH AFRICA – THE CASE OF THE KAROO RSDF (640)

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The introduction of the Spatial Planning and Land Use Management Act, 2013 (SPLUMA), marked a watershed in the pursuit of spatial transformation and inclusive economic growth in South Africa. Not only did the Act put in place a new uniform system of spatial development planning and land use management in the country, but it also made provision for the preparation of ‘Regional Spatial Development Frameworks’ (RSDFs) to provide for ‘cross-provincial and municipal boundary spatial/territorial development planning’. A key objective in this regard was the development of ‘post-Apartheid functional regions’ through targeted infrastructure investment and social and economic development spending without the encumbrance of administrative boundaries.

In 2019, a decision was taken to proclaim and prepare the first such RSDF for the ‘Karoo’ – a vast, largely arid region of immense beauty, rich in heritage and culture, but struggling economically, deeply impoverished and highly unequal – that constitutes about 40% of the national territory, and stretches over four provinces and more than forty municipalities. A service provider team, of which the two authors were members, was appointed early in 2020, to assist the responsible national government department with this task.

Preparing the RSDF was a huge, but not undoable undertaking, given the substantial experience in the country with district and province-level spatial/territorial development planning. What did, not unexpectedly though, turn out to be a major challenge was the introduction of ‘cross-boundary institutional arrangements and structures’ to (1) implement the spatial development proposals, and (2) guide, facilitate and oversee the crucially important infrastructure investment and development spending in the region in accordance with the thinking and provisions in the framework. A key contributing challenge in this regard being (1) the relative novelty of the concept, and (2) the ‘territorial guarding’ of the powers and functions allocated to the three spheres of government – i.e., national, provincial and municipal – in terms of the country’s 1996-Constitution.

In this paper, the authors provide an overview of the many proposals, the challenges and contestations, and the eventual ‘interim (yet untested) agreements’ reached on the introduction of the ‘institutional arrangements and structures’ in and for the region, followed by an engagement with the theoretical frameworks that best assisted the service provider team in making sense of them.

Keywords: regional planning; governance; institutional arrangements; South Africa

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TENDERING AS A COORDINATIVE GOVERNANCE TOOL: UNDERSTANDING THE ROLE OF THE TENDERING PROCESS IN INTEGRATING PRIVATE TRANSIT OPERATIONS IN ISRAEL (646)

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Coordinated services are essential to the usefulness of public transport, and to achieving high ridership (Lee & Vuchic, 2005), which is necessary to achieve climate goals, and ensure equity of access to essential services and economic opportunities. Governance structures can add barriers to service integration, or reduce them. Metropolitan travel involves routes that cross jurisdictional or operator boundaries, sometimes requiring what Jarrett Walker describes as “politically required connections” (Walker, 2012), or transfers that are produced as a function of the governance system, not for the sake of creating the most efficient or useful transit service. Understanding the governance geography, as well as the formal relationships for cross-jurisdictional coordination can help better understand our ability to minimize their occurrence. Researchers have examined the impact of fragmentation of services, finding that transfers from one operator to another make the service less useful to the rider, cost additional time to make the trip (Lee & Vuchic, 2005), and can reduce ridership by anywhere from 25-55%, depending on the difficulty of the transfer (Liu et al., 1998). Integration across transit agencies within a given metro region is a common challenge for such basic functions as fare collection, schedule coordination, and facility sharing, among others (Rivasplata et al., 2012; Miller et al., 2005), though these challenges also present opportunities to improve service links between operators. Particularly in Europe, there has been increasing privatization of services, which are tendered to private operators that bid in a competitive process, though public authorities often retain the power to define such services (Pettersson and Hrelja, 2020). This has created a new source of operator fragmentation (Pettersson & Hrelja, 2020), requiring further research on cross-operator service integration.

Level of government plays an important role (Veeneman and Mulley, 2018). National governments are more focused on the speed of transportation links across long distances, while local levels are focused on access to places, or first/last mile issues. Previous scholarship has found that larger tenders and more integrated tenders should, over time, facilitate further cooperation (Veeneman & van de Velde, 2014), but more work is needed on the process of developing such tenders, and enforcing such coordination.

We chose to examine Israel’s system due to its high degree of top-down funding and political decision-making. This proved a strong counter-example to previous work on the highly localized nature of transport governance and funding in the United States. This qualitative study uses interviews of key members of the national government, private operators and municipalities to understand how the Israeli tendering process. The study uses this information to understand the role of formal institutions in coordinating ticketing, schedules and stop location across multiple jurisdictions across the country. This research adds to existing theory by understanding the viability of tendering agreements as a tool for service integration and coordination as an alternative to full governance integration. We ask how integration was effected, what challenges were overcome, and how effective this was. The study closes with findings that Israel has

achieved coordination despite a large amount of private ownership and fragmentation across operators. Flexibility over time has helped to refine this coordination with each new tender. However the results have been confined to the bus system, with poor coordination across modes (bus/rail), and results that are unsatisfactory to local municipalities, which are often not included in the decision making process. In this case, the use of a higher level of government to effect coordination has been effective, though it has also impeded their ability to adapt to local needs.

Keywords: Transportation, Fragmentation, Governance, Collaboration, Multi-level governance

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THE GLOBAL LAND USE PLANNING: A SOLUTION TO OPTIMIZE THE IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS FUND JOINT PROGRAMS (674)

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Throughout the world, different planning cultures have developed land-use plans. Nevertheless, there is no single global plan that prepares the world's territory to receive climate change mitigation and adaptation measures and achieve the Sustainable Development Goals (SDGs) (UNDP, 2022). The investment of many international funds is sometimes fragmented across different agencies and the distribution of financial resources by country limits the success of projects for food security, biological connectivity, biodiversity and ecosystem conservation, and energy transition. However, a global land use planning (GLUP) as a solution to support the achievement of carbon decent and climate mitigation. We propose that the entire planet's territory should be considered as a common heritage. Then with a public participation process it will be possible to identify priority sites on where to apply the financial resources as those of the SDGs Fund. This should create convenient, equitable, healthy, efficient, attractive and resilient societies and environments for current and future generations. The first step to achieve this goal will be to improve international planning capacity through transboundary planning and to collectively design and create a global methodology for land use planning. To this end, we propose transboundary river basins (TRBs) as an initial pilot area since shared water resources require transboundary cooperation which can lead to sustainable water management practices and provide a testing ground for cooperation mechanisms as an opportunity for cooperation and trust building between countries. A Global Land Use Planning Group (GLUPG) will be organized with the purpose of developing sustainable land use policies and plans on a global scale, coordinating and integrating land use planning efforts between countries, promoting responsible and equitable land use practices and addressing the impacts of climate change on land use. GLUPG will define the criteria for selecting TRBs. considering ecoregions representativeness (Olson et al., 2001) and including urban areas with high cultural, social or economic transboundary connections. Different land use planning processes based on local methodologies will be pursued in each pilot TRB. A participatory data collection and analysis process is proposed to assess land use with a social, economic and environmental approach integrating a multi-objective genetic algorithm for land use allocation (Balling et al., 1999; Stewart et al., 2004; Liu et al., 2013; Karakostas, 2015; Zhang et al., 2016). Ensuring a connection between communities and spatial analyses, the proposed methodology uses community-defined land use indicators based on self-care, care for others and care for nature. A multi-objective optimization process derived from these indicators will allow the preparation of spatial planning scenarios (Azuara-García et al., 2017) creating a shared future vision through a bottom-up spatial decision process (Couclelis, 2005). The GLUPG will analyze the TRBs pilot planning processes to build a first global methodology. The second step consists of expanding the GLUP where the SDGs will be implemented. In addition to the pilot TWBs, other strategic water areas as well as fragile

ecosystems may be chosen, as well as other priority lands, especially agricultural heritage systems (Koochafkan & Altieri, 2011; Wang & Zhou, 2021), human settlements and eco-industrial parks (Santoro et al., 2020). In a third step governments will propose an international agreement to share those areas as collective world heritage/commons which will be considered by the United Nations Joint SDG Fund in order to execute the strategies defined in the land use planning (McIntyre Owen. 2022). The GLUPG will then support the creation of a transboundary planning support system (Kim et al., 2014; Sarker et al., 2018) for spreading and monitoring the GLUP to the rest of the planet using indicators as land use change, agricultural productivity, biodiversity conservation, water management, climate resilience, food security, sustainable urbanization, renewable energy deployment, economic development and social equity and inclusion.

Keywords: transboundary, public participation, spatial analyses, spatial planning, public commons, sustainable development goals

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VOLUNTARY TERRITORIAL PLANNING TOOLS AND BOUNDARIES CHANGES: SOFT SPACES FOR BETTER ADDRESSING CHALLENGING TERRITORIAL ISSUES IN ITALY (760)

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Borders, boundaries and perimeters have been recognized as a fundamentals of urban and regional planning (Gaeta, Rivolin and Mazza, 2013). Territorial planning challenges renewed the boundaries' discourse in urban and territorial planning by considering differences and continuities of ecosystems and landscapes for claiming the need for adequate policies' perimeters in place of the only assigned administrative boundaries. In the last decades, different voluntary planning tools emerged in which the boundaries are defined through bottom-up processes and/or according to different targets and funds.

In this framework, the contribution reflects on a research experience (De Leo, Altamore 2022; 2023) conducted in central Italy about two voluntary planning tools implementation that defined variable perimeters. Indeed, two recent territorial policies, with overlapped perimeters, have been pursued their own purposes in the Lazio Region: the first concerns the Inner Area of 'Alta Tuscia-Antica città di Castro' within the SNAI-Italian National Strategy for the Inner Area, with the aim to revert the spiral of abandonment. The second is the River, Lake, and Coastal Contract 'Marta-Bolsena-Tarquinia', which aims to create an action plan for environmental protection. According to this comparative research experience, this contribution reflects on its findings by shedding light on the connection between administrative/not administrative boundaries and efficiency in the goals achievement. Then, the analysis provides insights and prompts to reconsider the approaches taken in defining these new soft spaces for better addressing challenging territorial issues.

The conceptual framework of soft spaces (Haughton et al., 2009) offered suggestions for reinforcing the voluntary tool's efficiency by considering that:

- new boundaries have to be used for providing new opportunities for innovative public engagement, by structuring permanent learning and training processes for all the actors,
- the interplay between 'hard' and 'soft' boundaries must create a stable local network based on mixed actors with heterogeneous skills at different levels by avoiding concentration of knowledge and power,
- soft boundaries often exhibit an adaptable nature even though institutional participants have to learn to consider territorial planning as a shared practice among different local institutions and with inhabitants and associations.

In conclusion, soft boundaries creation of voluntary spatial planning tools could be effective only if multilevel interventions are adopted by involving various levels of governance and multiple relationships. Indeed, these interventions recognize the interconnectedness and interdependence of different actors and institutions involved in the planning process. But in order to do so, it is necessary to reshape the power distribution and knowledge availability within institutional and administrative structures and boundaries.

Keywords: boundaries, variable perimeter, innovative territorial planning tools, soft spaces

SPATIAL PLANNING'S ROLE IN FACILITATING THE EUROPE'S AMBITIONS FOR A SECURE, RESILIENT AND DECARBONISED ENERGY SECTOR WITH RESPECT TO OFFSHORE RENEWABLES (762)

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The multiple energy crises have re-invigorated the role and potential for off-shore renewable energy. In Europe, at least, there are plans to accelerate offshore renewable energy by at least 20% meaning that by 2030, some 72GW of energy should be being generated, up from a 2020 figure of 20GW (European Union, 2022). In this paper we explore the role that spatial planning across a variety of scales can help to facilitate the deployment of marine renewables. Drawing on a small 'on demand project' for ESPON, this paper, using a comparative methodology (Sykes, Shaw and Webb, 2023), critically reviews the role that spatial planning can play on a territorial basis (across the land sea divide), in a cross-border capacity between countries and in a transnational capacity within regional sea basins. This develops new ways of thinking about regional design in an ever increasing complex multifaceted and interconnected world (see Neuman and Zonneveld, 2021). Spatial planning must be seen as one of the critical processes that facilitates the delivery processes and our research showed that maritime spatial plans where they have been developed have often over-delivered space for predominantly offshore wind, but some of the new debates and developments for planning relate to the authorisation process of the offshore wind farms and how does the planning of the transmissions bring the energy to the shore and on land connect to the grid. In many countries, it is these processes that might be delaying offshore wind energy deployment. Although 'framework conditions' such as the capacity of the private sector to deliver are equally important. From a maritime spatial planning perspective, the evidence shows that an open, inclusive and transparent process both, in plan making and in seeking consents, is the best way to tackle potential conflicts. There is also much more scope for cross-border collaborations, which is properly co-ordinated and synchronised could considerably improve the efficiency and effectiveness of delivery.

Keywords: Spatial planning, territoriality, cross border, land sea interactions

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PLANNING CULTURES IN CROSS-BORDER TERRITORIAL DEVELOPMENT IN THE GERMAN-POLISH BORDERLAND (786)

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Cross-border regions increasingly face challenges with significant territorial impacts, underlining a need for cross-border spatial planning (Caesar and Evrard, 2020). This induces cooperation between different planning cultures (Jacobs, 2016). The comparative analysis of planning cultures focused on (national) planning cultures improves our understanding of their differences and similarities. Recent research also shows that planning cultures cannot only be delineated by geographic boundaries, but by specific planning tasks as well (Pallagst et al., 2021). Spatial planning in the cross-border context encounters specific regulations, policies, strategies, and spatial concepts, as well as beliefs and values (Durand and Decoville, 2018). This specific context might engender specific cross border planning cultures.

The project “Planning Borderlands” is concerned with cross-border territorial development. Its objective is to analyse planning cultures in cross-border regions along the French-German and German-Polish borders. This contribution analyses semi-structured interviews conducted on the topic of the provision of services of general interest with actors of statutory planning and stakeholders in cross-border governance structures in the German-Polish borderland of Brandenburg-Lubuskie. The analysis aims to produce first evidence on the differences and similarities between the involved planning cultures as well as the specificities on the cross-border level. The results of the analysis will be incorporated into a planning game which will take place in a later phase of the project to further analyse the German-Polish borderland and to compare it with the French-German borderland of the Eurodistrict SaarMoselle. The analysis builds on an analytical model based on Knieling and Othengrafen’s Culturized Planning Model (Knieling and Othengrafen, 2009) that incorporates the specificities of the cross-border context.

The paper presents insights into specific issues of cross-border spatial planning in the German-Polish borderland of Brandenburg-Lubuskie. It showcases evidence on the specific planning culture on both the national as well as the cross-border levels. The research presented here discusses an improved understanding of planning cultures in order to boost cross-border territorial development, thus allowing cross-border regions to realize their territorial capital.

Keywords: Cross-border territorial development cross-border regions planning cultures Cross-border cooperation spatial planning

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PLANNING SYSTEMS COMPARED: A REFLECTION ON THE STATE OF ART (817)

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The late 1990s saw increasing scholarly attention to comparative studies of spatial planning, notably since the publication of reports such as the European Compendium of Spatial Planning Systems and Policies (European Commission 1997) and the European Spatial Development Perspective (CSD 1999). From around then on, there has been a growth in academic research devoted to understanding and explaining the diversity of planning systems, cultures and perspectives, especially within Europe. This research has helped to develop and apply new theoretical frameworks in the study of spatial planning in different contexts. It has also contributed to practical understanding about the nature and operation of spatial planning. Comparative studies can for example inform and improve theoretical understanding by bringing different factors into relief relating to national conditions that may otherwise be taken for granted (Nadin & Stead 2013). Comparative research can also inform and stimulate the improvement of practice by exposing policy officials and researchers to alternative understandings, approaches and methods (Haintrais 2009).

Carrying out comparative research in the area of spatial planning brings with it some methodological challenges. Comparison requires some common scale of measurement but various characteristics of planning systems are difficult to compare directly. These include governance characteristics such as 'centralization', 'devolution' or 'discretion', and cultural dimensions of planning (Knieling & Othengrafen 2009). There are also potential problems of linguistic and conceptual equivalence when carrying out international comparative research, which is compounded when larger numbers of countries (and cultures and languages) are involved. Conceptual equivalence refers to the fact that the same concepts have different connotations across different cultures (e.g. 'structure plan', 'zoning'). Another methodological challenge is that a diversity of planning practices and policies can be found in some nations, especially in federal and regionalized states which makes it more difficult to identify the characteristics of spatial planning at the national level.

This paper aims to provide a way of navigating the complexity of comparative research in spatial planning by identifying the key dimensions that have been used, or could be used, in such studies. The content draws on direct experience of large comparative research projects on spatial planning (e.g. ESPON 2013 & 2018). A distinction is made between three main dimensions of comparison: (i) dimensions which influence the way planning is organised; (ii) dimensions which describe the main characteristics of the operation of planning in practice; and (iii) dimensions which illustrate the impact of planning on territorial development. Before discussing these different dimensions, attention is turned to clarifying key terminology in comparative studies of spatial planning.

Keywords: spatial planning; comparative studies; Europe; dimensions of comparison

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RESEARCH ON THE URBAN WATERFRONT REGENERATION BASED ON THE INTEGRATED SHARING MODEL, TAKING THREE CHINESE PORT CITIES ALONG THE HEILONGJIANG BORDER RIVER AS AN EXAMPLE (837)

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China, as the third-largest country, borders 14 countries on land. Due to geographical reasons, Chinese border towns on land are far from the economically developed areas on the southeastern coastal regions, suffering from economic decline, population loss, and declining urban vitality. With the formulation of the Belt and Road policy, China's cooperation with neighboring countries is becoming frequent. As the starting point of the North Silk Road Economic Belt, the Heilongjiang border river is a close connection to the largest territorial country, Russia. The river and the border ports also become important nodes to annihilate the physical boundaries in the post-epidemic era and become significant sharing windows for economic operation, trade contacts, and political cooperation. During nearly 10 years development under the policy, the border port cities have witnessed remarkable promotion in trade transactions, infrastructure construction, and tourism, and the economic and urban environment have been significantly enhanced, gradually forming a model of sharing development at border river port cities.

This paper selects waterfront areas in three typical Chinese port cities along the Heilongjiang border river, Heihe, Tongjiang, and Fuyuan, in order to study the mechanism of sharing model in the urban regeneration process. Based on a mixed methodology of field research and literature review, this paper analyses the shared urban regeneration model in three dimensions, shared ports at the regional scale, shared waterfronts at the city scale, and shared architecture and public space at the human scale. First, from the regional scale, the paper studies the sharing activities of trade transactions, shipping and passenger transport, and tourism in the Russian and Chinese ports, aiming to find the impact on the economy, society, and urban form. Second, from the city scale, the paper studies the shared waterfront areas and their spatial innovation such as urban morphology, block connection, and street interface. Third, from the human scale, the typical public buildings in the waterfront are selected to analyze the impact of sharing space on public activities and people's lives, aiming to bring people and cities closer.

In conclusion, this study summarises the sharing mechanisms of urban waterfront regeneration in three port cities, from aspects of economic drive, physical form activation, and public event intervention, reiterating the importance of sharing process for national development and citizens' lives. Moreover, this paper finds out the leading impact of the waterfront area for the whole town and the joint thinking of linkage development for port clusters along the border river, hoping to provide guidance and significance for the other border ports in the post-epidemic era.

Keywords: waterfront, port city, Heilongjiang border river, sharing model, regeneration

PLANNING CONCEPTS AS POLICY INSTRUMENTS: ANALYZING THE DUTCH CASE (852)

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Planning concepts provide a comprehensive framework for understanding the spatial structures and their functionalities under continuously changing circumstances. Most importantly, beyond the obvious attributes and statuses, they facilitate the interpretation and justification of the underlying procedures which take place within, among, and over the various spatial configurations. These procedures result from multi-level political decisions that are made by several agents and affect the morphological and operational patterns and relations. Acknowledging the interconnections of spatial, social, economic, political, and institutional parameters, planning concepts can function as policy instruments through which policy intentions can be converted into specific policy actions, in order to address complex socio-economic objectives.

This paper examines how different planning concepts could be availed as policy instruments in enormously complicated policy-making processes. For this purpose, a case-study analysis is selected as the most appropriate method to highlight the political relevance of planning concepts, within a real-life context of strong political and socio-economic procedures of competing interests and aspirations.

The Randstad, although a paradox case, is studied as an indicative instance of exploiting planning concepts to achieve diverse policy purposes across many spatial scales and governance modes. The paradox detected in the Dutch case regards mainly the Randstad's differentiated performance at regional/national and international level; depending on the political intentions, it is planned and governed either as a 'polycentric urban system' or as a 'metropolis', respectively. The dual performance of the Randstad, and subsequently its perspective through different planning concepts, is a political choice arose from the need, on the one hand, to guide and regulate, and on the other hand, to be responsive to the spatial and socio-economic circumstances in order to manage great opportunities and substantial pressures. The key findings of the case-study analysis underline the significance of planning concepts as instruments of policy-making procedures due to their capability to bridge the policy-reality gaps that very often exist in policy making, integrate physical and functional manifestations of deeper power relations, and facilitate, synergistically, planning and governance masterstrokes required to deal with contradictions and complexities stated in various aspects of politics, economy and social life.

Keywords: planning concepts, policy instruments, the Randstad

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IS LIFE IN THE ALPS GOOD? QUALITY OF LIFE CONCEPT REVISITED IN THE TRANSNATIONAL CONTEXT (881)

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The quality of the life (shorter QoL) concept has always attracted attention by researchers and policy makers and its regional aspect has especially gained attention by introduction of territorial cohesion by European Commission. The concept has no unified definition, and is often referred to with similar terms, such as well-being, life satisfaction, and happiness. The examination of the topic is not strictly limited to one scientific field but is usually addressed by disciplines such as geography, political science, statistics, planning or other fields concerned with (spatial) development on various administrative levels, thus requiring an integrated approach. The approaches to measuring QoL distinguish in how quantitative or qualitative they are, namely if they rely strictly on qualitative indicators or they measure personal opinion of population on QoL by applying qualitative methods like surveys, focus groups and interviews (for example Bonini, 2008; Keller, 2010; Tvaronavičienė et al., 2022). Currently, there are several existing on-line platforms and databases that monitor QoL and enable individuals and other stakeholders to discover how well they live in certain areas. Among such measurement approaches we should mention: global human development index, developed by United Nations, Quality of Life platform of EUROSTAT (EUROSTAT, 2022), OECD well-being monitor (OECD, 2018), European Social Survey (2015) measuring life satisfaction, ESPON QoL Dashboard (ESPON, 2022) and others. What all these database have in common, is indicators and graphical representation of the data (infographics, maps), however, they are limited in which territorial areas and time period they cover.

The preparation of the report on the state of the art of the Alps with thematic focus on QoL was commissioned by Alpine Convention in year 2022, under the umbrella of Slovenian presidency to the Convention. These above mentioned monitoring systems serve as a sound ground for comparison of QoL anywhere in Europe, nevertheless, for the purpose of transnational study in the Alpine context they needed to be revisited and reflected upon. This was done examining the current policy framework, including Territorial Agenda 2030, macroregional strategy EUSALP, Alpine Convention's protocols on spatial planning, population and culture, but most importantly the opinion of representatives of various policy makers and stakeholders from the area. The notion of considering the geographical level and context was mentioned by Gonzales, Carcaba and Ventura (2011). Therefore, this contribution presents the build up of the concept with bottom-up participative approach applied in transnational context of the Alps. It is continuing the work of researchers who has focused on QoL studies in the Alps in the past such as Keller (2010) and Borsdorf (2016). The starting definition of the QoL derived from ESPON QoL project (ESPON, 2020), however, the concept was reframed in the light of the place-based policy making context (transnational and national level) and the expressed need for consideration of the local population as one of the major target groups of the study. Thus, the measuring approach to QoL in the Alps is multi-layered and consists of policy framework analysis, identification and measurement of QoL enablers (factors securing QoL like accessibility to health care or education),

and a survey with the inhabitants of the Alps of six Alpine countries. On the basis of the state of the art's analysis the recommendation for securing better QoL in the Alps are prepared, both, taking into account various administrative levels, transnational context and its policy framework, and existing good practices. To conclude, this contribution revisits the QoL concept in transnational manner to monitoring and planning, by integrating various sectors and actors, all concerned with QoL, in the study.

Keywords: quality of life, policy making, strategic planning, participatory planning, Alpine Convention

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COLLABORATIVE LAND-USE DEVELOPMENT IN CITY REGIONS. THE CASE OF THE LEIPZIG-REGION (882)

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The discourse on metropolitan governance focusses on the organizational forms of city regions but rarely discusses problems stemming from urban sprawl and the land-use management measures adopted to resolve them (Zimmermann, 2021). The fragmentation of city regions and subsequent intermunicipal competition for residents has been discussed as a cause of urban sprawl (Siedentop et al., 2022), but proposals to resolve this problem by uniting multiple local governments into a consolidated city-regional general purpose government have for the most part been rejected (Danielzyk/Priebs, 2001; Scott, 2019). As a result, integrated land-use management in city regions frequently relies on cooperation between municipalities. In Feiock's (2009) classification of the mechanisms of regional governance, one of the two criteria used is the degree of autonomy of the actors involved in the governance. The cooperation in land-use management in city regions can thus be described along a spectrum ranging from a centralized governance authority in a consolidated city-regional body to coordinated decision-making by autonomous policy actors.

Against this background, we examine the cooperative approaches to land-use management being used in two German city regions, both of which have been supported by research projects designed and implemented by the authors. The two regions differ, however, in terms of the governance mechanisms of their promoting actor. The city region of Bonn is characterized by a policy network in which the component municipalities have an appreciably higher degree of autonomy than that found in the Regional Planning Association responsible for this task in the city region of Leipzig. The aim of our presentation is to identify ways in which these differences are reflected in the collaborative capacities of the two city regions. Following an initial analysis of the promoting institutional actors for collaborative land-use management in the two regions, we will trace the cooperative processes that each city region has adopted over the last four and a half years. Our descriptions will be based on expert interviews with participating actors, participatory observations, and document analyses. Subsequently, we will analyze these two ongoing processes using design criteria for collaborative land-use development in city regions (Zimmermann et al., 2022). These criteria cover multiple fields of action for successful collaboration in land-use management, such as selection of actors, rules of the game, aspects of time, and the possibilities for improvement towards sustainable development.

Keywords: city-region, collaboration, design-criteria, land-use management, metropolitan governance

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THE IMPACT OF INTERREGIONAL WATER TRANSFER ON REGIONAL PLANNING, DEVELOPMENT AND ENVIRONMENT: THE CASE OF GREATER BAY AREA (883)

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The cross-border collaborative governance of the Guangdong-Hong Kong-Macao Greater Bay Area has a longer history than the preparation of regional spatial planning on the map. Being part of the Pearl River estuary, the Greater Bay Area has long been confronted with regional environmental issues that transcend administrative and geographic boundaries, including the upwelling of salty tides in the estuary, severe water shortage and uneven distribution, due to the natural geographic characteristics of the land-river-sea connection and the past crude economic growth pattern (Jiashi, 2005; Die, 2020; Lihua, 2023). In the late 1950s, the Pearl River basin and the provinces and municipalities it encompassed initiated successive water conservation plans involving different levels of boundary synergy, and the development, allocation, and management of water resources shaped the urbanization development and environmental changes in this region. Based on 1954 U.S. Army maps, 1984 U.S. Department of Defense mapping maps, and 2020s Google satellite maps, this paper examines the evolution of practices involving water resources development and use at the Greater Bay Area level since the 1950s, including the spatial transformation of water bodies and the construction of related infrastructure. Then, specific cases are selected to discuss the relationship between water changes and the evolution of regional environmental characteristics (rainfall, flood and drought occurrence periods), as well as urban spatial patterns (land use, transportation networks, etc.). Furthermore, it explores how regional planning responds to these changing processes. This paper aims to help reconstruct the interaction between urban development in the Greater Bay Area and the environment in which it is located, providing a factual basis for regional planning.

Keywords: Interregional Water Transfer; Regional Planning; Urban Environmental History; Greater Bay Area

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STRENGTHENING REGIONAL GOVERNANCE STRUCTURES THROUGH ESTABLISHING JOINT DECISION-MAKING TOOLS: THE EXAMPLE OF BONN, RHEIN-SIEG AND AHRWEILER IN GERMANY (917)

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Growing city-regions such as the Federal City of Bonn and its neighbouring counties Rhein-Sieg and Ahrweiler face the challenge to coordinate various land-use interests and to reduce land consumption in the face of a growing population. In order to address sustainable land use as well as a looming housing shortage, the 27 municipalities of the city-region have decided to jointly address these spatial planning challenges across two federal states. To strengthen the existing regional governance structure in the region, the NEILA research project developed a web-based decision making system to identify suitable settlement areas.

In a transdisciplinary process, several indicators were developed to evaluate 2.238 ha and identify settlement areas for housing, commerce and industry were identified. Additionally, a set of criteria for the assessment of the importance of an area for the regional green infrastructure was developed as well as categories were defined that described the barriers to activate the land for development. During the project, building density has been identified as the crucial variable to counteract the housing crises and reduce land-use. Hence, regional building density concept was development, to concentrate housing at places with good public transport and public service infrastructure.

This result illustrates the relevance of inter-municipal coordination of settlement development, in which the municipalities' ability to steer beyond their own territorial boundaries can only be expanded through participation in cooperative structures (Goede, 2022). Given the complex interdependencies, regional governance structures aid municipalities to steer and manage the complex and cross-cutting issue of sustainable land-use management and housing shortage. In this contribution, the developed instruments will be discussed, focusing on the lessons learned in the process, the consolidation of the results and the transferability to other regions. In doing so, the challenges of strengthening regional governance in the sense of steering the process of collective action (Fürst, 2001) across the border of two federal states are highlighted.

Keywords: regional governance, inter-municipal cooperation, sustainable land management, land use information system

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SMALL TOWN DEVELOPMENT DILEMMAS, MECHANISMS AND STRATEGIES IN INTER-PROVINCIAL BORDER AREAS: THE CASE OF WANBAO TOWN (933)

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As a special type of regional development, inter-provincial border areas have similar resource endowments and development levels, and a natural basis for cooperation, but are far from administrative and economic radiation centres, and are far from the core of development while having more concentrated internal competition, resulting in slower development and lower levels of urbanisation.

The towns at the inter-provincial borders often lack certain development opportunities while bearing the burden of market transactions, pre-school education, compulsory education and basic medical care, and are important urban-rural nodes of the Hierarchy+ network, but lack the necessary development opportunities.

In this paper, the town of Wanbao in the northwestern part of the Jilin-Neimenggu inter-provincial border is selected for study. The spatial scale, economic development and social development data are used to analyse the development resources, transport links and economic relevance of the inter-provincial border region of Jilin-Neimenggu, and to construct an evaluation system for the centrality of the inter-provincial border region. The problems of Wanbao town in terms of regional resource utilization, edge transportation links and industrial and economic scale are summarized, and the formation mechanism of the problems is explored. The future development orientation of Wanbao town is proposed, and suggestions on regional policies, transportation links and spatial structure in the context of inter-provincial development are put forward in conjunction with the development orientation of its central town.

Keywords: inter-provincial border, central town, small town planning

POLYCENTRIC FUNCTIONAL CITY REGIONS: CONCEPTUAL, METHODOLOGICAL, AND NORMATIVE CONSIDERATIONS (946)

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Mono- and concentric urban regions are formations of modern industrial societies, with a clear urban core and a functionally very different, dependent suburb around the core. However, post-modern societies develop pluralistic lifestyles and dynamic urban patterns, which resembles in a more complex formation of urban regions. Champion (2001) argued a concordance of the second socio-demographic transition with polycentric urban regional formation. Indeed, it appears logical, that a diversification of society leads to a diversification of urban (sub)centres and urban-regional space in more general. Humer, Cardoso & Meijers (2022) have found evidence of urbanisation trajectories leading towards polycentric urban regions in Europe. Yet, what does this mean for urban theory building, for empirical in-depth investigation, and, not last, for normative considerations of spatial planning?

This contribution will dive into three perspectives: theoretical-conceptual, methodological-empirical, and normative-planning wise. In a first step, it will review the theoretical-conceptual state of the art of functional city-regional formations with a focus on polycentric patterns. By building on a systematic set of secondary studies, it will compile so-far evidence in European city regions and compare the methodological ways of analysing urban-regional dynamics. Ultimately, implications for spatial planning will be discussed with the normative question above all, whether polycentric complex urban-regional formations are indeed sustainable forms of urbanization or, on the contrary, jeopardize efforts of sustainable development. Expected results are that there is a huge further research agenda ahead for spatial research and planning research alike.

Keywords: functional urban regions urbanisation concepts empirical findings planning practice

NEW APPROACH FOR COMPARING SPATIAL PLANNING SYSTEMS (993)

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The paper makes a contribution to European comparative research on spatial planning by providing an instrument-oriented methodological framework for forms of spatial planning.

Regional planning, urban planning, and other public mechanisms that address the shaping of spatial development take different forms worldwide. Despite some previous efforts, regional and urban planning have not become part of the community policy of the European Union (Faludi 2011), although many EU policies and increasing cooperation among Member States indirectly influence the planning practices of the latter effectively. Despite this process, called Europeanization and the fact that planning faces the same global challenges, most authors (e.g. Purkharthofer, 2016; Stead, 2013) agree that there has been no obvious convergence among the spatial planning systems of the respective countries. The cross-national comparison of spatial planning is increasingly demanded due to the single market of the EU, the necessity of reacting jointly to global challenges, the multi-level governance exerted within the EU, and the increasing need for cross-border cooperation related to spatial development. These developments generated a wave of comparative policy research in Europe from the noughties, spurred by research funding from the EU research framework programs which often require international collaboration and comparison. This wave of comparative studies has been analysed by Nadin and Stead (2013).

Based on the main efforts to date, the main challenges of comparative research on European planning systems are identified. The multidimensional nature of spatial planning, language barriers, the diversity of planning practices within national systems, the emergence of informal practices and the dynamic changes of forms are the main limitations of the comparison. The author's comparative four-dimensional model and related visual tool can be used to bridge different national languages of planning and compare various spatial forms of planning. With the tool, the nature of planning regimes, specific plans, and other planning-related activities can be identified in accordance with the dimensions of Motivation, Geography, Scope, and Instruments, making them comparable. Drawing on the literature on European trends of spatial planning, the model can be used to capture both old and new forms of planning.

Keywords: spatial planning, comparative study, territorial governance

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TRACK 05: PLANNING FOR MOBILITY: ACCESSIBILITY, AFFORDABILITY AND SUSTAINABILITY

PLANNING FOR INCLUSIVE CITIES: DISABILITY, MOBILITY AND ACCESSIBILITY – SOUTH AFRICAN CITIES AS CASE STUDIES (55)

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The paper examines how South African metropolitan have incorporated inclusive planning strategies and the management of individuals with disabilities taking into consideration inclusivity and mobility patterns. The paper reviews these metros' characteristics, regulations, and practices related to mobility, accessibility, and individuals with disabilities. Data was collected from secondary sources, including policy documents on urban development, spatial planning, and mobility in these metros. The key findings show that there are several critical observations and realities. The current mobility issues concerning people living with disabilities (PLWD) in South African cities reflect social breakdowns in urban areas. Much of the transportation systems in the developing world are not accessible to those with impairments. Disability is frequently neglected in public transportation, parking, active travel infrastructure, and digital information platforms. Yet, we are advocating moving towards smart cities with minimal private transportation and more public transportation to fight issues such as climate change. Metros in the global south should promote car-free cities by ensuring that the urban infrastructure is inclusive to everyone to ensure smooth mobility patterns. The article concludes how neither metropolis's urban policies are inclusive regarding ensuring that people with disabilities can use its transit systems. The research's findings suggest that inclusive urban policy frameworks are required for cities in Southern Africa to improve accessibility and convenient mobility for the disabled significantly.

Keywords: Disability, urban policy framework, mobility, accessibility, inclusive

RURAL TRANSITION AND TRANSPORT IN CHINA (79)

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There are 3.41 billion people living in rural areas in the world, accounting for nearly half of the world's population. China has been experiencing the most noticeable rural transition in the past decades, which is featured with about 10 million rural people moved to cities per year, relief of rural poverty, modernization of rural economy, reconstruction of rural society, and improvement of rural life. Rural transport is a primary factor influencing the transition. This study carries out the research on rural transition and transport in China.

The study's content includes population change, settlements transformation and infrastructure development in rural areas and the changes in transport expenditure, travel behavior and accessibility to basic public services of rural residents in China.

This study contributes to the new body of knowledge from the international perspective in three points. Firstly, it explores the changes of and related factors in travel behavior of rural residents. Secondly, it provides new evidence for the relationship between rural social transition and transport infrastructure development. Thirdly, it discusses the effects of transport investments on rural poverty reduction.

The result and findings from this study would enhance our understanding of changes of travel behavior of rural residents. In particular, the findings from multi-source big data analyses would show new evidence for the links between social transition and travel behavior changes in rural areas of China. It would also be useful for planners and politicians to make policies designed to improve the quality of life, rural poverty and increase the efficiency of transport investment in rural areas.

Rural transition and transport in China will be of great interest to scholars interested in rural transition and development, sustainable transport, regional planning, environmental policy and is relevant to China and other developing countries.

The main contents of this study have already published as a book "*Rural transition and transport in China*" by Springer Nature in December 2022.

Keywords: mobility, social sustainability, sustainable urban planning

CREATING DISTINCTIVE PLACES IN FLANDERS 2050: HOW TO ACHIEVE ENERGY NEUTRALITY IN THE BUILT ENVIRONMENT BY 2050 (102)

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Invited by the Royal Flemish Academy of Belgium, the authors advised the Flemish government about the sustainable future of housing in 2050 (Salet et al., 2022). The advice contains two perspectives. First, an encompassing view on the spatial and transportation pattern of the full urbanized region in 2050. Secondly, a technical advice about the reduction of greenhouse emissions of the buildings in this region. It was necessary to start with a vision on the spatial and transportation system because the induced mobility of the spread-out spatial system of Flanders causes even larger greenhouse emissions than the energy use for heating of the buildings themselves.

Our presentation will focus on the first part of the report. The authors do not expect a compact urban pattern in 2050: the spatial pattern of Flanders is one of the most scattered in Europe. The crucial challenge, however, is not to get rid of spread-out spaces but to organise distinctive spatial networks in the non-descript spatial reality of Flanders. Facilities should be spatially organised in selective inter-urban networks (transportation, collective energies, education, health, etc.) and create a distinction between this primary spatial network and the more secondary settlements in the urban peripheries.

The system of public transportation is key for a transit oriented development. Flanders has better opportunities than other urbanized regions of Europe to make this transformation because it has (since 1880) a very tight rail net (over the full urbanised region). This unique potential, however, is highly underused in recent decades because of the grown privileges of the car and also because of the a-selective exploitation of rail- and bus lines. Its current contribution to the modal shift is 20% to 25% lower than in surrounding countries. The spatial selection of a primary network may be helpful to make a productive use of the high potential of public transportation. This may help to make the necessary selections of grading up and to grading down the qualities of existing lines and stations, and to organise an effective system of accessibility (Caset, 2019). The stations on the primary network should be facilitated to enable multimodal uses of transportation for the daily commuters from peripheral settlements (e.g. parking and other facilities for bike, bus, car, etc.)

Keywords: greenhouse emissions, future housing, distinctive spatial networks, spatial organisation, interurban transportation networks Energy neutrality integrated mobility and spatial planning

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SPATIAL DILEMMAS AND CHALLENGES AT SÃO PAULO TRAIN/METRO STATIONS AREAS (110)

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This research evidences the spatial dilemmas between a Transport Node and a Place in the city of São Paulo, based on the case studies of the Pinheiros, Faria Lima and Corinthians-Itaquera metro/train stations.

It is assumed that the stations with high-capacity are at the same time a Transport Node, due to the connections between two or more lines of the same system, and a Place articulating flows, people, activities, and the urban dynamics in its surroundings (Bertolini, Spit, 1998; Bertolini, Dijst, 2003; Amar, 2004; Conceição, 2015). In this scenario, the station area may be the basis of spatial tensions, but also can be considered a strategic point for the urban structuring and spatial transformation of a territory (Ascher, 2010; Smets, Shannon, 2010; Duffhues, Bertolini, 2016), a Mobility Urban Hub – MUH (Baiardi, 2018). Thus, MUH is understood as the "inter-place" (Guatelli, 2012) that interconnects simultaneously several urban scales and modes of transport without spatial ambivalence, concentrating and generating multiple activities and urban functions, while articulates several public and private agents stimulating a high urban intensification.

Therefore, it is necessary to investigate the spatial dilemmas, especially the relations of the transport infrastructure - in the case of stations - with the transformations in the territory and the urban dynamics. The main question that this research aims to answer is: What are the dilemmas and spatial challenges to articulate a Transport Node to a Place? To contribute to progress to discover how to overcome the spatial ambivalences, it is also questioned: How to improve spatial performance in station areas?

The hypothesis presented is that some stations of São Paulo's subway rail system, although strategic to the city, did not overcome the spatial dilemmas between Node and Place due to the lack of Urbanistic Instruments that articulate the different Urban Scales. The categories considered as crucial for the understanding of the concepts that guide the research, Node-Place-Urban Instruments, are discussed for the understanding of the spatial relationships established between, articulated in the three urban scales: Macro, Intermediate, and Local (Silva e Romero, 2011).

In the first part is built a spatial analysis method in the areas of the stations as well as the definition of the concept MUH. In the last part, the spatial dilemmas and challenges are evaluated in the case studies in São Paulo seeking to test the proposed hypothesis. The results show, on one hand the public interventions reinforce spatial ambivalences in Stations Areas, as well as it wastes the opportunity to become a MUH consistent with the new flow imposed by today's urban dynamics.

Keywords: Mobility Urban Hub, Transport Node and Place, Spatial dilemmas, Stations Areas

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IDENTIFYING LINKAGES BETWEEN DEMOGRAPHICS, BEHAVIORS, AND ROAD ACCIDENT FREQUENCY: A MACHINE LEARNING APPROACH IN ENGLAND (114)

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Introduction: Research has shown that human behavior plays a substantial role in road accidents, contributing to over 70% of incidents [1,2]. However, collecting comprehensive data on individual drivers' behavioral characteristics is difficult, leading many researchers to narrow the scope of their study, limiting the applicability of their conclusions [3]. This study seeks to overcome this limitation by identifying demographic-related factors and their indirect effects on road accident frequency, using existing literature connecting demographics and risky driving behaviors. **Method:** A comprehensive review of literature from various fields, including behavioral psychology, transportation policy and engineering, and urban planning, has identified several demographic characteristics that have direct relationships with multiple risky driving behaviors. Employing regression-based machine learning models built on insights from the literature review, this investigation examines all of England and the United Kingdom, attempting to link driving behaviors, demographic features, and road accident frequency. This offers a method for evaluating new relationships between driver behavior and other features that could serve as potential proxies. **Results:** The research confirms the previously found trends in the literature that show younger, male drivers are more likely to have an accident than other age-gender cohorts. While not substituting for more comprehensive research on driver behavior and associated road accident risks, this study presents a valuable approach to further investigate the links between behavior, additional factors, and road accident risks on a broader scale and emphasizes a stronger necessity for further multidisciplinary methods to understand road accident events better. **Practical Applications:** This study's findings support the utilization of demographic information that can be more easily gathered on a large spatial and temporal scale to estimate road accident risks. It also showcases a method for further examining indirect relationships and potential proxies between behaviors and road accident risks.

Keywords: demographics extra trees regressor driving behavior SHAP values cohort analysis traffic accidents

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ENABLING IM-MOBILITIES: A THEORETICAL AND OPERATIVE APPROACH TO PROMOTE REVERSIBLE IM-MOBILITIES THROUGH ACCESSIBILITY (132)

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The research on mobilities has extensively focused on mobility's social and political relevance, conceptualizing it as a complex set of spatial practices and a key driver for activity participation and social inclusion (Kaufmann et al., 2004; Cresswell, 2006). Based on this interpretation, the relative absence of spatial mobility (immobility) generated by mobility differentials existing between individuals as different propensities and possibilities to move would assume a negative value, being the possible symptom of unfair distributions of mobility-related opportunities and inducing forms of potential social exclusion and marginality (Preston & Raje, 2007). This latter interpretation suggests the existence of constrained forms of immobilities that may be induced and influenced by individual and contextual factors over whoever suffers from such inequality. In contrast, a state of chosen and reversible immobility could instead be proper for individuals who can access in physical proximity to the resources and activities they need for their well-being. In this perspective, limited spatial mobility would not represent a limit for inclusion and social participation, but rather a condition that can have important positive social and environmental implications due to the reduction of the need for travel and the possible strengthening of community ties according to a localist perspective (Banister, 2008; Ferreira et al., 2017). At the same time, high mobility itself, with which specific positive values are traditionally associated in terms of social privilege and inclusion, could be conceived, in specific circumstances, as a constrained condition experienced by individuals forced to move due to the absence of accessible opportunities. Thus, the social outcomes of forms of im-mobility practices could be ambiguous and not easily identifiable and assessed.

Based on a recently defended Ph.D. research, this paper develops a theoretical and operational framework to detect, measure and explore, under a planning-oriented perspective, different conditions of im-mobilities expressed by individuals in their daily lives and their potential social and spatial implications. The latter are analyzed based on the level of physical accessibility to valuable activities and opportunities provided by living settlements and personal capabilities, thus considering physical accessibility as a qualifier of forms of constrained and reversible mobilities and immobilities. The methodology that is proposed in the paper employs a mixed-methods approach combining and integrating quantitative techniques based on traditional census and mobile phone digital data analysis with a qualitative approach focusing on the Piacenza Apennine territory, a low-density and poorly accessible mountain area in Northern Italy. The results, which should be read as the outcomes of a step-by-step experimental and multi-scalar deepening of the forms and socio-spatial implications of everyday practices of im-mobility, contribute to shed light on the complexity of these practices and the factors that can generate reversion processes between states of constrained and reversible im-mobility. The deepening of these factors allows identifying those that could be determined or influenced by specific integrated land use, transport, and welfare planning policies and measures, highlighting the relevance of a theoretical

and operative focus on the promotion of reversible forms of mobility and immobility as enablers for social inclusion and environmental sustainability.

Keywords: mobility, immobility, accessibility, urban planning

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NEW METRO AND SUBJECTIVE WELLBEING AMONG OLDER PEOPLE: A NATURAL EXPERIMENT IN HONG KONG (171)

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Background: Staying mobile and active is vital for healthy ageing. Subjective wellbeing is closely linked to age and health. Within the constructs of subjective wellbeing, at least three aspects can be distinguished: evaluative wellbeing (overall life satisfaction), hedonic wellbeing (feelings of happiness, sadness, anger, stress, and pain), and eudemonic wellbeing (a sense of purpose and meaning in life) (Steptoe et al., 2015). Public transport could affect subjective wellbeing, especially for older people with limited mobility capacity. However, research into transport and subjective wellbeing impact at older ages is still at an early stage. It is unclear whether transport modifications (e.g., new transport infrastructure) can effectively promote older people's subjective wellbeing, and if so, through which pathways.

Method: This paper provided causal inference on the effects of public transport on evaluative, hedonic and eudemonic wellbeing among older adults using a natural experiment of a new metro line in Hong Kong (Figure 1). Natural experimental studies are essential to determine the before-and-after effects of transport interventions on behaviour and wellbeing changes, and to advance knowledge of what works and through which pathways (Sun et al., 2022). A longitudinal survey of 449 cohort participants was collected before and after the new metro (Sun et al., 2021). We used local transport planning knowledge for the treatment-control group assignment: treatment groups live within a 400m walking buffer of the new metro stations, while control groups are located around comparable stations of existing lines.

Results: The results built a conceptual model between the new metro and changes in public transport use and subjective wellbeing (Figure 2). Our Difference-in-Difference (DID) modelling suggested that it might be difficult to delineate a direct pathway from public transport infrastructure provision to subjective wellbeing improvement among older people. The causal linkage is more plausible for the new metro could contribute to the subjective wellbeing only if older people can adapt to it; for those who wanted to maintain or increase bus use after the metro intervention, we found a negative association with better subjective wellbeing.

Discussion and conclusion: Natural experiments might be the best approach to generate causal evidence linking transport and health impacts. Our findings in the high-density city provide novel evidence of the new metro's impact on public transport use and subjective wellbeing among older people. In short, the new metro promotes better subjective wellbeing of older people through the pathways of changes in public transport use. But we call for caution in making general assumptions about older people's willingness to behavioural changes, and planning and policy empowering the use of new infrastructure is necessary. Our natural experiment that leverages planning and policy knowledge helps unravel the complex relationship between transport, behaviour change, and wellbeing among older people.

Keywords: observational studies, healthy ageing, high-density cities, public transport

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SCRUTINIZING ENVIRONMENTAL URBAN STRESS FACTORS ON PEDESTRIANS IN WALKABLE NEIGHBORHOODS, CASE STUDY: (ISTIKLAL STREET AND ABDI IPEKCI STREET) (178)

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Rapid urbanization is frequently connected with poverty, pollution, and stress on the urban economy, resulting in several issues such as overcrowding, heavy traffic, rising crime percentages, and noise pollution, which all these factors lead citizens to stress. Therefore, it is crucial to scrutinize the environmental stressors in cities. The main research question of this paper is: What are the urban stressors in walkable environments on pedestrians? In this regard, In evaluating the stress factors on pedestrians in walkable environments such as streets in cities, besides the stress and urban stressors, we consider the walkability and features of walkable neighborhood environments in analysis. The urban stressors, which can affect pedestrians in streets, are in 5 categories: transportation and related issues, density and crowding, environmental designing features of the street, perception of security and social stressors, and accessibility to urban greenness. In case of studies, we analyze these urban stress factors within these categories based on literature review and observation. Findings: the first case study is Abdi Ipekci Street in the Şişli district in Istanbul. Regarding the advantages and disadvantages of this street, its design makes it a much more attractive walkable path compared with other streets nearby. As a second case study, Istiklal Street is a well-known walkable path in Istanbul. This street is well connected to various transit facilities on both sides, which increase the accessibility and livability of this street for pedestrians. As a result of the analysis, beyond the good accessibility and other locational advantages of Istiklal Street, which makes it a more attractive spot in Istanbul, there are some major stress factors in it, such as: high vehicular traffic congestion in the intersection, lack of access to green spaces and most important one, overcrowding and feel of density and lastly, feel of security and safety due to population crowding.

Keywords: walkability, urban stress, urban stressors, walkable neighborhood

RESEARCH ON FUTURE URBAN COMPREHENSIVE TRANSPORTATION DEVELOPMENT STRATEGY: BASED ON WUHAN YANGTZE NEW TOWN (185)

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With the rapid development of science and technology, there are many possibilities for the future development of urban transportation. Under this background, taking the master planning of Wuhan Yangtze New Town as an opportunity, we try to build a new urban comprehensive transportation development system for the future and to put forward the future traffic development strategies suitable for this area. It is proposed that the traffic development of Wuhan Yangtze New Town should conform to the four basic principles of "regional co-ordination, multiple sharing, interaction and coordination, moderate advance". Based on these four principles, the paper puts forward three specific strategies which are "building multi-dimensional transportation", "creating seamless mobility" and "TOD+ short trips".

Among them, "building multi-dimensional transportation" refers to the construction of "air-ground-underground" multi-dimensional transportation network. In the air, air rail + air footpath is the main feature, which integrates the functions of rapid transportation and landscape sightseeing. The ground traffic mainly includes BRT, intelligent rail and ground road (including driverless road). The underground part consists of subway, underground road and underground logistics. "Seamless mobility" includes three basic elements. First, Shared and autonomous driving fleets will be gradually formed in the Yangtze New Town. Second, car electrification needs to reach more than 60% in seamless mobility areas. Third, rail transit and bus rapid transit are still the backbone of long-distance travel. "TOD+ short trips" mode is actually a "bus + slow traffic" mode of travel organization. "TOD" stands for public transport-oriented development. The "short trips" mode refers to dividing the urban area into several regions based on the land use and spatial structure, in which the non-motorized traffic and public traffic are the main travel modes, to reduce long-distance trips and relieve the axial traffic pressure. The "TOD+ short trips" mode will play an important role in the future transportation development of Wuhan Yangtze New Town.

Keywords: Future cities; Multi-dimensional transportation; Seamless mobility; TOD+ Short trips; Wuhan

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UNDERSTANDING THE EFFECTS OF A LONG-TERM TRANSIT SERVICE SUSPENSION ON TRANSIT USERS' TRAVEL CHOICES (202)

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Substantial funding is allocated by governments around the world towards the construction of new transit infrastructure and the expansion the existing networks (OECD/ITF, 2017, Government of Canada, 2022). These investments are intended to provide a higher level of transit service to compete with the attractiveness of non-sustainable modes of transport, such as private cars. The construction of such large projects does not happen overnight and can take from a few weeks to several months or even years. This can significantly disrupt the transit system and result in the suspension of some of the provided services that regular transit riders were accustomed to using. This decreases the overall attractiveness of service during such periods.

While there is a considerable number of studies that focused on understanding users' mode choices during normal operations periods of the transit system (Graehler et al., 2019, Miller et al., 2018, Manville et al., 2018, Diab et al., 2020, De Witte et al., 2013), little has been done to investigate travel choices during such long-term disruptive periods (Noureldin and Diab, 2023). Therefore, this study aims at exploring changes in travel choices during a long-term disruption using a case study from Montréal. More specifically, using two waves of a large travel behaviour survey, called the Montreal Mobility Survey, this study explores the impacts of the suspension of the Deux-Montagnes train line in Montréal which occurred due to the construction of a new automated light rail system, known as the Réseau express métropolitain (REM), on the travel choices of regular transit users that previously used the line. It also explores the difference between users' anticipated travel choices reported before the suspension, and the actual travel choices during the suspension.

Using cross-sectional and panel survey data, potential associations between respondents' travel choices and socioeconomics and spatial factors and users' perception aspects were explored. The initial results show that 71.0% of the transit users shifted from using transit during the disruption to other modes, many of which relied on private cars. However, roughly 3/4 of them answered that they are likely or very likely to use the REM in the future. Additionally, respondents who are 18 to 29, who do not have access to private vehicles, have driver's licenses, or live within 800 meters from a closed Deux-Montagnes line station were more likely to use transit during the disruption than others. The study offers transit planners and professionals useful insights into the anticipated impact of service closures on users' travel behaviour.

Keywords: Public transit, Long-term disruptions, Construction, Suspension, Travel behaviour, Perception

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WHY DO RESIDENTS OF MELBOURNE'S GROWTH AREAS HAVE TO WAIT SO LONG FOR PUBLIC TRANSPORT? (203)

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Cities that experience high levels of population growth generally accommodate some of this growth in greenfield developments on the urban fringe. This development leads to the need for infrastructure and services in those areas, such as roads and sewerage as groundwork, and also schools, public transport, and community infrastructure. The provision of public transport to those growth areas where numbers of residents and also destinations are not large – especially in the beginning – is a challenge as well as political flashpoint and needs forward planning, commitment and integration of transport and land use.

Melbourne, in Victoria, Australia, is one example of a city with strong population and urban growth, which has brought to the fore problems associated with provision of infrastructure and services. Melbourne's public transport is concentrated in inner and to some extent middle suburbs, in terms of both density and frequency of service, and a backlog of public transport infrastructure exists in suburbs developed over past decades (Kroen et al., 2021). While current policies such as the metropolitan strategy *Plan Melbourne* envisage transport choice in outer urban areas and Precinct Structure Plans (PSPs) are developed to ensure the timely delivery of infrastructure and services, the reality is still that many residents in new suburbs have to wait several years for a public transport service and/or receive a service with inadequate frequencies (VAGO, 2013; Delbosc et al., 2016).

This paper seeks to understand the causes for the delay in supplying even a basic level of public transport service in the new suburbs. It does so primarily by seeking the perspective of those inside the planning system who offer a detailed understanding of the faults and sticking points of transport service and infrastructure delivery. Drawing on 30 interviews with staff in local and state government agencies, housing developers and other relevant stakeholders, as well as an analysis of documents and the governance structure for planning public transport in Melbourne's growth areas, the research suggests that a lack of clear governance, including the involvement of several statutory authorities and departments, planning for 'housing affordability', differences in the assessment of the importance of early public transport provision, and the ill-defined responsibilities for implementation (in contrast to planning) are some of the reasons for the delay.

Based on the results from the analysis, the paper presents possibilities for changing processes and structures that might improve the planning and early delivery of public transport in new suburbs. It furthermore considers what the equity costs and trade-offs made around planning and financing of transport mean for Melbourne as an increasingly divided city.

Keywords: public transport provision, growth suburbs, early delivery, governance, Melbourne

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URBAN TRAFFIC STATUS ANALYSIS AND PLANNING EVALUATION BASED ON MOBILE BIG DATA: A CASE STUDY OF JINGHONG CITY (218)

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Taking Jinghong city in Yunnan Province of China as an example, this paper mainly introduces the methods of traffic status analysis and evaluation of traffic planning scheme based on mobile big data.

In the section of traffic status analysis, travel OD and commuting OD obtained from mobile big data are used to calculate the overall-purpose OD of the city. Bases on OD data, we analyze the relationships among main city, Mengyang sub-city and Olive Ba sub-city and the relationships between the groups within the main city. Meanwhile, we construct traffic status model of Jinghong city by VISUM software. With entering OD data into VISUM, we calculate the traffic flow and saturation of Jinghong city, so as to analyze the traffic performance of the city.

In the section of planning evaluation, based on the analysis of the traffic current situation, we use the method of scenario simulation to evaluate the planning scheme. First, we also need to build VISUM traffic model with the planning traffic scheme. Second, we calculate the total number of trips in Jinghong in 2030 according to the projected population and give different traffic modes for different trip purposes. After the two steps, we give two different scenarios of bus travel in the future. One is that all bus travel is on the road, mainly in the form of normal buses, shuttle buses and tourist buses. The other is that the trams replace part of the road buses, especially between the tourist attractions. Through the analysis of the traffic flow and saturation calculation in the model, we can see the traffic performance of different scenarios. The results of the traffic performance will help the project team choose the scenario they need and the corresponding traffic planning scheme. Of course, scenarios can be changed according to planning requirements and the model will help the project team test different scenarios continuously.

The research believes that the mobile big data can be used to analyze urban traffic. Based on the analysis of big data and combined with the method of scenario simulation, it is effective to evaluate the planning scheme through VISUM traffic model. However, in this process, we need to pay more attention to the actual situation of different cities. For example, Jinghong as a tourist city, the capacity of tourist attractions should be further measured and included in the overall analysis of the city, so as to make the analysis results more accurate.

Keywords: Mobile big data, Traffic status analysis, Planning evaluation, Scenario simulation, Jinghong

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WALKABILITY IN THE CONTEXT OF A NORDIC ‘SMALL CITY’ (232)

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Walkability has attracted much attention in academic literature due to its potential contribution to walking activity and therefore to health and well-being, urban vitality, sustainable urban development and mobility. The level of walkability, which definition describes how and to what extent cities, neighbourhoods and streets stimulate people to walk and are attractive to pedestrians, has got limited attention in academic research in relation to small cities.

It is argued that walkability in general may encourage walking in all types of settings and for different population sizes (Thielman et.al 2015; Wasfi et.al. 2017). Although there exists an abundance of studies exploring the relationship between the built environment, walking behaviours and pedestrian experiences, most previous studies have looked at cities that are far away and bigger than the Norwegian cities of this study. Notably, it has been suggested that the way walkability turns out is strongly related to context, geographical as well as scale (Knapskog et al., 2019). Because of the limited focus on the way this context matters, the evidence remains inconclusive.

To develop knowledge on how to design and develop walking-friendly cities, a wholesome and holistic approach is likely more adequate. This involves exploring the influence of the sum of built environment elements rather than singular indicators that could work differently depending on their context. This is supported by several works that similarly call for a change of perspective (Krizek et al., 2009; Rynning, 2018; Saelens and Handy, 2008, Stefansdottir, 2018).

Based on the above items, the aim of the paper is to answer the following research question:

What is walkability in the context of a small city in the case of Norway, what characterizes built environments with a high level of walkability, how does this influence pedestrians' experiences and subsequently daily walking behaviours?

To answer this question, a systematic investigation has been conducted of pedestrian experiences of the surroundings for walking in three small cities in Norway: Narvik, Steinkjer and Kongsvinger. The data consists of survey results including map based PPGIS questions sent to inhabitants in the three cities, followed up by focus group interviews. In addition to exploring typical walkability indicators, we sum them up in categories, based on their nature and scale, to adequate more holistic approach. This method will enable us to map frequent walking routes and destinations in each city, pedestrians' perception of specific places, as well as barriers for walking.

Keywords: walkability, context, walking behaviour, PPGIS, perception

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MULTI-LOCALITY DURING AND AFTER CORONAVIRUS (COVID-19) AND ITS IMPACT ON REGIONS AND INDUSTRIES (235)

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Work-related multi-locality, i.e. living in and between two or more residences (Hilti, 2009), is an increasing and very complex phenomenon, which requires further research (Di Marino & Lapintie, 2018). The Corona pandemic affects employees by abruptly establishing new forms of work (e.g. home office) or new working hours (e.g. to comply with hygiene regulations) (e.g. Bartik et al., 2020; Bick et al., 2020). For people who already live in several places - so-called work-related multi-locals - these developments can impact lifestyles and areas. Due to the changing environments, multi-locality may decline (Willberg et al., 2021) and teleworking may affect, e.g. productivity and mental health (Reuschke & Felstead, 2020). It's still open, how multi-locality has changed and will change during and after the pandemic. Therefore, the paper aims to analyse the Coronavirus's impact on multi-locality and to identify how industries respond to multi-locality. In addition, the opportunities and challenges of regional and transnational relationships will be discussed.

An empirical approach with a case study selection and a quantitative survey was conducted (by Helfferich, 2011; Mayer, 2013; Meuser & Nagel, 2002). Larger (industrial) companies in Germany have been identified as case studies based on a review of the state of research: Volkswagen Aktiengesellschaft, BASF SE and Robert Bosch GmbH. These industrial companies are globally active and have international locations. Consequently, multi-local employees are expected. Furthermore, regional and transnational relationships can be brought into focus. Due to the different focuses as an automobile producer, a chemical group and a technology and service company, diverse production and working methods are analysed.

One example of the results is that companies and local authorities can curb the demand for multi-locality by reducing the commuting frequency and increasing the time spent at the locations (Greinke & Lange, 2022). Therefore, it could be helpful to establish co-working spaces near the place of departure of multi-locals in cooperation with other companies, and ensure that multi-locals can use them.

Using a quantitative survey, the impact of the pandemic on multi-locality as well as on regional and transnational relations is analysed. Furthermore, the regional and international relationships between (German) companies and regions are elaborated. This highlights the opportunities and challenges of multi-locality for companies and regions. The results are interesting for science and practice and can be transferred to global contexts so that other countries, regions or cities can benefit.

Keywords: Multi-locality, Coronavirus (COVID-19), (industrial) companies

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‘RESHARING’ SPACE, SERVICES AND MOBILITY. INNOVATIVE APPROACHES TO THE PLANNING OF OSLO (241)

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Recent studies on *sharing city* and *sharing economy* have focused on what can be (is being) shared as public spaces, food, mobility, ideas and knowledge, and governance, as well as community facilities, such as places for amenities, working, education and welfare (Sanchez-Vergara et al., 2021). In this emerging trend of sharing, the paper explores the novel approach of *Resharing* conceived as integration of *Mobility Sharing* (e.g. electric vehicles including emerging services and technology) and different forms of *Space Sharing* (e.g. shared workspaces, meeting rooms, indoor gyms) in residential, office and commercial buildings. First, the study reviews the theoretical approach to (re)share, secondly, it proposes the index of ‘resharability’ to apply to residential, commercial and office buildings in the urban district of Hovinbyen in Oslo which is taken as case study. Thirdly, the study analyses the conditions which may support the development of *Reshare* spaces and buildings. Thus, the study contributes to understanding the ‘*reshared*’ *qualities* and characteristics of the built environment and their limitations. The combination of shared spaces and shared mobility can serve as an accelerator to achieve sustainable consumption in urban areas and change people’s behaviors. Finally, the paper develops suggestions for planning strategies.

Keywords: residential buildings; shared mobility; shared space; resharability; planning

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Acknowledgements

The study is supported by ReShare-Resource sharing in residential buildings: Innovative approaches to shared, circular mobility & space solutions for sustainable consumption, funded by the Research Council of Norway (2022-2026).

MAKING MOBILITY HUBS MORE INCLUSIVE: NEEDS AND BARRIERS OF DISADVANTAGED USERS (242)

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Limited capacity to be mobile prevents people from fully participating in society and increases the risk of social exclusion. New mobility services, such as shared and smart mobility, might increase the mobility of disadvantaged users and thus, enhance social sustainability. In this regard, mobility hubs, which are physical locations where different shared transport modes are concentrated, can play a central role as enablers of more inclusive transport. However, empirical evidence shows these services are unequally used by different groups, often excluding vulnerable citizens.

By conducting 45 semi-structured interviews and four focus groups with local experts and potential users, this research adopts a user-centered approach to closely examine mobility hubs. This study is conducted in four European cities; Brussels, Munich, Rotterdam-The Hague and Vienna, to empirically identify the needs and barriers encountered by disadvantaged users and vulnerable citizens.

The findings of this research provide a comprehensive and context-sensitive analysis of the needs and requirements of users and non-users concerning mobility hubs. As a result, a set of recommendations are proposed for designers, transport operators, and decision-makers interested in increasing the accessibility and inclusivity of shared mobility services and mobility hubs.

Keywords: mobility hubs, shared mobility, smart mobility, transport disadvantages, inclusive transport

Funding

This study is part of the SmartHubs project (www.smartmobilityhubs.eu), funded by JPI Urban Europe.

MOBILITY DEPENDENCY IN RURAL URBAN REGIONS: CHALLENGING URBAN-CENTRIC PRINCIPLES OF THE URBAN AND TRANSPORT PLANNING (252)

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For the last decades, the development of speed and the improvement of travel conditions have led to socio-spatial transformations of the territory. This was characterized by a continuous growth of cities, where the distances between homes and activities became much more important. Rural urban areas have welcomed new populations in search of more affordable housing or a less urban, more natural living environment. These spatial transformations led to significant social inequalities of access to amenities, either in terms of access to fast travel modes, which highly depends on personal characteristics (Geurs, Van Wee, 2014) or to residential locations with good amenities or efficient public transport services. Both of these spatial transformations of urbanized areas and the social valuing of mobility have led to the increase need to travel more frequently, sometimes further, and faster (Kaufmann, 2008). This process of “*mobility dependency*” results in two forms of prejudice for precarious social groups: lack of accessibility for those who do not have access to mobility, or significant financial costs, difficult and longer travelling time for mobile people but severely constrained in their movements (Fol, Gallez, 2017).

With the climate emergency, the increase in energy prices and the growing social inequalities, access to amenities for precarious people is becoming more challenging, particularly for people living in sparsely populated areas, less well served by public transport, and often less well provided with local services and shops. A reflection on planning model favoring access to amenities while limiting the need to travel is necessary, especially in rural-urban regions. Yet, low density areas are usually stigmatized as fragile territories, marked with unsustainable way of living and mobility habits primarily based on the use of cars and defined by the great distances between activities (Fourny, Cailly, 2012). These imaginaries still emerge from the way these regions are planned and thought through the lenses of “urban”. We hypothesize that that in diffuse urbanization spaces, the application of urban-centric planning doctrines (i.e., densification, polarization, massification of flows) tends to maintain or aggravate mobility dependency, especially for less advantaged people.

In this communication, we will present the preliminary results of a PhD work that draw on the comparison of views, practices and experiences of the practitioners and the inhabitants, in order to show the gaps between urban-centric principles and the needs of the population. Our approach is based on various qualitative methods: in-situ observations, semi-directive interviews with urban planning and transport stakeholders, focus groups, open interviews and walk along with inhabitants. We draw on two case-studies that refer to contrasting urban environments and to different principles of urban planning-transport coordination.

The first case study is Creil, a commune located outside the administrative region of Ile de France but right at its fringes. It is presented as strongly dependent on the Ile-de-France metropolis (looking at the importance of daily commuting). Creil's rail service promotes the territory with a

good regional accessibility and micro-local accessibility restricted to a limited perimeter around the station. Such a dual approach tends to focus mainly on regional accessibility, while neglecting accessibility needs at intermediate scale (at the municipal and inter-municipal levels).

The second case study is the small town of "La Roche-sur-Foron", located in the French peripheries of Geneva and served by the new Léman Express railway (the transborder French-Swiss infrastructure). The network has been conceived as a corridor, dependent of the metropolis of Geneva specially in terms of daily commuting. As in the other case, this focus keeps aside other access needs for the inhabitants.

Keywords: mobility dependency, urban and transport planning, accessibility, rural urban region, social inequalities

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FUNCTIONAL SPRAWL IN FLANDERS (BELGIUM): EXPLORING SPATIAL VARIATIONS OF COST AND QUALITY OF SERVICES AT HOME (255)

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The phenomenon of urban sprawl is assumed to entail inefficient and cost-ineffective provision of public services. In this study, we investigate the impact of urban sprawl in Flanders on the spatial variation of the quality and cost structure of various services that are provided at home or near homes. Based on a literature review and expert interviews, we collected data with the aim of modelling such cost structures, in particular of local and regional public transport, household waste collection, and postal and parcel services. The findings differ between the various services studied. For public transport, sprawl has hardly any impact on the operational expenses and on the price charged to the traveller, but it does have a direct impact on the quality of the service. In the case of waste collection, differences in operational expenses are consolidated at the level of the collection round or collector, and differences in price or quality are hardly or not at all noticeable by the consumer. Universal postal services are tightly regulated, and consolidate operational expenses at the national level, as a result of which customers do not experience price differences, although they do face differences of distance to access points. These findings indicate that the density of address points along road segments are key to cost effectiveness of home-delivered services. Two new sprawl indicators are proposed for mapping urban sprawl, allowing to model the impact on the provision of various services: the average number of address points per kilometre mapped per road segment, and the inversion, i.e. average road distance between address points mapped per address point of a road segment. The data and models are intended to nourish the debate of whether or how spatially varying costs should be passed on to customers, and allow working towards solutions that serve a more sustainable interaction between urbanization and supply of services.

Keywords: urban sprawl; public transport; waste collection; postal services; Flanders

WALKABILITY IN POST-SOCIALIST MODERNIST HOUSING ESTATES: CASE STUDY OF TWO HOUSING ESTATES IN LODZ, POLAND (266)

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In the recent decade, walkability has become one of the essential features of human settlements, discussed both in the field of public health, urban planning and design and transportation planning. The concept of walkability appears as central in the documents of the United Nations (UN-Habitat, 2018) and the European Union (EC, 2021). The normative framework which addresses the built environment supporting walkability includes, among others, density, diversity, design, accessibility (Ewing & Cervero, 2010); destination, area and route characteristics (Moudon et al., 2006). Other authors also stress aesthetics, safety and comfort (Southworth, 2005; Alfonzo, 2005). The paradigm of European Modernism, defined according to the principles of the Athens Charter, assumed the separation of transportation modes and utter redefinition of traditional circulation concepts. Rediscovered along with the transformations within the Modernism planning tradition (Team 10) and the gradual development of the morphological framework, walkability has become a central concept for contemporary urban design studies. This challenge stays especially significant in Poland and Eastern Europe, where modernist blocks of flats satisfy the housing needs of a large share of the urban population.

In the current paper, we reveal the imprints that the Modernist tradition left behind in the design of two large-scale housing estates located in Łódź, Poland: Retkinia and Widzew the East. The research methodology includes tracing sociometric layouts and configurational and composition analysis. Moreover, the typo-morphological study is complemented by analysing densities and the distribution of activities and destinations. We aim to look for congruence in the analysed layouts. The final goal is the guidance for the redevelopment of Modernist fabric and the improvement of its functioning and sustainability.

Keywords: walkability, Modernism, urban health, mobility

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ACTIVE TRAVEL MODES AND ITS BARRIERS IN THE UK (308)

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Urban Air quality is majorly known to play an important role in general health and well-being of the citizens (Dolan and Laffan, 2016). Road traffic has been identified as the most important source of local air pollution which can have adverse effects on health and the environment (Hoffmann et al, 2010). Active travel modes including cycling and walking are the most sustainable modes of transport with no harm to air quality and with positive impact on people's health and well-being (Pucher & Buehler, 2008), however, cities have been slow in adopting infrastructure for cycling and walking, and people have been slow in embracing active travel modes as well. As an example, the UK government proposed the National Cycling Strategy with the aim of doubling cycling trips by the end of 2002 and doubling them again by 2012. However, we are in 2022 and these targets have not been met. There has been clearly a lack of commitment to sustainable transport and active travel at individual, city, regional, and national levels in the UK. At city, regional, and national levels, planning, land use, safety, and infrastructure issues as well as political and institutional issues have been discussed as barriers and at individual level, attitude, and behaviour towards using active travel modes and sustainable transport have been discussed as issues that have challenged the use of cycling and walking as travel modes. To increase cycling and walking in cities, on one hand, issues regarding proposing and implementing safe infrastructure for cycling and walking should be addressed by experts such as planners, transport engineers, and policy makers. On the other hand, at individual level, people should be encouraged to use sustainable transport and active travel modes as part of their behavioural changes towards being more sustainable. It is important to understand that behavioural change is a process rather than an event and there should be different strategies to facilitate this process. Just looking at cycling itself as an example, it looks like that there is a small minority of people who will cycle under any circumstances. People cycle for short and medium distances in cities for transport and long distances as leisure or sport activities. They choose to do this simply because they like it. However, a large group of people in cities have never contemplated cycling as a way of transport. There is also a group of people who would like to cycle and could be possibly persuaded to cycle if facilities will be right for them. This paper investigates the barriers for implementing and using active travel modes to find a clear roadmap for the future cities to be more walkable and cyclable, and to increase citizens' willingness to choose active travel modes. To do that, this study as well as studying the UK national policies and actions for cycling and walking, focuses on Essex County in the UK as a specific case study.

Keywords: Cycling, Walking, Planning, Policies

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INVESTIGATING SPATIAL ASPECTS OF THE GREEK ACCESSIBILITY LEGISLATION: CONTRADICTIONS BETWEEN REGULATIONS AND IMPLEMENTATION IN TRADITIONAL SETTLEMENTS (326)

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In contrast to urban centers, rural areas lack the necessary infrastructures for people with disabilities. This phenomenon is widespread in Greek mountain and island settlements. Being famous for their rich cultural heritage and natural beauty, revenues from tourism constitute the main economic resource for both the settlements and the countries. Protected by specific enactments, the historic identity of mountain and island settlements impedes the establishment of such infrastructures. In spite of the existing regulations for ensuring an accessible and inclusive built environment, the necessary physical transformation of physical space is yet to be made. Cultural heritage's protection becomes an end in itself, hampering the right to an enabling environment. This fact raises the question of the effectiveness of legislation's implementation. This paper argues that, despite the specificity of Greek topography and the identity of historic settlements, rural settlements could be well-adapted to meet the EU standards and national regulations so as to become an all-inclusive and accessible environment. In this framework, our research aims to identify, address and evaluate issues of coherence and compatibility among law, spatial implementation and preservation. First, a comparative analysis of the legislations in force would be presented. Then, our research will examine case studies where accessible design interventions on buildings and public open space were rejected or paused so as to present facts or hypotheses on these pitfalls. From the findings, the pathogeny of the current legislative status concerning cultural heritage and accessibility will be detected and conclusions will be drawn. Therefore, new approaches that correspond to current challenges of urban, regional and law planning can be proposed.

This research can be a stimulus for a better understanding of the significant correlation among spatial planning, architecture and law, in order to ensure an all-inclusive and just built environment.

Keywords: Accessibility, traditional settlements, historic preservation, built heritage, inclusiveness

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THE LONG-TERM INFLUENCE OF RAIL INFRASTRUCTURE ON URBAN FORM IN POLISH AGGLOMERATIONS FROM A PLANNING PERSPECTIVE (358)

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Transport accessibility is one of a few fundamental factors that influence the structure of land use in urban areas in Poland. Initially, rail transportation played a major city-forming role, being a catalyst for urbanization in many cities. As motorization progressed, access to major national roads or highways became increasingly important. After the socio-economic transformation in 1989, the rapid increase in the number of cars in Poland became the impetus for the uncontrolled suburbanization, which brought many negative economic and environmental consequences, especially in the metropolitan areas. The relation between transport accessibility and land use was mainly analysed in the most developed countries (Newman, Kenworthy, 1996; Cervero, 2013), while other areas are still poorly recognized. In this presentation, we aim to answer the question of how transportation investments affect the formation of functional and spatial structure in the long-term perspective in the eight largest agglomerations in Poland (as an example of Central and Eastern Europe country). Rail transport was chosen as the reference point in this research, due to its effectiveness resulting from the use of separate infrastructure and carbon efficiency.

The results of this study will contribute to further recognition of planning conditions in accordance with the Transit-Oriented Development. We outline the lack of legislative requirements for the integration of both infrastructural and urban development in Poland. This study provides crucial insight into relationship between railway development and urbanization processes, as well as the strength of their interplay. We provided a critical overview of the idea of Transit-Oriented Development in the initial phase of railway development; and significantly, we found patterns of Development-Oriented Transit mechanisms emerging with growth of the free-market economy. We developed GIS-based research design with regard on urban morphology methods and used multi-temporal datasets of socio-economic condition, historical maps and aerial photos. This theoretical framework allowed us to determine whether the investment was a stimulating factor for urban development or if it was a reaction to the general upward trend in the increase in the built-up areas.

The results are in line with the current environmental shift in spatial planning. Nowadays, the relationship between transport accessibility and land use planning is mainly undertaken in the context of climate change. The policy of the European Union aims to reduce carbon dioxide

emissions in the transport sector with respect to changes in the modal split (European Environment Agency, 2019). Consequently, the share of public transport in daily movements needs to be increasingly implemented in both planning policies and social behavior. Therefore, the implementation of the European new mobility policy requires a strong theoretical background, based on an analysis that takes into account spatial and temporal aspects. Accordingly, the results shed new light on planning policies in Poland and highlight the reduction of costly urban development projects. It is crucial, especially in Central and Eastern European countries, where uncontrolled development processes occur at the same time (Stanilov, Sýkora, 2014).

Keywords: CEE, rail infrastructure, spatial planning, Transit-Oriented Development, urban morphology

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SURVEYING RELOCATING HOUSEHOLDS: BENEFITS AND CHALLENGES OF COMBINING QUANTITATIVE AND QUALITATIVE APPROACHES TO THE COMPLEX RELATIONSHIP BETWEEN RESIDENTIAL LOCATION, TRAVEL ATTITUDES AND TRAVEL BEHAVIOR (363)

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Cities around the world are facing the challenge of making urban mobility sustainable and reducing its negative impacts on the global climate as well as the local environment. This requires, above all, an understanding of the determinants and causalities of travel behavior. Numerous studies in the last decades have tried to analyze the complex interactions between built environment, travel attitudes and everyday travel behavior (e.g. Van Acker et al., 2010; Van de Coevering et al., 2018; Holz-Rau/Scheiner, 2019). Particularly household residential location changes have become an important life event to study these interrelations, as mobility has to be reorganized in that process. However, most related studies suffer from the shortcomings of collecting retrospective pre-move data, i.e. recall errors and ex-post rationalization of change. Moreover, the majority of studies rely on quantitative survey data. However, to work out causal relations, it is essential to include subjective perspectives of households under study, which therefore requires to combine quantitative and qualitative data (Næss, 2015, 2016).

The STAWAL research project is a mixed-methods panel study that investigates the relationships between spatial structure, residential location choice and everyday mobility of relocating households in three German metropolitan regions. This paper discusses the benefits and challenges of our complex methodological approach as well as its practical implementation. Notably challenging was the recruitment of households who plan to move in the near future. We chose various recruitment channels, including housing companies and house hunting websites, which resulted in different outcomes in terms of representativeness and effectiveness. In addition, we highlight the integration of qualitative methods into the research design, their particular value for the study and the challenges of creating a diverse and balanced sample and handling a great number of interviews with a small team. Finally, we also had to deal with external influences, namely the Covid-19 pandemic and ever tightening housing markets, that have a serious impact on the relocation and choice options of households willing to move and thus on our research agenda. Conclusions are drawn with respect to the relevance of the approach for researchers and practitioners.

Keywords: methodology, mixed-methods research design, panel study, travel behavior, residential relocation

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PLANNING FOR HEALTH - OPTIMISING MEDICAL PRACTICE LOCATIONS ON A SMALL SCALE (364)

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Public provided health care is elementary in terms of equivalent conditions of life, pursued by spatial planning for Germany as a whole and its sub-regions. Of particular importance are not only hospitals and ambulances but also general specialists (e.g. ophthalmologists or gynaecologists), dentists and, above all, general practising doctors. Site analyses today already reveal a partial undersupply with age-related closures of practices and difficulties in filling vacancies with junior medical practitioners (BMI, 2020). In particular rural and suburban areas are confronted with challenges in this regard - thereby medical service can partly only be ensured because certain medical doctors continue to practise well beyond the statutory retirement age.

The supra-local planning of health care with the re-staffing of vacancies is conducted within the framework of 'demand planning', carried out by the Associations of Statutory Health Insurance Physicians of the federal states. These represent outpatient statutory medical services and draw up demand plans for different services (general practitioners, general specialists, specialised services and highly specific services) within corresponding planning areas (KBV, 2022). The demand plans specify binding requirements for the number of physicians and their spatial distribution. In accordance with their mandate to ensure an outpatient medical care available at all time and close to the patient's home, a range of care that is adapted to the actual demand is required.

Since especially in rural or suburban areas not every municipality is equipped with a medical practice, access to health care is often determined by the accessibility of medical facilities. Dealing with accessibility, numerous models and tools can currently be observed. Examples are the 'Daseinsvorsorgeplaner Baden-Württemberg' (MLR, 2022) as a tool to ensure accessibility in rural areas or the interactive webtool 'GOAT' (geo open accessibility tool) for accessibility analyses on walking and cycling. Likewise, the Federal Office for Building and Regional Planning (BBSR) in Germany uses its own reachability model as a basis for its spatial analyses, which constantly undergoes further development (BBSR, 2022).

Facing the outlined issue, this abstract examines an accessibility model serving a tool for improvement of the aforementioned 'demand planning' and the small-scale coordination of medical practices among other services of general interest by mathematical optimization. As part of the research project 'Ageing Smart - Smart structured areas', funded by the Carl Zeiss Foundation (Carl Zeiss Foundation / RPTU Kaiserslautern-Landau, 2023), the research hereby focuses on the German 'babyboomer' cohort of the years 1955 to 1969, given a relevance by their large number of 25 percentage of population and an upcoming retirement wave.

In a first step, the status quo of the health care situation and the given accessibility as well as a forecast based on amount, type of practice and age structure of the medical practitioners are examined. Second, the spatial distribution of the baby boomer population is analysed on the basis of census data (note: in Germany, population data are surveyed and aggregated within the census every 10 years in a hectare grid of 100x100m grid cells; Destatis, 2023) and compared with the

preferences and tolerances of the baby boomers as well as determinants of babyboomer mobility in terms of transport and housing related behavior identified in a survey. Lastly the tool calculates and shows optimal locations for new medical practices or related adaptation needs, new (age-appropriate) housing and social infrastructure, and adaptation needs for public transport in terms of accessibility based on the aforementioned data.

This abstract depicts the current state of the newly developed tool and reveals how the target groups (local politicians, administration (e.g. urban, social and traffic planning) as well as the Associations of Statutory Health Insurance Physicians) benefit from it.

Keywords: health care, decision support, accessibility, mathematic optimisation, babyboomer

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SHORTER OR GREENER WALK? VISIBILITY OF GREENERY ALONG CHILDREN'S HOME-SCHOOL ROUTES FROM THE COST-BENEFIT PERSPECTIVE (365)

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Walkability improves physical and mental health, encouraging urban planners and scientists to study which built environment features lead to more pleasant surroundings for people's walks. One such feature is the possibility of seeing greenery. Greenery provides multiple benefits for walkers, making their walks more aesthetically appealing and healthier. Nevertheless, due to the scarcity of greenery in cities, access to those benefits usually requires lengthening the walk, which could be treated as an extra cost endured by walkers.

This raises questions: what benefits from seeing greenery can be obtained during our walks? How much more would we have to walk to make our walks greener (what extra cost would we have to pay in terms of extending the distance covered)? This study aims to answer those questions from a cost-benefit perspective using children's home-school walks as an example.

We defined the benefits as the amount of visible greenery along paths, and costs as the extra length of routes necessary to maximize the visibility of greenery. To quantify the costs and benefits, we assessed the visibility of greenery (trees, grass and a mix of trees and grass) for the shortest home-school route and compared it with the greenery that could be visible if a child chose the greenest home-school route. For this purpose, we applied visibility and network analysis for multiple spatially-explicit datasets using Lodz (Poland) as our case study city.

We found that the greenery visible during home-school walks varies statistically significantly for the shortest and greenest children's home-school routes. If children select the greenest home-school routes, their distances will increase, on average, by 103 meters (costs) but they could see, on average, 17% more greenery (benefits).

Keywords: Walking, Greenery, Children, Home-school paths, Cost-benefit perspective

MEASURING EQUITY OF ACCESS IN FINLAND WITH OPEN-SOURCED GIS-TOOLS (384)

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During the last few decades, the concept of accessibility has begun to take a more prominent role in transportation planning, land use planning and decision making. Social and environmental sustainability have also become a more integral part of contemporary public policy. Although social exclusion effects of transport are a recognized phenomenon, very few governments today measure the inclusivity of transport through access across different population groups and different opportunities. (Geographic Information System) GIS-based accessibility metrics offer the possibility to study the spatial distribution of access and can be used as an ex-post impact assessment framework to support different equity related policy agendas. There seems to be three kind of gaps in knowledge that are in the way of larger adaptation of such policy support tools: (1) Lack of research how such metrics are operationalized at a large regional or national scale, (2) how these access measures are used to produce just policies and (3) how can recent advances in open-sourced algorithms offer an affordable alternative to tedious workflows and long computational times of traditional GIS-software (Pereira et al. 2021). The aim of this study is to share knowledge of a Finnish use case, how open-sourced GIS-tools were used to produce nationwide accessibility metrics for the Finnish government agency Traficom (Pönkänen, 2022) and to shed light how social exclusion effects of transport and land-use can be explored with geographic data models.

Keywords: Accessibility, Equity, Distributive justice, Transport policy, GIS

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DISPARITIES IN BICYCLE CRASHES BY NEIGHBORHOOD DISADVANTAGE: A COMPARISON BETWEEN LOS ANGELES AND NEW YORK (398)

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Although there is growing evidence that traffic crashes tend to occur more frequently in poor ethnic neighborhoods in several U.S. cities, little is known about the drivers of such spatial disparity. Focusing on Los Angeles County (LAC) and New York City (NYC), this study examines whether disadvantaged neighborhoods have more motor vehicle-involved bicycle crashes than less disadvantaged neighborhoods and, if this pattern exists, what contributes to that disparity. Using the decomposition technique, this study examines the relative roles of various factors in explaining disparities in bicycle crash outcomes between neighborhood types. Results show that bicycle crashes are more likely to occur in disadvantaged neighborhoods in LAC, but the opposite pattern is found in NYC. Further analysis results suggest that this difference is likely affected by the intra-region spatial distribution of disadvantaged neighborhoods. Results further show that disparities in bicycle lane availability between neighborhood types are not primary factors contributing to the unequal distribution of bicycle crashes. Moreover, factors contributing to the spatial disparity of bicycle crashes and the extent to which these factors explain such disparity vary greatly by region. These results suggest that planners need to develop tailored policy measures to reduce the gap in bicycle crash outcomes between neighborhood types.

Keywords: Road traffic safety, Spatial equity, Motor vehicle/bicycle crashes, Decomposition analysis

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A CONCEPTUAL REVIEW OF POLICY PARADIGMS IN TRANSPORT PLANNING RESEARCH: IMPLICATIONS FOR STUDYING SUSTAINABLE MOBILITY POLICY IN FINLAND (404)

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Given increasing public and political commitments to sustainability in response to the impacts of climate change and global warming, many studies have called for a paradigm shift in transport planning. Within this literature, different interpretations of paradigms are evident, while many studies do not elaborate how they understand paradigms in a transport planning context. This article reviews the different interpretations of paradigms, both implicit and explicit, in the transport planning literature and compares these interpretations to conceptualisations from the policy studies literature. In doing so, this article attempts to provide more clarity on the conceptualization and use of paradigms in future transport planning research. The article also outlines how to use the proposed conceptualization of paradigm to assess the transition to sustainable mobility and applies it to study the status of transport planning in Finland. The article concludes with suggestions on how to move forward in studying a paradigm shift in future transport planning research.

Keywords: transport planning, paradigm shift, sustainable mobility, transport policy

FOSSIL-FREE TRANSPORTS IN RURAL AREAS: IDENTIFYING CONSTRAINTS AND POTENTIAL SOLUTIONS (412)

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Despite the problem of climate change being well known and that transport is a prominent user of fossil fuels, it is becoming increasingly clear that usage is increasing and the pace of reduced use must increase - towards zero emissions. Reducing use is complex; one primary reason is that transport is so well integrated into society that our society today is dependent on transportation. Transport and mobility are vital as they enable access – access to service, a way of living, and need. Accessibility determines opportunities in which some are beneficial and others not. In many rural areas, the built environment is sparse, which creates unique challenges. It is particularly challenging as many rural areas or settlements have long distances, less access to services, and limited opportunities for public transport. Therefore, it is a need to find fossil-free solutions where people can still participate in society, where there is accessibility to, for example, school, work, education, and more. In addition, the barriers around these solutions and what is required to make fossil-free transport possible even in rural areas where people still have access to society.

An essential voice in this is the people who live in different settlements in rural contexts. This study focuses on the travelers' perspective and how they see the transition, which solutions and strategies they think may be possible, and what is required for these. In practice, a focus group study has been conducted to understand better the precondition, where 6 case study villages have been visited. These rural settlements are located in Västerbotten and Norrbotten, located north of Sweden. They also have different contexts and conditions; for example, the built and natural environment is characterized by; being sparsely populated, close to the city, farm landscape, or remote. What they have in common is that they are outside the towns and have a sub-arctic climate with intense summers and winters. Furthermore, with the location near the arctic circle, the summer is bright all day, and the days are short in the winter.

What has emerged is that residents in the villages have found different strategies to get out based partly on their built environment but also climate. Traveling strategies and habits often differ between settlements in detail but in common is that the solutions are often car-based, and car dependence is high. What is also interesting is that there are already strategies today that minimize the use of fossil fuels; one start to at least start decreasing the use is to promote and facilitate these. It has also become clear that there are strategies that are both good ways to reduce the use of fossil fuels separately, but they are difficult to combine. This shows a need to analyze the whole of the transport system in different rural contexts. A better understanding of which measures work and how they work together is needed. The precondition in rural areas is different compared to city areas, and as it might differ between cities, it also differs between rural areas.

Keywords: Mobility, rural, sustainable transport, fossil-free, sub-arctic

THE ROLE OF LOCAL HOMOGENEITY IN TRAVEL BEHAVIOUR ANALYSIS: EVIDENCE FROM EUROPEAN CITIES (416)

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In today's rapid times, one of the most critical issues for urban planners is effective reaction to changes in peoples' behaviours. These changes are rooted in different contexts. Some of them can be predicted in advance as those related to long-term climate changes, and some are the results of sudden events like pandemics or war, which make them the black swans of our times. One of the critical types of people's behaviours is their daily travel mode choices. These decisions affect the effectiveness of urban travelling and influence the noise and exhaust gas emissions levels.

Travel behaviour analyses are widely present in the scientific literature. Also, the analyses of its determinants have been well-known for decades. Most research focuses on a single city exploring the linkages between its residents' characteristics and travel mode choices. In our study, we focus on the differences in travel behaviour exhibited by the inhabitants of different European cities stemming from the homogeneity of their behaviour. This approach remains rare in the literature and allows us to explore the differences in daily travel mode choice, which are not only attributed to the commonly analysed characteristics of respondents, journeys, or built environment.

The study incorporated data from the *Perception survey of quality of life in European cities* conducted by the European Commission in 2019. The representative sample of respondents was inquired regarding their travel mode choice used most often in daily commuting. It is worth noting that data from 2019 are currently the most actual source of information about the modal split, with a coverage of 83 cities and approximately 58 thousand respondents.

The data have a hierarchical structure where respondents are clustered within cities, and cities are clustered within countries. This structure must be accounted for to obtain fully reliable estimates of parameters describing the impact of a particular variable on travel mode choice. That is why the multilevel logit model was incorporated as a tool in quantitative analysis. Three different models were estimated to separately analyse the determinants of the choice of bus, private car, and bike as the most often used daily travel mode. To assess the importance of local homogeneity, we employed a series of classic one-level models as a benchmark.

The results of the study are in line with the literature in terms of the sociodemographic characteristics of respondents. As for the environmental awareness of choice-makers, we analysed the impact of individually perceived air quality and noise level in the city. Both these variables do not significantly affect mode choice (regardless of the mode). The study's results confirmed that satisfaction with the quality of public transport plays an essential role in shaping travel behaviour. It is worth noting that satisfaction with the different aspects of public transport was analysed, but only accessibility and reliability were significant.

The analysis of local homogeneity between the different cities provided statistically significant results in individual effects for each city and insignificant outcomes for country-level homogeneity. It means that the homogeneity of respondents' behaviour is visible within the

particular city but not at the country level. This result, on the one hand, supports the need to analyse travel behaviour in cities individually, but on the other hand, clearly shows that city-level clustering needs to be accounted for in global travel behaviour analyses.

Keywords: travel behaviour, multilevel logit model, homogeneity, mode choice, daily commuting

UNLOCKING MOBILITY PRACTICES AND MEANINGS: PROSPECTIVE SCENARIOS FOR CARS AND BICYCLES (418)

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In 2022, policy makers in Brussels (Belgium) experienced first-hand, during the fierce protests against the Regional Mobility Plan, that the complex nature of the current socio-technical system of automobility makes a shift towards more sustainable travel patterns difficult to realise. On the one hand, there is an urgent need to facilitate and increase the pace of the ecological transition. On the other hand, a part of the population expresses that their needs and concerns are insufficiently considered by the Regional Mobility Plan. It seems that while the socio-technical system of automobility is under pressure, many people still depend on the functioning of that system for the organisation of their daily lives and are not ready or not willing to switch. The project is based on the identification of two gaps in the current research. Firstly, while research established the importance of infrastructural and safety aspects with respect to cycling, it is not clear yet to what extent the meanings (based in culture, religious norms and identities, influence of peers) associated with the bicycle can hinder or accelerate the uptake of cycling. The second gap considers the extent to which activities are car-dependent, or put differently, more locked-in as car trip, e.g. when the car functions as cargo. The research wants to explore if and how these car-dependent practices can be substituted by bicycle trips. The presentation will shed light on the scope, methods and preliminary findings.

Keywords: automobility, bicycle, car-dependent practices, meanings, Brussels

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DEFINING PROXIMITY-CENTRED ACCESSIBILITY (419)

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Accessibility is widely recognised as an important dimension of quality of life. Although it has long been recognised that accessibility conditions can be improved by both improvements of mobility and proximity conditions, in practice, many cities have centred their policy efforts on improving mobility conditions, offering more efficient transportation systems and higher travel speed. The proximity conditions for accessibility have had far less attention in the last decades. This is particularly concerning following the hypothesis of a negative feedback loop between local and regional accessibility put forth by previous research, the former essentially based on proximity while the latter is highly dependent on mobility. The idea that accessibility offered by proximity has been decreasing in our cities in response to the vast improvements of mobility conditions is alarming, particularly for the implications it generates to car dependency, sustainable development, and quality of life (to mention just a few). However, in recent years we have seen many movements, such as the 15-minutes city of the 20-minutes neighbourhood, in favour of higher proximity and less dependence of mobility for accessibility, particularly following the COVID pandemic. Although such movements have been present for some time, the pandemic gave them particular strength, a probable reflection of the negative feedback referred to before.

It is clear that further attention must be given to proximity-based accessibility. Research has, so far, contributed with a somewhat mix of approaches and a diversity of notions of proximity-centred accessibility. In this paper we seek to contribute to the conceptualization of proximity-centred Accessibility. We start by exploring different concepts currently in use in empirical research. In particular, we explore the size of the 'local' dimension of accessibility analysis as well as the meaning and relevance of local accessibility in land use and transport policy. These issues are further explored through a survey collecting the opinion of accessibility experts and planning practitioner on the meaning of accessibility by proximity. Special attention is given to relevant opportunities at local scale as well as to reasonable travel distances/times to these opportunities at local scales. Surveying experts and practitioners allows for a comparison between theoretical and practical points of view.

Our review of empirical research revealed that, despite of the growing use of terms related to proximity-centred accessibility, these have scarcely been defined in the scientific literature. Available definitions mostly focus, either on active/sustainable transport, or specific neighbourhood amenities and proximity. Our expert and practitioner's survey revealed clear preferences among the variety of terms used in the literature (similar among expert and practitioners), as well as similar perceptions towards the relevance of certain opportunities at the neighbourhood scale. Based on these results, we propose a definition for proximity-centred accessibility, including its spatial scale and relevant opportunities.

Keywords: Proximity-centred Accessibility, Expert Survey, Practitioners Survey

IS REGIONAL ACCESSIBILITY UNDERMINING LOCAL ACCESSIBILITY? (420)

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The need to reinforce the sustainability of daily mobility in urban areas has been on top of the political agenda worldwide. A major concern has been that of the growing car dependency. The expanding distance between human activities has naturally been at the root of such phenomena. Efficient transport systems and high travel speeds have generated unprecedented levels of accessibility considering the larger travel catchment areas. On the flip side, such conditions lessened the need for proximity which in turn led to the distancing of human activities and car dependency.

In this paper we explore this mutual influence of improved *regional accessibility* levels provided by the car and the reduced *local accessibility* levels generated by expanding distances to relevant human activity. We built a theoretical framework that hypothesises the existence of a negative feedback loop between local and regional accessibility, and provide initial empirical research into the feedback loop. The metropolitan area of Oporto is used as case study. Local and regional accessibility are assessed for 15 minutes travel distance by foot and by car, respectively. In the absence of longitudinal data on the spatial location of activities, we used multinomial logit models to explore the role of a set of build environment factors in explaining low local accessibility levels in areas offering high regional accessibility.

Our results suggest that, in general terms, local and regional accessibility levels are positively related. Regardless, our sample presented a large number of locations offering opposing realities with regard to local and regional accessibility levels (high regional and low local accessibility or, more surprisingly, low regional and high local accessibility). Results suggest that low local accessibility levels in areas offering high regional accessibility have most likely been generated in recent urban developments (last 3 decades), holding lower density and closer to motorway nodes. Thus, although the general relationship between regional and local accessibility seems to be positive in nature, recent urban development trends might be shifting the balance, creating conditions for a negative feedback loop between local and regional accessibility.

Keywords: local accessibility, regional accessibility, land use and transport interaction, car dependency

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PARKING AREAS OF CONTEMPORARY HOUSING ESTATES: PLANNING, REGULATIONS, SOCIETY: A CASE STUDY OF POLISH CITIES (424)

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The growing number of cars is visible in European cities: in the suburbs, housing areas and in the city centre. On the one hand, the number of cars is increasing because the car is not a luxury item. Its price is accessible to city residents. On the other hand, individual cities are implementing restrictions on car mobility in the organizational and planning fields (Gunnarsson-Östling, U. 2021; Buehler, R.; Pucher, J.; Kunert, U., 2009)The large number of cars generates a lot of problems: traffic congestion, polluted air, lack of parking spaces, etc (Shoup D., 2005; Henley S., 2007).

The presented research concerns the parking problem in Polish cities from several perspectives. The author completed several research stages (stage 1 - Background. Society, stage 2 - Research. Planning Documents, stage 3 - Transformation. Housing Estates)

Background. Society

An analysis of newspaper reports from the daily press since the early 1970s has been conducted. The context of this analysis was the importance of the car for people, the importance of parking spaces and the problems associated with car ownership. Several thousand daily newspapers were analysed. The research work carried out showed how residents' attitudes toward cars changed from euphoric to negative (at the turn of the years) and when parked cars began to disturb residents.

Research. Planning Documents

The texts of Local Spatial Development Plans from 2000 - 2020 (several hundred documents) for the five largest Polish cities: Warsaw, Krakow, Wroclaw, Poznan, Lodz were analysed (Lower A, Szumilas A. 2021). The focus was on the requirements for residential areas. The author analysed the value of the parking indicator and additional regulations (e.g., the obligatory number of parking spaces in the underground garage, the design of greenery on the parking slab, areas without parking, etc.). Such a task makes it possible to show what the trends in parking policy in local planning documents are.

Transformation. Space of housing estates.

The area studied in the spatial analysis were housing estates made with large-panel technology in Wroclaw. It was analysed how the area of parking lots expanded in specific neighbourhoods, the study was made on the basis of aerial photographs and reports from the local press. The study made it possible to show in which areas and with what dynamics parking space was growing.

Keywords: parking policy, urban design, mobility

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ANALYSIS OF URBAN ACCESSIBILITY BARRIERS WITH LEGAL, SPATIAL, SOCIETAL, AND ADMINISTRATIVE ASPECTS (429)

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Accessibility is a right for all. To access urban services, spatial components of urban space need to enable each single possible trip route free from any barriers, barriers related to the legislative framework, urban space, society, and administration. In this respect, the right to access is a well-covering concept as a starting point to understanding the barriers against accessibility. The theoretical review suggests that the Right to the City and accessibility through independent mobility are related, considering inclusive accessibility as a chain for persons with reduced mobility (Arvanitis, 2004; Yılmaz, 2018; İmamoğlu, 2013; Mace, 1998). In practice, even if accessibility rules are well-defined, it is evident that accessibility still stands as a crucial problem full of spatial, societal, and administrative barriers. As the origin of questioning the accessibility concept, the research intention began with understanding those barriers.

According to Lefebvre (1996), the Right to the City is a challenge of removing the alienation of urban space and re-integrating into social connections, meaning that the Right to the City involves inhabitants appropriating space in the city. Lefebvre complains the exclusion of some groups in society as not only an exclusion from social life but also an exclusion from being a civilized individual in society (Şen, 2012). The contributions have further developed the Right to the City concept from a more political and economic perspective comprehension of the city from David Harvey (1973) and Manuel Castells (1977), who approach the city and urban space as mainly the result of the capitalist production processes. These two urban scholars aimed to develop the concept of the Right to the City by criticizing and improving its scope. Considering Harvey's approach to the Right to the City as a collective right, since the social needs of individuals and mobility choices are closely embedded, the right to mobility can also be considered a collective right (Sager, 2006; Harvey, 2008). Considering the social aspect of the discussion regarding each link of the accessibility chain, an urban mobility system, expected to be free from any spatial and physical barriers, needs to be correspondingly free from social exclusion (Hawas, Hassan, and Abulibdeh, 2016). Mobility-led social exclusion is highly related to the participation of persons in social life as well as economic and political activities. Barriers to accessibility contribute to mobility-related social exclusion, even in cities with high mobility (Kenyon, Lyons, and Rafferty, 2002).

Analysis of current studies, socio-demographic situation, and legal framework in Turkey reveal a gap that needs to be studied and critically discussed. Differences in perspectives and philosophical approaches make significant changes in the way that accessibility and independent mobility is perceived, and this understanding constitutes the fundamental baseline of the research and the originality of methodology, which is composed of researcher's perspective for legal system analysis and spatial case study analysis, and user perspective through focus group discussions. The three research methods of the thesis are desk research, case study research, and focus group discussions (Figure 1).

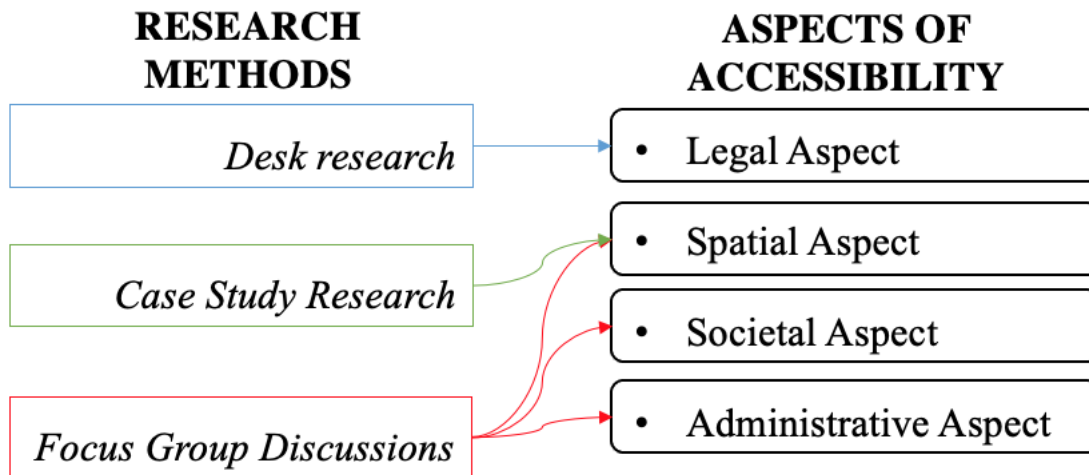


Figure 1. Research Methods and Related Aspects of Accessibility

The main research question is: ‘How do legal, spatial, societal, and administrative aspects of accessibility, as interdependent processes, create barriers that prevent PRMs from exercising their right to access in Turkey?’ The leading hypothesis is ‘Right to access is a right for all and the way to have accessible cities is possible as long as a comprehensive accessibility framework is ensured including four interdependent aspects: legal, spatial, societal, and administrative.’

At the end of the research, it is revealed that a well-defined legislative framework of accessibility exists in Turkey, however, there are significant spatial, societal, and administrative barriers against the right to access. This research fills the gap through understanding the barriers, not the barriers merely focusing on legal and/or spatial as most studies tend to do, but barriers for accessibility composed of interdependent legal, spatial, societal, and administrative aspects.

Keywords: The Right to the City, Accessibility, Mobility, Persons with reduced mobility

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CLIMATE CHANGE ADAPTATION PLAN STUDY FOR THE TRANSPORT SECTOR IN TURKEY: KEY FINDINGS, ACHIEVEMENTS AND CHALLENGES (454)

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Climate change mitigation is a broadly studied area in the transport sector. In Turkey too, mitigation has been on the agenda of the country for over 10 years, with a comprehensive mitigation-based Climate Change Action Plan prepared and approved in the early 2010s, in which the transport sector was one of the main components, being considered as a significant contributor to greenhouse gases and hence the climate change.

Adaptation plans, however, have not been an integral part of these action plans in the transport sector, although it is clear that climate events have been increasingly affecting the transport system, and that there is an urgent need for adaptation with a view to make the transport infrastructure and activity more resilient. For over a year now, a comprehensive adaptation plan study has been carried out in the country, for which the transport sector is one of the main components.

This paper presents the results of the analysis regarding the vulnerability of the country's transport sector. In doing so, firstly the approach adopted for vulnerability and risk analysis is presented; then the results of the analysis are discussed by making use of geographical comparisons and maps that highlight certain regions of the country as those that have high degrees of exposure, vulnerability and risk for the transport sector. These analysis results point to specific actions for country-wide transport system, as well as highlighting particular regions as those that require priority in making local plans for urban and regional transport.

In addition to the presentation of these key findings and achievements for the preparation of the adaptation action plan, the paper also discusses the challenges faced in the analysis phases and plan preparation. These include the lack of reliable comparable country-wide data, limited awareness regarding the need for analyzing and restructuring the transport sector in relation to adaptation strategies (as opposed to mitigation as has been the case so far), the policy bias towards major engineering projects resulting from the dominance of roads and highways in the country, and the issue of "scale", that results in the tendency to overlook the need for, and value of, formulating planning and design policies for urban transport at the local scale even though the plan is country-wide in scale.

Keywords: Climate change, adaptation action, transport sector, resilience, Turkey

UNSTEADY STEPS TOWARD AN INTEGRATED PLACE-BASED APPROACH TO RURAL ACCESSIBILITY: REFLECTIONS A DECADE AFTER THE LAUNCH OF A NATIONAL POLICY IN ITALY (477)

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In spite of the variety of possible meanings of the “rural” and the difficulty in defining and distinguishing it from the “urban”, most rural and peripheral areas, however defined, suffer from accessibility and mobility problems that challenge their liveability and potential for development, raising justice and equity issues (Oliva and Camarero, 2019; Nordberg, 2020). Low density, scattered demand and distance from the centres where services and opportunities are located are typical features of these areas, that often struggle to invert the decline loops they have been trapped into, also as a consequence of the increasingly urban-centric approach that has characterised EU policy-making in the last 30 years (Küpper et al., 2018; Vitale Brovarone, Cotella and Staricco, 2022). Beyond mobility-centred approaches, to cope with these challenges a wider perspective is needed, embracing the societal, economic and spatial components and implications of accessibility, with comprehensive action involving actors from various sectors at different scales (Vitale Brovarone and Cotella, 2020). The Italian National Strategy for Inner Areas (SNAI), launched in 2014, aimed to reverse marginalisation processes of rural and peripheral areas with a place-based approach, has tried to move in this direction (Vitale Brovarone, 2022). Almost ten years after its launch, this paper analyses and discusses how the SNAI approached and addressed accessibility and mobility, in principle and in practice. First, a general overview is given through document analysis of the SNAI’s documents and guidelines and its 72 local strategies. Then, qualitative insights from in-depth analysis and interviews in four project-areas are presented, discussing the strategy’s potentialities and challenges. The results show the extent to which the ambition of the strategy clashed with sectoral and limited approaches that were difficult to unhinge, leading to a banalization of the approach, partly because of a possibly overly ambitious process. Finally, the need to adopt approaches that move from a deep understanding of determinants and needs of mobility and accessibility is emphasized.

Keywords: rural accessibility; mobility; policy; inner areas; place-based

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PUBLIC SPACES CHALLENGES IN THE E-MOBILITY ENVIRONMENT (493)

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Public spaces are an important part of urban life. Creating spaces for the daily movement of residents, they form their habits, as well as create the impression that its visitors take away from the city. The urban structure of cities is relatively stable over time and its transformation bears either large economic costs, when we are trying to improve it, or social costs, in case of their of bankruptcy. The public space of (not only) Central European cities, which were designed in the middle of the nineteenth century, can thus be subject to a set of completely different requirements within 150 years. In one and the same space, the original pedestrian and animal drawn cars were replaced first by trams, bicycles, then cars with all their infrastructure, so that in recent decades the public space has at least partially begun to be taken back by pedestrians, cyclists, and users of so called micromobility. The aim of this paper is to identify the challenges that the public spaces of Europe's cities are likely to face in connection with the changes that will take place in transport and urban mobility in general.

Keywords: Public Space, E-Mobility, Micromobility

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MECHANISMS OF CHANGE? POLICY EFFECTS OF PUBLIC PARTICIPATION IN A LOCAL CAR-REDUCTION SCHEME (499)

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Urban transport planning is currently under a lot of pressure to manage a sustainable mobility transition, while at the same time being a highly controversial policy field. Contemporary transport planning approaches include the integration of civil society as part of political integration (Schwedes and Rammert, 2020). Municipalities as key actors in the design of sustainable mobility and the associated governance processes increasingly rely on consultative public participation. In parallel, civil society is increasingly demanding and organizing more ways to participate in mobility planning processes, as illustrated by numerous referenda initiatives in Germany demanding the extension of bicycle infrastructure (European Cyclists' Federation, 2016).

Among other effects such as increasing the acceptance of policy measures, one (implicit or explicit) hope for participation is that the public can influence or even “improve” the political decisions (Vetter and Remer-Bollow, 2017). Such an effect is desirable from a normative point of view (Smith, 2009), but also relevant for a sustainable mobility transition. However, there is little knowledge on whether and how participation actually has effects on the resulting political decision, and what those effects look like (Emery, Mulder and Frewer, 2015). To approach this question, I am interested in the mechanisms through which different formats of public participation on the local level do or do not lead to policy effects, and what this means for a sustainable mobility transition.

To this end, I have investigated the planning process to transform the neighborhood of Ottensen in the German city of Hamburg into a low-car area. The public was involved in different ways, such as workshops, a scientific survey, focus groups for specific target groups, and bottom-up initiatives, each of which has informed policy to different extents and through different mechanisms. Following the methodological approach of process tracing (Beach and Pedersen, 2019) and mainly drawing on qualitative data from various methods and sources, I first identify the relevant mechanisms in each case and then provide a rich description and interpretation of those mechanisms. It is shown how the mechanisms differ depending on the format of participation, the participants and their interaction, and the moment of participation.

I find that participation earlier in the process had stronger effects, also because it could be used as an argument due to its scientific nature. Later consultation efforts were used selectively and were not able to influence policy substantially, but were applied to improve details of the car-reduction scheme. The bottom-up initiatives unsuccessfully applied various strategies to create pressure to influence policy, while the advisory council was able to create pressure on politics by agreeing on a common position and being perceived as representative.

The contribution concludes with a discussion of the implications of the findings for a sustainable mobility transition.

Keywords: citizen participation, mobility transition, urban governance, sustainability, car-reduction

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UNDERSTANDING THE ROLE OF ON-DEMAND PUBLIC TRANSPORT IN LOW-DENSITY REGIONS: INSIGHTS FROM FLANDERS (507)

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Research has shown that people who rely on PT are vulnerable to transport poverty and related social exclusion (Lucas et al., 2016, Fransen, 2018), especially in more sparsely populated areas (Farrington and Farrington, 2005). In an effort to tackle these inequalities, on-demand PT services are gaining attention among urban and regional authorities across Europe (Sörensen et al., 2021). However, we identify an important knowledge gap with regard to the socio-economic profiles of the (potential) users of on-demand PT in low-density regions. In addition, it is unclear how these services ensure social and economic participation.

In Flanders (Belgium), a dial-a-bus system has been servicing less urbanized areas for over 30 years. This system is currently subject to significant reorganization in light of the new mobility policy 'Basic Accessibility' (Decreet Basisbereikbaarheid, 2019), and will be replaced by different services like shared bikes and cars, in addition to a revised system of on-demand and flexible transport by minibus or taxi.

Against this backdrop, this research focuses on the unequal access to amenities by inhabitants of low-density areas in the region of Flanders. More specifically, we examine the extent to which the dial-a-bus service is essential for current users in reaching their destinations on a day-to-day basis. In light of the pending reorganization of this service, the central objective of this research is timely: to increase our understanding of the socio-economic profiles of current dial-a-bus users alongside their mobility needs in relation to their participation in society.

The work reported in this paper is part of the CARIN-PT (Capacities for Resilient and Inclusive Urban Public Transport Infrastructure and Built Environment) JPI Urban Europe project. In the first stage of this project in the region of Flanders, we gauge the transport needs of current users of the dial-a-bus service in a quantitative way, with an emphasis on improving our understanding of the importance of the PT service for the accessibility of amenities and daily activities by its users. To this end, we develop a research strategy that is two-fold. First, an extensive GIS analysis of dial-a-bus trip data will provide preliminary insights into aggregate spatial and temporal patterns, linked to user-specific data reflecting a range of socio-economic aspects. Second, we will conduct a survey of current dial-a-bus customers, in which we question several aspects related to their socio-economic situation, place of residence, dependence on PT, travel behavior, and participation in society.

Building on the two sets of data, we expect to derive new insights in terms of the geography of the demand for on-demand PT in low-density regions in Flanders, and how this demand is intrinsically linked to several socio-economic dimensions. Additionally, we will contribute to an

increased understanding of the mobility needs and preferences of users in relation to their participation in society.

Keywords: on-demand public transport, low-density urban region, transport poverty, Flanders

INCLUSIVE TRANSITION TO ELECTRIC MOBILITY (ITEM): PRESENTATION OF PARTIAL RESULTS (512)

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We would like to present partial results of the research project ITEM which aims to advance and accelerate an inclusive transition towards electric mobility by deploying a transnational research strategy for data collection from users and stakeholders and explores the social and spatial differences in the uptake of electric mobility. Our research examines various aspects of social justice related to the transition to electric mobility using a mixed-methods approach.

The transition to urban electric mobility can be seen across Europe, happening despite the energy crisis and geopolitical uncertainties. Initiated by the directive Fit for 55, supported by governments and businesses, accelerated by the environmental decarbonization program, is treated by industry as an economic opportunity. And while ambitions at the national and city level are high, little is known about the social justice dimension of these changes and how they will affect electric mobility ambitions in urban communities.

How is this process going on in Poland, is the transition to Electric Mobility inclusive? Can an average Polish resident afford the transition to electromobility – on a personal and on a wider, systemic level? Won't clean transportation zones divide residents into the wealthy and the poor? How is municipal and national legislation on this topic shaping up, does it take inclusivity and equal access into account? What are the factors determining the scope of subsidy programs, who are the beneficiaries?

We will present how the process of transition to electronic mobility is shaping up in Poland and address the above outlined questions by presenting and discussing case studies from our project: (1) charging infrastructure development and (2) EV purchase subsidies. The analyses of the process are based on a literature review and analysis of both the interviews conducted as part of the project and the available strategic and legal documents at the municipal and national levels.

Find out more about our project at <https://www.itemresearch.org/>

Keywords: electromobility, justice, inclusive transition, charging- infrastructure

SPATIAL STRATEGY PLAN AS A METHODOLOGICAL APPROACH IN ENSURING ACCESSIBILITY: THE CASE OF ISTANBUL (530)

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This study aimed to investigate the question, "Can the spatial strategy plan be a tool for ensuring accessibility?" and was carried out in two stages. Firstly, the historical process of planning theories was analyzed and the background of the spatial strategic plan was understood. The second stage focused on the accessibility issue in the sample area of Istanbul; preliminary results have been obtained by using the spatial strategy plan.

Comprehensive planning has kept planning in the technical domain by focusing on instrumental rationality and placing planner expertise at the heart of the planning process (Sandercock, 1998). A range of approaches, such as defensive, progressive, and egalitarian planning, were born as criticisms of comprehensive planning. The field was then shaken to its foundations by the view of Marxist geographers and sociologists, Harvey (1973) and Castells (1977) chief among them, that planning is a function of the capitalist state. More recently, strategic approaches and planning have come to the fore again due to increasing urban complexity, rapid developments, environmental problems, and other related concerns (Albrechts, 2004; 2006), that highlight the importance of sustainability and subsequently reemphasise the need for long-term thinking.

The concept of strategic spatial planning based on Habermas' concept of strategic action was first introduced by Yiftachel (1989). Finding its roots in a relational geography approach, strategic spatial planning is based on active participation, open dialogue, accountability, cooperation, and compromise. It normatively aims at selective, relational concepts of space and place, emphasises relationships and processes rather than objects and functions, and focuses on actor roles and relationships at the nodes of relational networks (Albrechts, Healey, and Kunzman, 2003).

In this study, the aforementioned features of the spatial strategy plan have been used as a tool for ensuring accessibility in Istanbul. In the first stage of the study, 6 general objectives were determined for the Istanbul Metropolis. After the objectives were determined, the situation determination phase was started, and special spatial analyses related to the theme of each objective were made. The walkability parameters put forward by various theorists in the existing literature were grouped in relation to each analysis and further analysed to determine a hierarchy, with Accessibility found to be the most important parameter. As each analysis comprised a different number of parameters, a multiplier coefficient was determined to quantify each analysis's impact on the final synthesis sheet, which was created using an overlapping method and the first-, second-, and third-degree intervention areas of the city of Istanbul were determined at the neighbourhood scale.

In the second main stage of the study, 17 needs were identified by discussing which facilities were necessary to ensure accessibility. Using the collective structure of the spatial strategy plan, special professional fields and institutions related to these topics were identified. A "Relational Wheel" was devised to illustrate the relationships between access needs, the fields of study these needs are the subject of, the institutions that should work on these issues, the analysis methods they

will use, the outcomes they might obtain when they complete their work, and the relationship of these outcomes to the initial objectives.

By graphically representing these multifaceted relationships, the Relational Wheel made clear the necessity of a collective effort in ensuring accessibility. Employing the Relational Wheel also revealed that accessibility is a crucial element among a wide range of problems, and that by tackling the issues related to providing accessibility, planners will necessarily address interrelated problems, thus creating a multiplier effect in the future. This study further highlighted the flexibility of the spatial strategy plan, its adaptability to the complex structure of a city, and its potential to be an important tool in ensuring sustainability.

Keywords: Accessibility, Walkability, Spatial Strategy Plan, Multiplier Effect, Sustainability

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CAN THEORY OF PLANNED BEHAVIOR EXPLAIN THE EFFECT OF BUILT ENVIRONMENT ON WALKING BEHAVIOR? (562)

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Walking is not only the most basic and sustainable means of transport (Keall, Shaw, Chapman, & Howden-Chapman, 2018; Neves & Brand, 2019), but it is also recognized for its physical and mental health (Chen et al., 2021; Hsu, Lee, Yang, & Chao, 2021; Lamberti et al., 2022; Morris & Hardman, 1997; Yen, Liao, & Huang, 2022) and economic benefits (Baker, Pillinger, Kelly, & Whyte, 2021; Tas, Karagulle, Kiraz, Ozcan, & Ek, 2019). While theory of Planned Behavior (TPB) is being increasingly applied to travel behavior studies, the studies focus mainly on motorized means of transport. Pedestrian studies based on Theory of Planned Behavior (TPB) are not only few and but also measure walking and the built environment subjectively, have very generic measures of TPB constructs that do not account for built environment and measure perceived neighborhood built environment (instead of the built environment along the route). Pedestrian studies analyzing the impact of built environment on route choice, i.e., analyzing built environment along the walking route, are also rare. However, there are no studies using TPB to understand the effect of built environment on mode and route choice.

The aim of this study is to develop a detailed understanding of the psychological and environmental factors that affect individuals walking and the interaction between them. Firstly, we develop a methodology to analyze the correlation between walking, built environment and TPB. Unlike most studies, we measured attitude towards and perceived behavioral control (PBC) over, both the behavior (i.e., walking) and the built environment, in addition to measuring both walking (at both individual and trip levels) and built environment objectively. We developed our own TPB questionnaire (based on a combination of built-environment studies, pedestrian studies, and cycling studies using TPB) that addresses both behavioral and environmental aspects and collected travel data using GPS tracking via smart phone app. Secondly, we apply this model to analyze walking behavior in Umeå, Sweden. Statistical and spatial analysis is carried out on data was collected in the autumn of 2019. Thus, this paper makes important methodological contribution towards using TPB to analyze correlation between objectively measured walking and built environment that would assist urban planners and designers to develop better pedestrian environments.

Keywords: theory of planned behavior, objective measure, walking, built environment

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POST-CAR CITIES WITHIN CAR-ORIENTED SURROUNDINGS: A TALE OF WORLDS GROWING APART? (577)

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Research suggests a peak in car use and ownership in Western countries (Millard-Ball & Schipper 2011; Lyons & Goodwin 2014; Focas & Christidis 2016). While the issue is still subject to debate, it appears that, while in large or medium sized cities car use and ownership tend indeed to stabilize or even decrease, in suburbs and the countryside they still increase. It seems that two worlds are emerging: post-car cities, surrounded by an 'autopia' of car-oriented suburbs, small towns and countryside (Headicar 2014, 2015; Jonkeren et al. 2019; Zijlstra et al 2022).

A vast amount of policy and research addresses the urgency and potential of a modal shift from cars to active modes and public transport in cities. This can be partly explained by the fact that the negative environmental and social impacts of car use and ownership are quite evident in the high densities of cities. Furthermore, the same high densities and the corresponding short distances to destinations shape favourable conditions for a modal shift. This promising outlook seems to be in contrast with the situation in suburbs, small towns and the countryside. It is questionable in what measure the above-mentioned negative impacts also apply here, or are anyway evident, while the conditions for a modal shift seem much less favourable in these lower density environments. To what degree is the image of two worlds growing apart matched by the empirical data? What could be explanations behind these trends? Why and for whom is the development of two worlds problematic? And finally, how could the divide be bridged? These questions haven't up to date been addressed adequately and are central to this paper.

Taking the mid-sized region of South Limburg as an illustrative case, we can indeed observe a widening of the gap between the 'post-car' central cities and their car-oriented surroundings. Cities are stabilizing or growing in population through immigration of students and young professionals, while suburbs and rural areas are shrinking. Current mobility policies (Provincie Limburg 2020, Gemeente Maastricht 2020) focus on more intercity railway services, cuts in bus services in rural areas, P&R locations on the border of cities and facilitating bicycle use. These measures would benefit the accessibility and liveability of the cities, however, suburbs, small towns and rural areas would become more car dependent (Goudappel Coffeng 2015; Wiersma et al. 2017).

This is problematic in three ways: First, as more than half of the population in the Netherlands lives in suburban and rural environments (CBS Statline), increasing car dependency makes society vulnerable for changes in environmental, economic and social spheres. The increasing energy prices illustrate this. Second, based on available data on car ownership (CBS Statline; Steenbekkers & Vermeij 2013; Bastiaanssen & Breedijk 2022), these trends appear a factor in transport poverty in suburbs, small towns and rural areas, as well as in cities for those who have destinations in peripheral regional centres (Wiersma et al. 2017). Third, as the two worlds largely function within one interconnected daily urban system, there is a need for transport modalities connecting them and thus being suitable for both territories.

In search of these interconnecting modalities it appears that 1) particularly the e-bicycle shows potentials to make daily relations within the suburban realm and between suburbs and cities less car dependent, 2) re-organizing regional public transport and moving some peripheral regional centres to station areas would benefit both worlds. In a team of regional planners, the regional public transport company and some major employers, we explored pros and cons of those scenarios and their effects to provide a new and sustainable balance between cities and suburbs.

Keywords: Cities, Suburbs, Rural Areas, Car Dependency

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MISSED CONNECTIONS: OPPORTUNITIES FOR INTEGRATED URBAN AND TRANSPORT PLANNING WITH COMPREHENSIVE CLOCK-FACE SCHEDULES (581)

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In several European countries, comprehensive clock-face schedules (also called integrated periodic or regular timetables, cyclic schedules, or *Integrierter Taktfahrplan*) as a form of public transport schedules have been introduced during the last decades for regional and national passenger rail operations, in some cases also for local public transport and even freight transport. They are characterized by regular, rigid frequencies of services on fixed lines and a hub-and-spoke-like service organization with timed interchanges at hubs, typically in larger cities or urban subcentres. Compared to conventional, demand-driven public transport service planning, comprehensive clock-face schedules (CCS) in conceptual terms represent a reorientation towards network-, accessibility- and supply-based transport planning. CCS aim to maximise the number of potential indirect connections between any origins and destinations within an area, also with a view on the option value of public transport, at the expense of direct connections and occupancy efficiency.

Crucially, CCS imply a reversion of the typical sequence of transport planning: A desired future public transport timetable is established first. Transport infrastructure projects are developed second, based on the requirements of the former. The aim is no longer the highest possible speed, but the optimal speed for a desired level of accessibility and connectivity. The definition of the final timetable becomes a highly important planning task, with the potential to greatly influence the distribution of accessibility levels and development potentials across locations.

Despite obvious links to regional and urban planning, the discussion on and actual design of CCS so far is still very much limited to the transport planning domain. Often, private transport engineering firms are tasked with the elaboration of the desired timetable, taking note of operational opportunities and constraints, but rarely engaging in public consultation and typically taking no regard of statutory regional and urban planning. While important operational constraints indeed often exist, this way the CCS planning process can appear to outsiders as an incomprehensible black box, so that scope for alternative decisions is not recognised and publicly discussed.

This conceptual contribution aims to introduce the CCS concept to the planning debate and to illustrate systematically and more clearly the potential for a stronger exchange between CCS and statutory planning in both directions. On the one hand, there are several situations inherent to CCS where a certain leeway for different alternatives exists, e.g. excess travel time on spokes or at terminuses. On the other hand, there are some more general considerations for a mutual influence. It also aims to highlight potential instruments for the improvement of public participation in the process.

The contribution closes with a demand for a public planning of CCS that is integrated with general spatial planning and considers all public (and active) modes to achieve a balanced accessibility planning.

Keywords: Regional planning, integrated urban and transport planning, transit-oriented development, accessibility, timetable

THE IMPLICATION OF A CO-CREATED SOFTWARE SOLUTION FOR MOBILITY IN RURAL AREAS (583)

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A digital divide between urban and rural areas is often assumed (Roßmann, 2020). In addition, the factors that need to be taken into account in software development are different in rural regions than in urban ones. The model project "Smarte.Land.Regionen" therefore aims to improve the digital provision of public services in rural regions. This will be achieved through a central platform with various software solutions (Pallangst, 2022). The solutions are derived from the needs and projects of two counties in order to be able to solve the challenges of as many counties in Germany as possible.

This presentation will focus on the mobility aspect of the project. The aim is to show how mobility in rural areas can be improved with co-operatively developed software solutions.

The research questions to be answered in the presentation are:

- What are the specifics of co-created mobility software for rural areas?
- To what extent can the developed solutions be complementary to the commercial offers available in the districts?
- How far can the results be transferred into other districts in Germany?

During the implementation of the pilot project, different methods were used to answer these questions. For example, a document analysis was carried out, requirements workshops were held and the functionalities of the developed software were evaluated together with the users. In addition, a regular exchange with stakeholders who want to digitize mobility aspects in the district took place in order to get an overview of the different activities.

The results show that there are many efforts in the counties to make mobility more digital and versatile. The advantage of collaborative development of mobility software is that it is less likely to fail to meet the needs of the population. However, the big challenge, especially in the area of mobility, is that there are already a large number of efforts by a wide variety of providers. Some of the providers are large commercial and government-funded, and the risk of duplication is high. Accordingly, it makes sense to focus on smaller niches in the mobility segment. The vision of integrating these into a larger digital mobility platform at a later stage should always be considered.

Keywords: smart regions, smart mobility, co-creation, mobility-as-a-service

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URBAN PLANNING FOR TIME-SENSITIVE DELIVERY: A STUDY OF LAST-MILE DELIVERY OF PERISHABLE GOODS IN DELHI (591)

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The increasing demand for perishable goods in urban areas requires the development of efficient and sustainable last mile delivery systems. This study, carried out by an urban planner, explores the potential of new technologies and delivery systems to improve the sustainability and efficiency of last mile delivery for perishable goods in Delhi, India. The research starts by analyzing existing literature, international and national case studies, to identify the issues and constraints in the existing last mile delivery mechanisms for perishable goods. The study goes on to estimate the demand for perishable goods, implement a strategy to minimize negative effects, evaluate its impact, and provide guidelines for the best approach in the study area. The research focuses on the spatial requirements of land and urban infrastructure to minimize the negative impact of perishable freight transport on the urban environment and maintain the quality of the goods being delivered.

This research builds on the idea that the movement of vehicles on roads is largely studied in terms of passengers, with the movement of goods yet to be explored in detail in terms of sustainability, affordability, and accessibility. The aim is to improve last mile delivery while preserving the urban environment and the quality of the goods, without disrupting the movement of passengers. The objectives of the research include understanding the last mile delivery mechanism, identifying the issues and constraints in the existing system, and exploring the most sustainable and efficient strategy.

This research offers valuable insights for urban planners and contributes to the understanding of the last mile delivery of perishable goods in urban areas. By considering the spatial requirements and urban infrastructure, the findings of this research can inform decision-making and help to improve the sustainability and efficiency of last mile delivery for perishable goods.

Keywords: Last mile delivery, Perishable goods, Urban Planning, Time-sensitive delivery

COMPARING THE APPLICATION OF DIFFERENT THEORIES OF JUSTICE IN EQUITY ANALYSIS OF TRANSIT PROJECTS: A CASE STUDY OF THE LISBON METRO CIRCULAR LINE (593)

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Transit plays a central role in the accessibility levels of urban populations (Guzman and Oviedo, 2018). Allowing access to different goods, services, activities and employment is a basic requirement in contemporary cities, and may be directly related to social inclusion (Griffin and Sener, 2016; Lucas, 2012). For instance, at peripheral places residents without car access face isolation, or at least more limited access to services and employment opportunities (Rodrigue et al., 2017). Therefore, a fair transportation system provides a sufficient level of accessibility to all under most circumstances (Martens, 2017). Although equity is a fundamental concept in transport policy, it could be relatively vague and therefore, susceptible to different interpretations. Thus, both the adopted definition and measurement of equity could significantly affect analysis results (Litman, 2018). Transport equity refers to the fair distribution of transport outcomes across spatial or demographic groups (Di Ciommo and Shiftan, 2017). In this context, the study explores different equity assessments based on the distribution of the impacts of transportation projects by applying four different theories of justice: Utilitarianism, Egalitarianism (Rawls, 2003), Walzer's Communitarianism (Walzer, 1983) and Capability Approach (Sen, 2009). The new Metro of Lisbon circular line (LMCL), under construction, is used as case study. Utilitarianism understands welfare (understood here as basic access) in a uniform manner, not paying attention into its distribution throughout different social strata, and not providing parameters to evaluate its distribution. In response to this limitation, the theories of justice from Rawls, Walzer and Sen provide the basis for two other principles "maximax" (Martens et al., 2012) and "minimum threshold" (Martens, 2017; Nahmias-Biran et al., 2017). These encompass dimensions of vertical equity (Litman, 2018) to assess the distribution patterns of accessibility benefits between different social groups. Accessibility is used here as it is a potential facilitator for the access to different opportunities (Hansen, 1959), is directly related to social inclusion. For this specific study accessibility indicators based on the gravity accessibility indicators are built (Geurs and Wee, 2004). As the analysis is focused on the distribution of accessibility to a specific transport project intervention (LMCL), only the opportunities within a 400m radius around each metro station, corresponding to the common walking distances to access and egress public transport systems (Aultman-Hall et al., 1997), are considered. The same radius is used to define the disadvantaged population groups. The opportunities used in the accessibility indicators are grouped into five domains: education, jobs, health, shopping, and leisure (Mavoa et al., 2012). Different weights are attributed to each domain, reflecting their relative importance in terms of the observed distribution of travel purposes (Wee and Geurs, 2011). Travel times are estimated using GTFS, added by time penalties resulting from transfers and waiting times (Farber and Grandez, 2017). The resulting accessibility indicators are estimated for the current situation and for the LMCL. For the Sen-based indicator, travel time thresholds were based on the observed average commuting time of 30-min (Bertolini et al., 2005). The "Maximax criterion" considers the accessibility for each station weighted by the population surrounding it, and it is estimated across

disadvantaged population groups. The results from the Maximax do not support the new line proposal, whereas utilitarianism does. The Sen based indicator provides a more ambiguous result as it is sensitive to the adopted travel time thresholds. This study starts an argument about different perspectives to measure and evaluate the distribution of benefits and burdens of specific transport changes based on equity parameters established by distinct theories of justice. Thus, it gives support to the need to establish fair accessibility standards to basic opportunities, which should be used in the assessment of transportation investments.

Keywords: equity, accessibility, transit, theory of justice

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HOW PUBLIC TRANSPORT ACCESSIBILITY IMPROVED IN THE DUTCH RANDSTAD DURING THE 2010S (594)

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The Dutch Randstad, and other cities and regions in the Netherlands, have a long-standing role as laboratories for developers of accessibility planning measures and their application in practice (Bertolini, 2017). Local and national policies for land use-transport integration in this region also look back on a range of innovations with international relevance, such as the transition from compact city to network city planning as an overarching spatial template (Venhoeven and van den Boomen, 2012), and the coordination of public transport and bicycle infrastructure development in order to maximise synergies between the two modes (Kager and Harms, 2017). In this contribution, we will use the Spatial Network Analysis for Multimodal Urban Transport Systems (SNAMUTS; Curtis and Scheurer, 2016) tool to take a longitudinal view at the evolution of public transport accessibility in the Randstad region and its component cities (Amsterdam, Den Haag-Rotterdam and Utrecht) over the 2010s. By documenting and visualising recent land use trends on the one hand, and public transport infrastructure and service development on the other hand, we will explore the question of whether, and where, this polycentric urban region has become more amenable to public transport usage for daily mobility tasks between 2010 and 2021. Introducing a new SNAMUTS indicator that captures the integration of bicycle and public transport accessibility, we will also map progress in the combination of these modes and conclude with some reflections on how the Dutch experiences can provide policy-relevant inspiration for the zero-carbon transformation of urban and regional mobility in other parts of the world.

Keywords: accessibility planning, public transport, Randstad Holland

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DETERMINANTS AND TRENDS OF UNIVERSITY STUDENTS' COMMUTING PATTERNS: THE ROLE OF ATTITUDES AND OF HOUSING ACCESSIBILITY (595)

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Large universities are unique places working like small cities within cities, usually with a significant impact on infrastructure and services and with negative externalities by intensive travel demand by car. To develop better and more inclusive and sustainable transport systems in places where the university is a dominant trip generator, we need to understand the determinants of modal choice. This study aims to extend the research on the factors influencing travel behaviour by providing an in-depth analysis, considering tendencies over time and transport policies. Studies over time have the advantage of identifying trends in the evolution of commuting patterns, ascertaining the effects of packages of measures and mobility plans and allowing for a deeper understanding of the influence of transport system barriers and the city evolution patterns (Cadima et al., 2020; Maciejewska et al., 2019).

The daily mobility in the context of the University Campus of the Faculty of Engineering of Oporto (FEUP) in Greater Oporto, Portugal, provides the empirical focus and helps to get more insights. The study explores the changing trends in various mobility indicators, such as housing accessibility (spatial location, distance to university, transport system structure and availability), urban quality, car ownership rates, modal choice reasons, cost, attitudes and time invested in travelling. Origins can be within a 72 km radius of the university, covering the North of Portugal and part of the Central Region of Portugal. The data analyzed were acquired through a face-to-face survey, applied in 2012, 2017, and 2023, of FEUP representative samples (N=1300) and data from the National Portuguese Census (INE, 2021, 2011, 2001), the Oporto Metropolitan Agency, the transportation system operators and Oporto University.

We performed spatial and statistical analyses for the three distinct scenarios (i.e., for the 2012, 2017 and 2022 academic years). We examined the spatial distribution of the data obtained using a Geographic Information System (GIS). Following the literature (Cunha and Silva, 2023; Pereira et al., 2021), we conducted a dasymetric mapping using hexagonal boundaries. We used a hexagonal grid, also known as H3 geospatial index system, at resolution 8 with an area of 0.74 km². We conducted the statistical analyses using SPSS with a significance accepted of $p < .05$. Exploring the distribution for the various indicators using independent samples T-tests (continuous data) and Pearson's chi-square (categorical data). Following previous studies, adjusted logistic regression models were conducted for travel separately for each academic year (Cadima et al., 2020; Maciejewska et al., 2019).

The results explained the tendencies and multifactorial origin of travel demand. First, according to the research, the results showed strong associations between travel attitudes and transportation by car and between residential location preferences and commuting on foot (Nash and Mitra, 2019; Sottile et al., 2022; Zhou, 2012). Differences in commuting choice behaviour between ungraduated and graduated, where graduated students are more likely to share a residence and use public transport in exchange for rent affordability and autonomy. Second, the

results showed gender differences, revealing that male students are more prone to car use than female students, although this tendency is declining. In this way, the study also provides room to reflect and contribute to a deeper understanding of travel behaviour, which may inform planning, policy and service provision relating to more inclusive transportation, urban development and new solutions for affordable housing.

Keywords: Commuting trends, University students, Mode choice factors, Travel behaviour, Greater Oporto

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NAVIGATING THE GANGES: EXPLORING THE ROLE OF INLAND WATER TRANSPORT IN ENHANCING ACCESSIBILITY, AFFORDABILITY AND ACCEPTABILITY IN VARANASI (602)

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As the world population continues to grow, urban areas are facing increasing congestion on traditional road and rail transport systems. In order to address this problem, there is a growing need to explore alternative modes of transportation. Inland water transport (IWT) is one such alternative that has the potential to alleviate congestion and provide additional mobility options for urban residents. However, the implementation of IWT is not without its challenges, particularly in terms of citizen acceptability.

This research paper examines the potential of IWT as a viable transportation option in the city of Varanasi, India, which is located along the Ganges River and its tributary, the Varuna. Through a mixed methods approach, the paper explores the correlation between various impact factors such as transit nodes, land use, tourism, environmental factors, and citizen acceptability in terms of accessibility and affordability for both passenger and freight transport. By using Varanasi as a case study, the paper aims to identify solutions for maximizing accessibility and affordability for the urban population and tourists to navigate through the water channels.

The findings of this study suggest that there are a number of measures that can be taken to improve the citizen's acceptance of IWT, such as addressing infrastructural challenges and modal integration, as well as aligning transport linkages with the developing urban pattern. Additionally, this research highlights the importance of considering environmental factors and the potential impact on tourism when planning for IWT. Overall, this paper contributes to the understanding of the potential of IWT as a viable transportation option in urban areas, and provides insights for urban planners and policymakers to improve the transportation system in Varanasi and to make better use of the Ganges River as a transportation corridor.

Keywords: Water Transport, accessibility, affordability, linkages

EXPLORING THE RELATIONSHIP BETWEEN GREEN-BLUE-GREY INFRASTRUCTURE (GBGI) AND QUALITY OF LIFE: A CASE STUDY OF BRISTOL, UK (625)

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Mental health, particularly for urban populations, is a growing public health concern. As urbanisation continues it is important to plan and develop towns and cities that maximise population wellbeing, and related health and social outcomes, whilst also contributing to the sustainability agenda. Understanding how people relate to and feel a sense of belonging in the urban environment is therefore an important research agenda. There is mounting evidence about the importance of green (e.g. parks, trees) and blue (e.g. lakes) infrastructure for the health and wellbeing of urban residents. There is also emerging evidence about the benefits of certain 'grey' features (e.g. historic buildings, active travel routes).

This paper reports on the preliminary results of a RECLAIM Network Plus project exploring the relationships between Green-Blue-Grey Infrastructure (GBGI) and a range of health and social outcomes in neighbourhoods across Bristol (United Kingdom). Using GIS and spatial analyses we link various GBGI features to self-reported health, social interaction and neighbourhood satisfaction from the Bristol Quality of Life Survey - an annual city-wide survey conducted since 2001. Multiple GBGI factors such as tree density, distance to quality green and blue spaces, and the presence of historic buildings and transport infrastructure are considered.

By exploring the relationship between different GBGI and self-reported quality of life we aim to be able to better understand the importance of these features for improving people's lives and reducing inequalities within neighbourhoods and across the city. The evidence we produce we hope will further our understanding of how citizens relate to their urban environment, and will help more inclusive decisions to be made by local councils about investment to ensure that all residents, wherever they live, benefit from GBGI which enhance quality of life for urban communities.

THE RISE OF CITIZENS VOICES FOR A GREENER EUROPE. THE CASE OF PUBLIC DEBATE FOR HIGHWAY 16 (ADRIATAICA), REGIONE APULIA, ITALY (649)

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The European Green Deal's (EGD) transition pathway has been one of the major challenges for Europe since the start of the 21st century, taking into account the joint effort which is required to harmonise their very diverse contexts and the different stages concerning the EGD's general goals.

When dealing with environmental issues, participation is not just an option, but an absolute pre-condition for institutional policies and projects' success. With this in mind, the paper presents a reflection on the capacity of certain participatory instruments (Democratic Innovation Schmidt, 2009) widespread in the European context to respond to the challenges posed by climate change, with particular reference to those with regard to spatial development. It shows some results of the first year of work carried out by the Department of Architecture of the University of Florence within the Project "PHOENIX. The rise of citizens voices for a Greener Europe" (Call: H2020-LC-GD- 2020 - Building a low-carbon, climate resilient future: Research and innovation in support of the European Green Deal). The Project, through a literature review and the reconnaissance of approximately 100 case studies, analysed four Democratic Innovations (Participatory Budgeting, Citizens' Assemblies, System of Councils and Forum/Conferences on Public Policies, Public Debate) identify their complementarity, divergences and methodological approaches, with special attention given to: 1) How they combine the four democratic goods (inclusiveness, popular control, considered judgment and transparency) defined by Graham Smith (2013) and 2) how they deal with the goals and challenges of the EGD. In this perspective, the paper analyses the public debate process regarding construction of an alternative corridor to the section of Highway 16 (called the "Adriatica" because it follows the Adriatic coastline) that passes through the municipalities of Bari, Triggiano, Noicàttaro and Mola di Bari in Regione Puglia, Italy.

Keywords: Democratic innovation, Urban planning, Public Débat

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THE IMPACT OF COVID-19 ON THE INCIDENCE AND SEVERITY OF TRAVEL PROBLEMS (655)

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Individuals may experience a variety of travel problems, ranging from accruing high travel costs and experiencing long travel times to relying on others for daily travel and even foregoing trips altogether. Travel behavior literature has also identified a range of personal and environmental factors that are associated with experiencing travel problems. These factors include, among other things, an individual's income status, vehicle ownership, household composition, and residential location. On top of these issues, the COVID-19 pandemic and consequent social distancing requirements have also affected travel through disruptions to employment, education, and health services as well as in public transport services.

Yet the impact of the COVID-19 pandemic and consequent social distancing requirements on the travel problems that people experience is yet to be fully understood. On the one hand, a considerable body of literature has identified an increase in the severity of travel problems that people have been experiencing during the pandemic. Specifically, disruptions and reductions in public transport service have been found to exacerbate the travel problems that people with low-income, women, and members of other marginalized groups experience (He et al., 2022). In some case, these effects on travel have exacerbated disparities in travel behavior between higher-income individuals and those with access to a vehicle and lower-income individuals, especially those relying on public transport (Kar et al., 2021). On the other hand, the shift to work from home and the reduced need to travel for large portions of the population could also result in improved travel for conditions some. Specifically, travel times are often shorter (Borkowski et al., 2021) due to lower travel volumes while public transport might be more convenient due to fewer passengers on board. More information is therefore needed on the multiple ways in which the COVID pandemic has affected people's travel and on the specific groups who have been negatively affected.

In this paper we examine how the COVID-19 pandemic impacted the incidence and severity of travel problems that individuals experience. We do so based on data from two similar surveys administered to individuals in the region of Tel Aviv, Israel. The first survey was administered in 2017-2018 while the second survey was administered in the winter of 2020-2021. Both surveys measure the travel problems that individuals experience. Among these problems are the time, cost, and effort associated with conducting a trip, relying on others for conducting trips, and foregoing trips due to time, cost, and effort that a trip requires. Pairwise comparisons and regression analyses test how key travel problems that people experience have changed from pre-pandemic to pandemic conditions. The results suggest that travel during the pandemic improved for most people across all income levels, but only if they have access to a vehicle. At the same time, individuals across all income levels without access to a vehicle did not show statistically significant differences in travel problems between the two periods. Combined, the results suggest a net increase in disparities in travel problems between people with and without access to a

vehicle. The results also confirm the effective use of survey designs to identify the incidence and severity of travel problems and to compare them over time.

Keywords: COVID, mobility status, travel problems, travel insecurity

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THE SYNERGY OF PEDESTRIAN-FRIENDLY ENVIRONMENT AND PUBLIC TRANSIT RIDERSHIP: AN ASSESSMENT OF METRO CATCHMENTS IN DELHI (686)

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The Sustainable Development Goals (SDGs) outline rapid urbanization as a crucial element of urban growth in developing countries. Sustainable urban growth results from the sustainable performance of various city functions. Urban mobility is one of them. The increased accessibility to mass public transportation, consequent urban revitalization, and decreased automobile dependencies are critical components in promoting sustainable urban mobility. The presence of mass public transportation does not cut down automobile dependencies independently. However, it requires complementary infrastructural development too. Pedestrian-friendly infrastructure is one of those complementary developments.

A comfortable walkable environment plays a fundamental role in the ultimate utility of public transportation (Li et al., 2018). The ease of spatial accessibility to the metro stations is the primary determinant of mass transportation (García-Palomares, Gutiérrez and Cardozo, 2013). Walk-friendliness of subway surroundings can reduce commuting costs, increase accessibility, decrease road congestion, and enhance agglomeration benefits, resulting in higher metro riderships. Therefore, the synergy of walkability and transit node is crucial in achieving SDG. The pedestrian-friendly infrastructure around the metro stations is essential in high-density cities, especially in rapidly urbanizing cities like Delhi (Sharma and Newman, 2017). Numerous factors affect the pedestrian environment, such as weather conditions and increased risk of crashes (Jain and Singh, 2021). Past studies indicate that fluctuation in walking conditions changes public transportation's ridership.

The study aims to examine the synergic balance between walkability and rider density of metro stations in Delhi. The pedestrian-friendliness of station surroundings is evaluated based on the level of services (LOS) using the average walking speed around stations. The average walking speeds are captured through the distance time matrix of Google API. The rider densities are calculated by delineating the catchment areas of metro stations using Thiessen polygons and station-wise access-egress data of the Delhi metro. The key findings suggest that the level of services (LOS) of walkability and rider density complement each other.

Keywords: Subway Ridership, Walkability, Thiessen Polygons, Distance Time Matrix

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COMPETING FOR HEALTH: COMPETITIVE ACCESSIBILITY TO HEALTHCARE SERVICES IN AN UNEQUAL AGEING METROPOLIS (693)

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The possibility to access a sufficient set of basic opportunities with reasonable temporal and monetary costs is crucial to guarantee healthy living conditions for the inhabitants of a setting. Such contribution of accessibility is obviously related to a basic opportunity such as health care but becomes even more relevant in the face of a significant health challenge such as demographic ageing. The possibility to access basic opportunities within a limited distance is crucial especially for older people, who need to remain autonomous but often experience significant mobility limitations. At the same time, the adaptation of existing setting to an increasingly older population may be even more challenging in settings that are rapidly ageing. Among many other Global South and especially Latin American countries, this seems to be the case for Santiago de Chile: here, the segregated structure of the city and the deep socioeconomic inequality strongly affect the contribution that the city can provide to the healthy living of its inhabitants, especially in the case of older people. On the one hand, the scarce economic resources available to older people affect their possibility to afford health care, so that most of the elderly population relies on public services. On the other hand, the polarization of the city affects also the spatial availability of health care services, which are often concentrated in the central or affluent areas of the city (especially when considering structures dealing with more complex health issues). As a result, older people in Santiago often find themselves competing for the access to basic health care services, raising thus an important challenge for the adaptation of an ageing city to an increasingly older population.

Drawing on these premises, the paper intends to assess the competitive accessibility of older people to healthcare services in Santiago de Chile, focusing on primary services. The analysis examines whether the elderly population meets a sufficiency threshold, both in terms of access to health care and in terms of being able to receive care at their facilities. Indicators and analyses of simple and competitive accessibility show that the distribution of primary health care is equitable and prioritises areas with lower income socio-economic inhabitants; these groups tend to have higher accessibility within a reasonable travel time, also considering the number of people that care healthcare facilities can attend. However, the results show that there are many areas where the sufficiency threshold is not yet reached, both in terms of travel time and mainly in terms of the capacity of the healthcare services. The analysis helps to highlight the importance of public transport, and the spatial positioning of health facilities, in bringing a greater number of destinations closer to people. It also highlights the importance of competition - taken as the distribution in the territory of the elderly population - as an evaluative tool to reveal which sectors are actually having less accessibility. The results provide significant insights for urban and mobility planning strategies, especially to promote access by proximity to a basic opportunity such as health care.

Keywords: competitive accessibility, ageing, healthcare

ANALYSIS OF THE SUROBOYO BUS PROJECT AS A MASS TRANSIT TRANSPORTATION BASED ON CAMPBELL'S MODEL (698)

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Surabaya Bus is one of the mass transit platforms in Surabaya, Indonesia, introduced by Mayor Tri Rismaharini as a form of compensation for MRT provision failure. Currently, this mass transit mode faces problems with accessibility and environmental impact uncertainty. Utilising Campbell's (1996) concept of The Planner's Triangle, namely the development conflict, property conflict, and resource conflict, this paper will try to argue the sustainability concept of Suroboyo Bus. In advance, by deploying the green city index and the sustainability index and categorisation by Huang et al. (2015), the index and measurement can be narrowed down to frame the measures and indices more comprehensively, revolving around transport efficiency, resource efficiency, energy efficiency, and social development. It resulted in 11 appropriate measures and indices in light of alleviating the current problems experienced by Suroboyo Bus.

Keywords: Campbell's model, Suroboyo Bus, sustainability, mass transit

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THE INTEGRATION OF ALTERNATIVE MOBILITY SERVICES INTO THE PUBLIC TRANSPORT SYSTEM IN AUSTRIA: LEGAL ASPECTS (700)

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Studies show that alternative mobility services such as car, bicycle and E-scooter sharing, carpooling or on-demand microtransit services can contribute to the transformation towards sustainable mobility: as a way of supplementing local public transport on the last mile they have potential to reduce motorized private transport and greenhouse gas emissions. However, in order to realize this potential, a coordinated strategy and integrated planning for the different types of mobility services is necessary.

A look at the mobility sector in Austria shows that there has been a lack of such planning so far. Although numerous different services, referred to as "new" mobility services, have been provided by various operators for quite some time, they have not yet become established on the market on a broad and comprehensive scale.

In Austrian transport law, alternative mobility services currently have hardly any legal basis at all. A classification within the existing legal framework is hardly possible, as discussions that have been going on for years show. While in Germany, for example, approaches to a legal definition have already been found (e.g. Carsharing Act, new legal basis of on-demand transport in the Passenger Transport Act), in Austria there continues to be legal uncertainty for operators with regard to market access regulations. On the other hand, there is also a lack of legal foundations for an integration into the public transport system - which is essential for these services to be able to contribute to making mobility sustainable and at the same time ensuring that mobility needs are met.

Mass transportation services provided by the public sector stand in contrast to alternative mobility services, predominantly offered privately, by non-profit associations or municipalities and often relying on voluntary engagement. In Austria, the current system for planning, organization and financing established by the law only applies to the conventional public mass transport services, is complicated in detail and characterized by fragmented responsibilities of different authorities. Transport associations play a key role in this system and, together with the transport operators, take on the task of coordinated service planning and setting tariffs. Alternative mobility services remain mostly outside of this system. As a result, considerable potential is not used, which would exist through a better link with regular transport, through integration into the tariff systems, etc. The increasing diversity of actors in the interplay of private and public actors and the aspect of multimodal mobility are not sufficiently reflected in this system and the corresponding legal foundations.

It is the task of the law to provide a reasonable framework for alternative mobility services and make their integration possible. Therefore, it is necessary to analyze the legal possibilities for integration into the system of planning and organizing and for improving cooperation between different actors. In this regard, cross-cutting issues such as the availability of infrastructure for alternative mobility services (e.g. mobility hubs), technical possibilities of coordination through

digital platforms, but also the linking with other systems closely related to mobility (especially housing and work) also need to be considered.

Starting from an analysis of the current legal basis possibilities should be outlined for creating a holistically conceived legal framework for integrated planning of a new "public mobility" as a mix of traditional public transport and new mobility services.

Keywords: alternative mobility services, sustainable mobility, mobility transformation, mobility law, public mobility

TOWARD A GREEN CAMPUS: GIS-BASED ANALYSIS TO LOCATE THE OPTIMAL BIKE-SHARE STATIONS: THE CASE OF ISTANBUL TECHNICAL UNIVERSITY, MASLAK CAMPUS (721)

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Istanbul Technical University was ranked 57th out of 100 universities in Europe in 2021 in the UI Green Metric ranking. Furthermore, Istanbul Technical University is first in rank in Turkey. Moreover, transportation is one of the categories in the UI Green Metric ranking framework. Transportation policies that restrict the number of motor vehicles on campus and promote bicycle and campus bus use provide a healthier environment. Nowadays, a remarkable number of cities are accomplishing bike-share systems as a sustainable urban mobility approach. One of the crucial factors of prosperous bike-share outcomes is the integration of bicycle station locations with other public transportation alternatives in order to increase accessibility and bike demand.

In this research, we use a GIS-based approach in order to analyze the spatial distribution of existing stations with our data collected via Open Street Map and site analysis inside the Istanbul Technical University campus. Accordingly, the location-allocation containing Target Market Share (TMS) and Maximum Coverage and Minimum Facility (MCMF) are taken into account to analyze the accessibility of student shuttle stations, faculties, and social facilities with bike-share stations within the Maslak campus. We analyzed Location-allocation models to specify the potential bicycle dock locations accessible to the highest number of students within a 200-m buffer around existing student shuttle stations. The preliminary results show that analyzing the location of existing bike stations and optimizing the new locations can improve active transportation usage inside the Maslak campus to create better accessibility for students.

Keywords: green campus, Bike-share system, Location-allocation, GIS, Istanbul Technical University

15-MINUTE FOR WHOM? MEASURING URBAN WALKABILITY/ROLLABILITY FOR THE BUILT ENVIRONMENT TO ENHANCE RESILIENCE FOR ALL IN THE POST-PANDEMIC ERA (739)

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15-minute neighbourhood is a popular concept that points to key principles of healthy and sustainable neighbourhoods, where residents have safe and convenient access to the goods and services needed for daily life (Weng et al., 2019). In the face of the COVID-19 crisis, the concept has become even more relevant to planning, promising an environment that fosters resilience in its residents for managing stress and maintaining health through walking more while staying in and around their homes and accessing daily necessities without traveling beyond their immediate neighbourhoods.

However, the 15-minute neighbourhood and associated walkability discourses still often miss the perspectives of persons of varying ages and abilities (Stafford and Boldwin, 2018). For instance, common indicators related to 15-minute neighbourhood concepts have thus far have largely taken a ‘one-size fits all’ approach, typically benchmarking the 15-minute walking distance based on an average walking speed for all population. Yet, these services and amenities within the distance may not be walkable for persons outside of the typical profile of an able-bodied, working age [and often male] adult (Imrie, 2003)—who are in fact more in number than the ‘average’ citizens.

Despite the rhetoric, the efforts of fostering 15-minute neighbourhood also often overlook the quality of infrastructures that pose barriers in built spaces that affect non-able-bodied persons. Literature has pointed out that not only distance but also the configuration of where people walk, or ‘roll’ in wheelchairs, is a determining factor of whether older adults and persons with mobility issues are able to conduct daily activities outside of their homes (Herriges, 2019). Examples which better facilitate a 15-minute neighbourhood include: clear separation from roadways, shade to prevent heat-related discomfort and illnesses, and proper curb cuts between point A (e.g., home) and point B (e.g., store) within the 15-minute travel area. However, a lack of routinely collected data on these measures has hampered research, especially in local contexts, in discerning the true capacity for so-called 15-minute neighbourhoods to facilitate walking/rolling and enhance the resilience of persons with all ages and abilities against adverse events such as the pandemic (Armitage and Nellums, 2020).

Using a mid-size Canadian city (Halifax) centre as a case context, we developed a GIS platform containing a wide range of 15-minute neighbourhood indicators, combining common walkability-related built environmental measures (e.g., spatial distance to services, street connectivity, access to active transportation) and measures of walking/rolling infrastructure quality. For the latter, the research team conducted an extensive street audit with Google Streetview (Clarke et al., 2010) to determine the relative scores of sidewalk infrastructure quality (presence/absence, curb cut quality, tree shade coverage, tactile attention indicators) for neighbourhoods. The public-facing platform allows calculation of 15-minute neighbourhood ‘potential’ across the city for municipal planners as well as the public.

While Halifax is considered relatively walkable for a North American city with a high level of access to services and amenities, the addition of alternative distance measures and walking/rolling infrastructure quality scores revealed its low capacity to become a city of true 15-minute neighbourhoods for all. This research offers a critical look of operationalizing a popular planning ideal while proposing future directions of research that can better frame the planning agenda of creating more equitable, inclusive, and resilient communities from the perspective of older adults and persons with disabilities.

Keywords: walkability/rollability, 15-minute neighbourhood, community resilience, GIS, Canada

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ACCESSIBILITY AND QUALITY OF LIFE: USING NETWORK ANALYSIS TOOL TO ANALYZE ACCESS DIMENSION FOR URBAN QUALITY OF LIFE (748)

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While access to facilities relating to everyday life has direct role in uplifting quality of life, research on assessing network-based accessibility for urban quality of life remains underdeveloped (Wu *et al.*, 2022) especially for cities from developing world (Liu, Ettema and Helbich, 2022). We used geospatial network analysis techniques to measure the accessibility to everyday life facilities for pedestrians, cyclists and cars using the case study of Lahore Pakistan. Access scores were generated and later transformed into quality-of-life mapping for the Lahore City. The results show the potentials of quick accessibility scan of the city using the methodology of Geographic information Systems and Open data for forming policy guidelines for the cities with similar contexts.

Keywords: Access to Facilities, Accessibility, Geographic Information Systems, Quality of life, Lahore

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Funding

This study is funded by HEC Overseas Scholarship Pakistan.

INTERRELATIONSHIPS BETWEEN PERCEIVED ACCESSIBILITY, PUBLIC TRANSPORT MODE CHOICE AND ACTIVITY SPACE IN PERIPHERAL AREAS: A CONCEPTUAL FRAMEWORK (749)

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Individuals experience important life-changing events during the course of their lives. These life-changing events may alter individual evaluations of accessibility of public transport and affect activity participation. For example, life changes such as leaving high school, starting tertiary studies, entering the market, getting married, and having children, have been reported to increase the likelihood of changing transport mode choices (Collings et al., 2022; Olde Kalter et al., 2021). This is exacerbated by spatial location with peripheral areas that experience precarious access to public transport. Spatial location can influence perceptions of accessibility of public transport which may impact public transport mode choice and affect activity participation (Pot et al., 2021). Participating in daily activities can be influenced by infrastructural (availability of varying public transport modes), geographical (spatial location relative to the available transport system), socio-economic (income, social status) and individual (perceptions of convenience, safety and comfortability) factors (Curl, 2018; Gao et al., 2022; Jamei et al., 2022; Lucas, 2012; Schönfelder & Axhausen, 2003; Tiznado-Aitken et al., 2020). These cross-cutting factors imply that there are differences in the ways that particular groups of individuals perceive access to public transport. Thus, some individuals may become more vulnerable than others. For example, young adults face a plethora of life changes in a short space of time, they become vulnerable and at risk of transport-related social exclusion. Some may have limited financial resources to spend on public transport with no access to private vehicles, while some may be constrained by spatial location such as those living in peripheral areas where transit accessibility may be precarious.

The consequences of the inability to access public transport can contribute to transport-related social exclusion and ultimately transport poverty (Lucas, 2012; Martens, 2006). Hence, it is important to consider subjective measures of accessibility when measuring public transport accessibility because calculated measures of accessibility may obscure the inequalities that people experience at the individual level (Pot et al., 2021). Gao et al., (2022) argue that the inclusion of perceived accessibility in understanding the factors that influence access to activity locations can illuminate disparities between those for instance, with access to cars versus those who use public transport; between households of different socio-economic status; and associated socio-demographic characteristics within a group. Notwithstanding these issues, to date, there is a paucity of research on factors affecting perceived public transport accessibility, especially for individuals living in peripheral areas.

This study aims to investigate factors influencing the perceived accessibility of public transport and the ultimate effect of these factors on public transport mode choice and activity participation for individuals staying in peripheral areas. A systematic literature review is conducted on the factors affecting perceived transit accessibility, transit mode choice, and activity space and the possible interrelations between these factors, especially in peripheral areas. Citation platforms

Scopus, ScienceDirect and Google Scholar are scanned systematically for journal papers published between 2010 – 2023. The systematic literature review will include a combination of the keywords on perceived accessibility, public transport, mode choice and activity space. The literature review will result in a conceptual model on the possible interrelations between the abovementioned factors and highlight the areas that require further empirical research.

Keywords: Perceived Accessibility; Public Transport; Activity Space; Transport-Related Social Exclusion; Literature review

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ARCHETYPES OF COLLABORATION IN URBAN AND TRANSPORTATION SCENARIOS (764)

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Even though the participatory processes in foresight applications have shown relevant potential for dealing with changing and uncertain contexts in the sectors of land use and transport planning, there is still a theory-practice gap to be overcome. While future narratives are mostly focused on specific aspects linked to land use and transport planning (Timms et al., 2014) (e.g., technological developments; advances in transport infrastructures; new energy sources), limited attention has been paid to a key agency factors (Wangel, 2011) that can increase the usability of future scenarios in practice: the collaboration mechanisms that should be activated between stakeholders, the public, and professional domains to make transport futures happen. To address this, the present research shows a novel scenario-building process that explores different dimensions of collaboration (relational, structural, and cognitive), which serve as an input for obtaining a set of future scenarios. First, a review of scenario narratives is conducted to identify archetypes of collaboration. Second, such archetypes of collaboration serve as the basis for a two-round questionnaire to design future scenarios, which was filled in by a total of 33 experts. The empirical focus was the city of Valladolid, Spain, where the strategic goal of integrating land use and transport is prioritized.

The obtained results during the first questionnaire round enabled the confirmation of collaboration archetypes identified during the review of scenario narratives. These results were the input for the second questionnaire round, in which participants were asked to provide insights into the future of land use and transport, assuming the archetypes of collaboration as an intrinsic part of the future narratives. The results facilitated the representation of key dimensions of collaboration to take into consideration in the future of land use and transport planning. Furthermore, collaboration archetypes proved to be useful for identifying key divergences based on underlying worldviews, which were finally used to build exploratory future scenarios where different collaboration forms took place. Thus, by illustrating the collaboration processes implicit in scenario narratives, an innovative research avenue is open for bridging the applicability gap of scenario planning.

Keywords: collaboration; archetype; scenario planning; transport system; urban planning

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LIFE SERVICE TOD SPACE ORGANIZATION AND PLACE CREATION FROM THE PERSPECTIVE OF PEOPLE (784)

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The establishment of the comprehensive hub station has brought about an increase in the flow of people, which is regarded as a positive benefit of the comprehensive development of TOD. With the construction of the station, the surrounding area is not only a transfer station for people, but also a dynamic place for people to stay, communicate, create and even work and live about the flow of people. Based on the fact that the human-station-city mode of TOD4.0 model is the mainstream of revitalizing the block and driving the development of the area, the development of the Intelligence-human-station-city mode of TOD5.0 model is proposed for the first time, emphasizing more accurate demand perception, more accurate element allocation, more accurate spatial link and more accurate development timing, reflecting the human perspective design and human concern. Based on the project practice and the problems of parking difficulty, lack of rest area and inconvenient transfer in TOD spatial organization from the perspective of people, this paper explores the development process of life service TOD with people's destination as the end point and people's activities as the core to provide service support of different layers of station-core area-surrounding area-whole city. Explore the life service TOD space organization and place construction from the perspective of people in the new stage.

Keywords: human perspective; Communication; Interaction; Contact; Grey space; Positive space; design

POLICY PACKAGING FOR LAND USE AND TRANSPORT INTEGRATION PLANNING: A STATE OF THE ART LITERATURE REVIEW (789)

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The transport sector, especially urban road transport, makes a significant contribution to GHG emissions in Europe (e.g., EEA, 2028; Dasgupta et al., 2022). To work towards a reduction of these GHG emissions, the EU acknowledges the need for interdisciplinary planning approaches to deal with sustainable urban transport objectives and encourages cities to develop a Sustainable Urban Mobility Plan (SUMP). This provides local authorities with a framework to strategically plan their sustainable urban mobility goals (Gavanas et al., 2016). The transition to a more sustainable urban transportation sector, however, necessitates paying attention to all transport flows, including both urban freight and passenger transport (Rosales & Haarstad, 2022). Studies show that, even though numerous cities invest in SUMP development, the integration of passenger transport and freight transport is unusual in urban areas (Cavallaro & Nocera, 2022) and freight transport is still a neglected topic by most city administrations (Kiba – Janiak et al., 2021).

Another approach that has the potential to enhance the sustainable development in regions and cities is the integration of policymaking in the fields of land use and transport planning (Banister et al., 2008). The integration of land use and transport policies can assist in achieving cross-sectoral goals (Stead, 2008) and it is expected that the integrated planning of Land Use and Transport could deal with sustainability objectives (Duman et al., 2021). Nevertheless, the implementation and use of Land Use-Transport Integration (LUTI) in practice faces multiple challenges in the form of institutional and organizational differences between planning fields (Duman et al., 2021; Van Geet, 2019). Moreover, also within the field of integrated land use and transportation planning the focus of most studies has been on passenger transport (Lee et al., 2021; Li et al., 2019; Song et al., 2021). and urban freight has been less commonly considered or in isolation in approaches that specifically focus on urban logistics (e.g. SULPs: Aifandopoulou & Xenou, 2019).

Policy packing has been recognised as having potential for integrated land use and transportation planning (Van Geet, 2021) and could also have the potential for including both passenger and freight transportation. Policy packaging can be used to design a coherent bundle of policy measures that address the same policy objective(s) and when carefully selected could be more effective and efficient in comparison to one single policy measure (Givoni, 2014). However, more research is needed to understand how policy package can be designed and applied in practise (Dijk et al., 2018; Givoni, 2014; Maor & Howlett, 2023) and how policy packaging can be used as a procedural instrument to bridge the differences between planning fields (Duman et al., 2021). Therefore, the aim of this study is to investigate how ‘policy packaging’ can contribute to the integration of land use and transport planning and include both passenger and freight transport to contribute to sustainability goals.

The study uses a systematic literature review to research the concepts and theories for policy packaging in general and specifically for LUTI planning, in addition to the role of integrated

(passenger and freight) transport in LUTI planning. The purpose of this study is to establish a conceptual framework and provide an answer to the following research question: “What is the current knowledge (gap) on policy packaging for LUTI planning including integrated transport?”. Peer reviewed articles from the Scopus database will be selected through a keyword search identifying their possible relation and overlap. The following keywords are used within this systematic literature review: policy packaging, integrated transport, sustainable transport, Land Use and Transport Interaction/integration, passenger and freight transport.

Keywords: Land Use and Transport Integration (LUTI), integrated planning, policy packages, integrated transport

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MOBILE RURAL AREAS (RÖRLA): NEW FORMS OF COORDINATED TRAVEL COMBINED WITH EXISTING PUBLIC TRANSPORT SERVICES, PART 1, 2022-2023 (822)

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Public transport has greatly reduced the number of passengers during the pandemic. It now needs to be rebuilt in a more modern way to meet the needs of individuals to move around. Especially in rural areas where the range of traditional public transport is limited.

Analysis of adaption of requirements from intended travelers with the transport options in the form of trips partly paid by society (public transport, special public transport and medical trips) as well as other vehicles that move in rural areas, will be carried out.

The potential for using existing vehicles to increase access to transportation opportunities through coordination to jointly build a completely new system to enable the necessary sustainable transportation is analyzed.

Legislation, rules, and procedures may need to change to enable this coordination. In order to practically implement coordination in time and space, developed computer support needs to be used and tested in the form of digital twins before real changes are implemented.

In the project, knowledge is developed about different forms of collective and coordinated travel. Then possible solutions are tested in the existing public transport together with other offerings in digital twins in a few different rural areas.

The initial analysis steps are:

- Identification of factors of importance for coordinated trips in rural areas for different traveler groups.
- Analysis of changing linear public transport in rural areas to become more need-based.
- Analysis of synergy potential between special public transport (travel service and medical trips) and demand-driven public transport in a selection of villages

The analyzes will be followed by evaluating effects for different degrees of coordinated travel using computer support and digital twins in test areas and control areas respectively.

The first part of the study (2022-2023), will show how a range of different forms of coordinated travel can look like, as well as a digital twin of the existing public transport.

Keywords: Public transport, Countryside, Co-ordinated trips, Digital twins

MAPPING OF 15-MINUTE CITY PRACTICE IN EUROPEAN CITIES (839)

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The concept of the 15-minute City is based on the idea that city dwellers should be able to cover most of their daily needs within a 15-minute radius by walking and cycling while connecting to different districts and travelling more considerable distances by other forms of sustainable transport. The 15-minute City seeks to establish integrated and mixed-used neighbourhoods at large, which are crucial to reducing GHG emissions in the transport and logistics sector and adapting urban environments to the challenges of climate change.

The 15-minute City concept brings an attractive and holistic perspective that helps demonstrate co-benefits for climate change adaptation, health, and social cohesion. Its focus is on rethinking the existing mobility system and urban morphology to encourage sustainable mobility choices, redistributing urban space and reorganising daily activities while creating attractive and integrated neighbourhoods. Nevertheless, the concept represents a standardised template. The practical implementation of this concept is highly context related and depends on demography, the local socio-economic structure of population and economy, morphology, and institutional setup of neighbourhoods.

This paper proposes a mosaic of the status quo and core policies for bringing the 15mC concept to the ground, suggesting a critical analysis of the collection and systematisation of the 15mC local definitions and good practice on strategies, instruments, and implementation.

The paper proposes an overview of the mosaic of international practical definitions, strategies, instruments, the implementation experience, needs and challenges for research and innovation connected to the 15-minute City concept and related policy fields.

Practices of European cities are organised in four main key areas: (i) Sustainable urban mobility, (ii) people-centred urban spaces and planning, (iii) smart urban logistics, production, and service sites, (iv) urban governance for mobility transition.

The paper also presents a deeper analysis of selected cases focusing on the examples of Paris' "Ville de ¼ Heure", Portland's "Complete Neighbourhoods", Melbourne's "20-Minute Neighbourhoods", the "45-min City" in Singapore, Barcelona's "Superblocks" ("Superillas") or Bogotá's "Barrios Vitales".

Keywords: 15-minute city, accessibility, people-centred, mobility transition

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MEASURING THE INTEGRATION OF BIKE-SHARING LOCATIONS WITH PUBLIC TRANSPORTATION SYSTEMS (853)

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Growing cities make public transportation essential for citizens to transit in urban areas, primarily in metropolitan areas, and appropriate measures should be taken to facilitate public accessibility. Bicycles promote low greenhouse gas emissions and help to increase society's mental and physical health. Public bicycles can solve first-mile and last-mile problems in origin-destination conditions.

In metropolitan cities, bike share systems (BSSs) are seen as an efficient option for facilitating sustainable mobility. The placement of bicycle stations is one of the most important aspects in the development of these projects in terms of future needs (people and their activities in the city and public transportation stops). In this regard, the locations of bicycle-share stations are critical in order to implement the effective BSSs. Moreover, residents must gain from public transportation by using BSSs and reducing travel time by integrating bicycles and public transportation. For this reason, this article aims to analyze bicycle station locations in the Fatih region. This historical and commercial region is the city center of Istanbul and optimizes the new location of stations with the location-allocation model of Geographic Information System (GIS) techniques. BSS station locations near subway transportation stations help increase accessibility to metro stations by walking (origin) to bicycle stations and cycling to metro stations or final places (destination). The findings reveal that bicycle-sharing networks lower the total transmission time and the total path distance that riders travel considerably. Finally, a public bike-sharing system decreases passengers' trip times and enhances the effectiveness of public transit systems within the city, especially the metro and bus, which are examined in this research and its impact on citizens' daily lives.

Keywords: Bicycle Sharing System Station, Public Transportation Integration, Location-allocation, Fatih district

THE SPATIAL JUSTICE OF URBAN PUBLIC SERVICE FACILITIES IN NORTHWEST CHINA FROM THE PERSPECTIVE OF LIFE CIRCLE: A CASE STUDY OF KARAMAY (857)

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The life circle is a concept of the walkability of people in urban space to get the daily public service. Since Shanghai first proposed the 15-minute community life circle, the Chinese government has promoted the convenient and walkable community life circle in major cities.

Spatial equity and justice in the life circle means equal walking accessibility to public space, especially to the public facilities in the community. In this research, the spatial equity and justice is evaluated quantitatively in the downtown area of Kalamay, based on the accessibility analysis of public service facilities in the community level. By obtaining the spatial data of educational, medical, elderly care, cultural and sports facilities, the 2SFCA model is used to describe the spatial accessibility of public facilities in three different levels with 5, 10 and 15 minutes. In each level, different kinds of facilities are discussed with the standard of life circle planning guide to figure it out whether they match the population distribution.

Furthermore, in order to highlight the principle of spatial justice in life circle, the research matches the spatial distribution of facilities via types and levels with the residents of different age groups. As a result we found that in the 15-minute life circle, all kinds of facilities have a better accessibility than 10 and 5 minute circles. Elderly care and sports facilities have the worst accessibility. In terms of the spatial equity and justice, primary school performs best and Nursing home performs worst. Under the background of inefficient land use in Karamay, the mixed use of functions of different facilities should be encouraged to achieve the purpose of spatial equity and justice by space-sharing.

Keywords: life circle; accessibility; spatial equity; walkable community; mixed use

IDENTIFYING FACTORS FOR ENHANCING PUBLIC TRANSIT UTILIZATION BASED ON EXPERT OPINION: A CASE OF BHUBANESWAR, INDIA (870)

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Today, mobility has become a basic need. Whether it is the movement of people for work, education, shopping, or leisure, it has become an everyday affair. Thus, planning for efficient transportation systems augmenting human mobility becomes essential. However, the transportation system in most of the world's cities is far from being efficient and desirable, especially in developing nations. Congestion, excessive emissions, traffic accidents, subpar public transit, energy depletion, and environmental deterioration are just a few major issues urban areas are dealing with due to improper transportation systems. Among these myriad issues, the lack of accessibility and affordability for the urban poor is a major concern. The issue is being aggravated by the fact that many cities are investing less in public transit and focusing more on expanding their networks to accommodate extra private cars. Unfortunately, the focus has shifted to moving cars instead of moving people.

The negative environmental and social consequences of poorly planned transportation systems can be drastically reduced by applying sustainable transportation solutions. To promote sustainable transportation, investing in and strengthening the public transit systems is crucial. This makes it essential to understand how to plan for a better public transit system. For that, it becomes vital to investigate and prioritize the factors that have led to improvement in the public transit system. With this motivation, the present research was carried out, aiming to identify factors that help enhance transit utilization with the help of experts' opinions. The investigation was conducted in a developing world scenario by taking the case of a growing city - Bhubaneswar, India.

Bhubaneswar is the capital and the largest city of the Indian state of Odisha, with a population of 837,321. It is a city of temples and one of the first planned cities of Independent India. Public transportation was only introduced in the city in the year 2010. A moderate ridership of 40,000 passengers per day was observed in the initial years. However, the city's public transit received an overhaul in the year 2018 in terms of its routes, service characteristics, branding, and infrastructure, and currently has an average ridership of 175,000 passengers per day. The city public transit organization also received the 'Most Innovative Bus Transit System in India' Award in the 'Transit & Mobility' category at the Second Urban Infra Business Summit & Awards 2022, making it an interesting case to study.

In the present study, several major aspects of public transit are identified from the literature, including service quality (e.g., service headway, fare, schedule adherence, passenger information system, comfort), safety and security, gender sensitivity, social inclusion, environmental sustainability, etc. To determine the factors that led to the enhancement of public transit ridership, an expert opinion survey was carried out using the Best-Worst Scaling (BWS). The experts included urban planners and researchers who understand the city and are also working on various projects in the city. As per the preliminary results, improvement in factors like service headway, fare, schedule adherence, passenger information system, safety and security is found

to be responsible for the enhanced public transit ridership. The identified factors may be prioritized to enhance public transit ridership in similar situations. However, minimal improvement was observed in critical factors like gender sensitivity and environmental sustainability, and thus, a vast scope for improvement exists. The results and observations are case-specific, but the findings are expected to be of interest to urban planners across the world in similar settings.

Keywords: Public Transit Planning, Expert Opinion, Best-Worst Scaling (BWS), Gender Sensitivity, Social Inclusivity

EXTRAORDINARY PROGRAM FOR URBAN REGENERATION: PLANNING THE SYSTEM OF CONNECTIONS TO FOSTER THE SUSTAINABLE METROPOLITAN INFRASTRUCTURE (900)

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The obsolescence of the hierarchical model in the organization of the urban space, the crisis of traditional models of service organization, the new services appearing on the web, require non-uniform, non-standardized and hierarchical responses to environmental, socio-cultural and health emergencies.

Urban planning cannot be the result of a sum of extraordinary programs, nor a set of applied techniques. A paradigm shift is needed to manage a sustainable urban growth scenario, looking at all the elements that are radically changing the relationship between the demand and supply of urban services, within a common perspective of improving the quality of living conditions, in terms of safety, health and well-being.

The project proposal for the Sant'Avendrace district in Cagliari (2017 – currently underway) fits into this background, as part of the “extraordinary program of interventions for urban redevelopment and the safety of the suburbs” (Law no. 208/2015), the so-called "Suburbs call for tender". Starting from a neighbourhood affected with serious problems of spatial fragmentation, reduced crossing capacity, accessibility and usability, an operational path is outlined on the plan of an integrated and multi-scale system of connections that links and makes accessible new uses, public spaces and urban functions (Fig. 1).

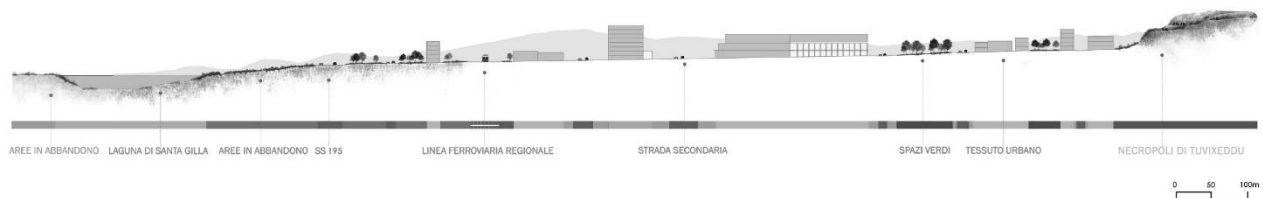


Figure 1. territorial section

Moreover, an integrated multi-sectoral planning is encouraged, going beyond the limits of the interventions and the functional lots, extending its effectiveness in a synergistic and complementary perspective with some programs already financed and to be defined in the metropolitan government framework of the city of Cagliari.

The operational device planned for the Sant'Avendrace district in Cagliari, stands as a paradigm of an important change in the approach to urban regeneration policies from at least two points of view. In the first place, as an operational tool, through the declination of predefined types of action by the ministerial call for tender in operational objectives and planning “recommendations”. Secondly, the interventions are framed within a unitary strategy - the metropolitan sustainable infrastructure (EC, 2014).

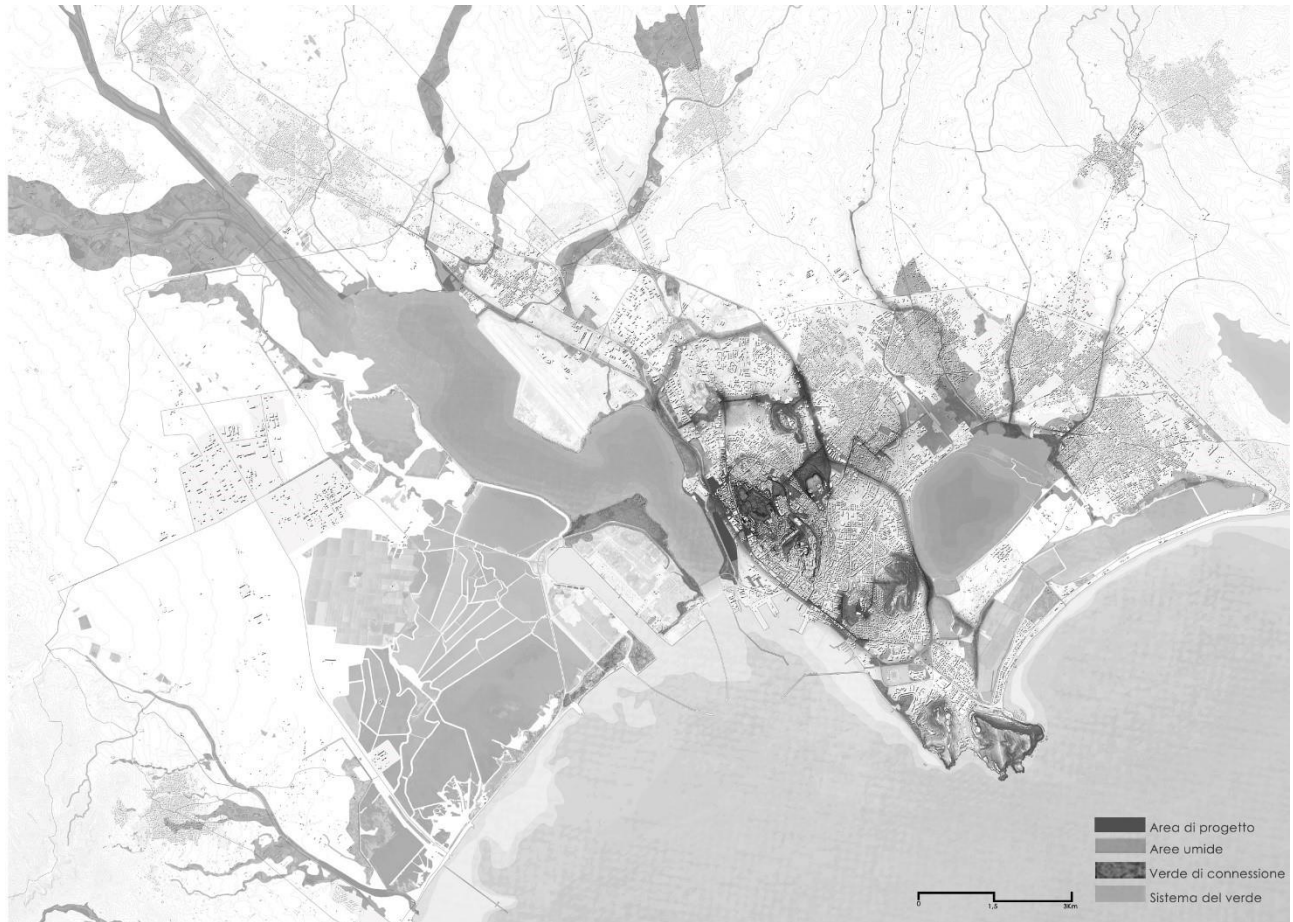


Figure 2. The metropolitan sustainable infrastructure

The framework of the environmental infrastructure allows decision-makers to address the interventions by means of a system of physical and relational connections among spatial elements at different scales (Congiu *et al.*, 2018). It supports sustainable forms of living, their accessibility to green areas and proximity services, as well as it highlights and reinforces the role of ecosystem services in the government of the city (Müller *et al.*, 2010). The new system of connections constitutes the load-bearing skeleton along which a series of new urban and territorial functions stand, such as a sports-educational park, a new social housing complex and a new system of public micro spaces, which involve some marginal and degraded areas, becoming accessible for the entire metropolitan city of Cagliari. Selected paths and public spaces physically and perceptually connect the district with the environmental centralities (Maciocco, 2010), encouraging new urban practices, fostering the fruition and broadening the spectrum of opportunities for the entire population that lives and uses these places.

Furthermore, the different services and new urban functions restore centrality to those hybrid and intermediate landscapes, which can be recognized in urban environments, such as areas pertaining to services and other free areas, emphasizing the fruitive and social dimension as well as the ecosystemic one.

The paper illustrates in detail the main interventions, exemplifying the contribution of the actions, single and combined, to the pursuit of the operational objectives according to the considered requirements.

Keywords: System of connections; sustainable infrastructure; suburb regeneration; ecosystem services

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GENDER AND TRAVEL BEHAVIOR DIFFERENCES BETWEEN ARAB AND JEWISH COMMUNITIES IN ISRAEL (914)

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This study explored the differences between Arab and Jewish traveler behaviors to an urban tourism destination to assess whether the differences could be attributed to factors related to a history of or related to differences in culture (ethnicity).

This research addresses the critical but understudied issue of ethnic gender differences in travel behaviors in traditional societies, between Arab and Jewish in Israel. The data gathered through this process were analyzed by a variety of statistical means to reveal that rather stark ethnic and gender distinctions in travel behavior exist.

The analysis of the data was done by dividing it into the types of communities as well as the sector of the traveler. In this way three groups were formed, the first being Jews travelers living in Jewish settlements, the second being Arabs living in Arab settlements (Tira, Taybe, Kfar Qusim, Qalansawe) and the last group being Arabs travelers living in Jewish settlements.

The analyzed sample consisted of 13506 households, of which 13101 Jewish households and 402 Arab households. The average age of the Jewish group is 34.03 (Sd=23.33) and the average of the Arab group is 22.9 (Sd=16.35). The number of children in each household is 1.48 among the Jewish and 1.43 among the Arab households.

Results showed that proportionally more Jewish travel during the day than Arabs and an opposite pattern emerges when analyzing the travels at the end of the day.

when escorting is carried out, it is for a person from the household (in a similar proportion in both groups) and there are fewer cases of escorting a person from outside the household. Relatively speaking, the number of trips with a person outside the household is double among Arabs than Jews. When examining the means of transportation with which the activities were carried out, about a third of the activities, both among Jews and Arabs, are done by private vehicle. After that, the most common means of transportation is walking (17.73% among Arabs and 21.14% among Jews). Relatively, Jews (5.50%) travel twice as much by bus compared to Arabs (2.04%). Despite the above, close to 22% of the activities did not contain information indicating the means of transportation by which the activity was carried out.

an equal distribution of the percentages exists when we look at the other categories including shopping, sports, entertainment. Within each category the range is from 5%-8.5% of the total activities. It can therefore be seen that the number of trips intended for sporting activities is 4 times higher among Jews than Arabs and almost 2 times higher when it comes to leisure activities. However, relatively close to twice as many Arabs go to academic institutions compared to Jews. At the extremes categories, 2.9% of Jews make the trip for some medical service, twice as many as Arabs.

Arabs from Arab communities travel more than Jewish from Jewish settlement. Arabs from Jewish Settlements travel the least. This main effect was qualified by a significant interaction. Simple main effects showed that no difference between women and men was found in the Arab sector whereas Jewish men travel more than Jewish women.

Relatively, Jewish and Arabs living in Jewish communities have similar travel patterns as both groups travel mostly during the day (~62%) and less in the start or the end of it (~18%). In comparison, Arabs living in Arab communities present a slightly different pattern as they travel less during the day (49.7%) and more in start or the end of the day (22.1%). Further exploration of this relation was examined in gender the amount of transportation of household members is similar among Arabs and Jews living in Jewish settlements, but it is lower among Arabs living in Arab settlements. When looking at the transportation of people who are not members of the household, relatively the number of trips involving such people is higher among Arabs from Arab settlements compared to the other groups.

THE SPATIAL ACCESSIBILITY OF AN EXPERIMENTAL INTEGRATED HEALTHCARE SYSTEM IN A RAPIDLY URBANIZING AREA: A CASE STUDY OF THE LUOHU DISTRICT IN SHENZHEN, CHINA (918)

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As urbanization in China continues to accelerate, cities are experiencing problems related to limited medical resources due to rapid population growth, rapid urban expansion (United Nations, Department of Economic and Social Affairs, n.d.), and an unhealthy development of the healthcare delivery system (Hu et al., 2019). In order to address this issue, the Luohu District developed the Luohu Hospital Group, an integrated medical system that connects all public hospitals and community healthcare service centers (CHSCs). Despite the importance of understanding the spatial accessibility and connectivity of the Luohu Hospital Group for the provision of healthcare services (Gong et al., 2021), little research has been done in this area. To address this gap, this study analyzed the accessibility of the system, both within and outside of it, using two steps: first, estimating the travel time for each journey using actual transport modes, such as primarily walking, biking, driving, and public transportation; second, calculating the accessibility of the supply-demand ratio for each resident centroid using an enhanced Gaussian Two-Step Floating Catchment Area method (Radke and Mu, 2000). The results of the study show that different travel methods can produce different results and that the healthcare accessibility in the Luohu District is generally good, with a strong spatial connection within the system and good coverage of primary healthcare facilities. However, the study also identified some small areas of inaccessibility within the district. The findings of this research provide insight into the characteristics of healthcare service accessibility in urbanizing areas and can serve as a useful example for other fast-urbanizing cities seeking to optimize the spatial structure of their healthcare resources.

Keywords: Integrated medical system, hospital groups, spatial accessibility, medical services, Shenzhen, 2SFCA, navigating map, mapping API, urbanization.

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DEVELOPING A DECISION FRAMEWORK FOR TOD PRINCIPLES AND ASSESSING ITS SOCIAL INCLUSIVITY: A CASE OF AHMEDABAD, INDIA (938)

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Various urban planning and design challenges exist for the fast-urbanizing cities of developing nations. These challenges include urban sprawl, inefficient land management, air pollution, improper waste management, traffic congestion, neighbourhood identity loss, single-use development, extensive use of energy, and others. Due to such incompetent urban planning, human mobility suffers. It poses a threat to three critical components of efficient human mobility, namely, accessibility, affordability, and sustainability. Transit-oriented development (TOD) claims to resolve most of the aforementioned urban challenges and enhance human mobility. It is an urban planning and design strategy that promotes people-oriented mixed-use and compact development. TOD attempts to prioritize pedestrians, non-motorized modes, and mass transit systems instead of private vehicles. Thus, it can be promoted as a solution for the myriad issues of improper urban planning and augment human mobility, especially for developing nations.

A developing nation like India has a large and diverse transport sector catering to its 1.3 billion people. However, road transport remains the most widely used mode of transportation in India and is slowly getting biased towards private vehicles. In such a scenario, TOD can prove to be a boon. However, defining and prioritizing the TOD principles is an arduous task. Thus, it is high time to design a decision framework for defining and prioritizing TOD principles in the Indian context, especially for the upcoming megacities. In the present study, the city of Ahmedabad, the largest city in the Indian state of Gujarat, is chosen. The city has two prominent mass transit modes other than the regular city buses, i.e., the 40 km long Ahmedabad Metro (rail rapid transit system) and 89 km long Ahmedabad BRTS (bus rapid transit system). Ahmedabad BRTS has won several national and international accolades, including the silver rating in the BRT Standard by the Institute for Transportation and Development Policy (ITDP). At the same time, Ahmedabad Metro is a newer addition to the city and is still under expansion.

The present research has attempted an enhanced fuzzy-analytical hierarchical process (EFAHP) technique for a TOD-planning problem for Ahmedabad. Seven planning criteria were established from the literature for the decision-making process: density, diversity, design, distance, destination, demand, and demographics. With the help of an extensive literature review and expert opinions, corresponding indicators for each criterion were also identified. Several experts were recognized who are familiar with Ahmedabad's growth and development or currently involved in it, including urban planners, policymakers, urban designers, and researchers. They helped determine the global weights of criteria/ indicators by assessing their importance. The EFAHP technique helps develop weights free from uncertainty and imprecision in experts' opinions. The preliminary analysis depicts that the different experts vary in the weights and priorities of the criteria. However, a consensus is observed in the least prioritization of diversity and demographics criteria. While diversity refers to mixed-use developments for creating vibrant choices for a better quality of life, demographics primarily focus on affordability and accessibility.

It raises the question of social exclusion remaining an issue with TOD implementation in the context due to caste, religion, gender, age, income, and ableism. Based on the pilot results, experts were interviewed further to address the revealed concern. Design recommendations and planning policy implications are derived from the interaction with experts. The context-sensitive TOD definition and prioritization derived from the research will help the experts and government authorities in TOD development for Ahmedabad and similar cities from Indian and other developing nations worldwide.

Keywords: Planning for Mobility, Transit-oriented development (TOD), Expert Opinion, Social Exclusion, Enhanced Fuzzy-Analytical Hierarchical Process (EFAHP)

NEW MOBILITY PATTERNS IN LISBON METROPOLITAN AREA, PORTUGAL – LESSONS TO POST-COVID TIMES (975)

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The population mobility was emerged as a determining factor in the spread of the SARS-CoV-2. During the various lockdowns and the arose of teleworking, travel, either by private transport or public transport, decreased very sharply, but the resumption of activities, reactivates travel needs. Currently, we are in a new stage of CoVID-19 pandemic and the retake of normal of economic activities and mobility's patterns are on the way. From that, some questions arise: What are the main changes that have taken place in the mobility pattern, both in terms of modal distribution and in intensity? What is the importance of active modes in proximity travel patterns in the neighbors? Are there behaviors differentiated by age and geographic area? The study is carried out in the Lisbon Metropolitan Area, Portugal, a territory with 2.8 million people and the center of the country's economic activity. The methodology used mobility data from Google and the survey results performed under the research project, used to compare two periods; October 2020 and current time. Results namely shows the recovery of neighbours to non-work activities, making evident the transformation, for now, too more a sustainable mobility pattern, the use of active modes, but also the use electronic platforms to passenger's transport.

NEW WORKING SPACES IN LISBON FROM A CHRONO-URBANISM PLANNING PERSPECTIVE (978)

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In the last two decades, scholars and planning practitioners have been discussing chrono-urbanism approaches trying to respond to urban sprawl and proposing new urban models based on proximity and access to essential goods, services and welfare opportunities for city residents (Guzman *et al.*, 2021).

The COVID-19 pandemic brought this theme to the spotlight, mainly through the 15 minute (15') city concept (Moreno *et al.*, 2021; Pozoukidou and Chatziyiannaki, 2021) as a way to promote more sustainable, livable and healthy cities. Furthermore, the pandemic has significantly impacted how and where people live and work (Florida, Rodríguez-Pose and Storper, 2021), which is expected to extend beyond the present moment.

However, the role of New Workspaces (NWS) that proliferate in our cities (e.g., coworking spaces, fab labs, incubators, maker spaces, etc.) and their potential for creating more sustainable and livable neighbourhoods have not been satisfactorily discussed in these approaches. Choosing a working space to work at a 15' distance (on foot or by bike) from home and accessible to a variety of urban functions can have various impacts on our neighbourhoods, as well as changing mobility patterns and improving people's quality of life (e.g., promoting work-life balance and leaving space for healthier lifestyles. The study presented here is part of a broader investigation (see Di Marino *et al.*, 2022).

Driven by increased remote work and flexible work arrangements for a wide range of work activities and users, it has favoured the emergence of new types of workspaces. Some of these reflect the specificities of other sectors, such as the tourism and hospitality industry or the new demands of the workforce (e.g. coliving spaces).

To discuss the recent chrono-urban approaches applied to urban planning and the growing and increasingly diverse phenomenon of NWS, the city of Lisbon is empirically examined. To this end, the investigation carried out included identifying and mapping the diversity of NWS, a qualitative analysis of Lisbon planning documents and interviews with key informants, as well as a spatial analysis of accessibility, proximity, density and diversity of different urban functions in the 15' around the NWS.

Keywords: new workspaces; 15' city; chrono-urbanism; city planning; urban functions

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TRACK 06: PLANNING FOR DEMOCRACY AND GOVERNANCE

TO BUILD, OR NOT TO BUILD: TENSIONS WITHIN THE AUTHORITARIAN NEOLIBERAL BLOC IN ENGLAND (96)

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The UK state, led by the Conservative government, is instituting and increasingly authoritarian form of neoliberalism, consistent with a global turn towards authoritarian and illiberal state practices (Bruff & Tansel, 2019; Arsel et al., 2021). A central focus for authoritarian-neoliberal reform has been the planning system for England, the constituent nation of the UK from which the party draws most of its support. The Conservative's proposed to both centralise and deregulate planning in their *Planning for the Future* white paper, removing discretionary control from local authorities and instituting a zoning system as a new 'spatial fix' for economic stagnation. These proposals, however, antagonised their voting base in rural England, who were concerned about the potential damage to the countryside and their house values in the proposed system. Through analysing the planning reforms and the reaction to them, this paper reveals a constitutive tension between the two key features authoritarian neoliberalism (Bruff and Tansel, 2019): 'authoritarian statism' (Poulantzas, 2014) and 'authoritarian populism' (Hall, 1978).

The paper challenges the perspective that authoritarian populism is historically novel or somehow distinct from neoliberalisation (Sager, 2020), showing how conflicts between populist and statist interventions represent a tension within the 'historical bloc' (Gramsci, 2003) of neoliberalism. On this understanding, populism is not a challenge to otherwise progressive and democratic planning systems, rather, it is one part of a reaction to the longer-term degradation of the state and civil society which planners and many who seem themselves as progressive were active participants in – in the English case the very subjects of populist and reactionary appeals have limited an authoritarian statist power grab. The present set of crises are likely to exacerbate these tensions within the neoliberal bloc, providing opportunities for genuinely progressive reforms.

Keywords: Populism, Neoliberalism, Urban Planning, Democracy

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PUBLIC PLANNER: A DELIBERATIVE AUTHORITY (111)

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Beyond merely mediating between particular interests, deliberative planners are in need of a firmer agency in shaping attention to common good concerns. However, locating such agency legitimately in the context of deliberative ideals is difficult, and not well supported by theory. A key problem is the weak conceptualization of legitimate forms of power-over, regarding the deliberative planners' agency. To address this theoretical challenge, the paper employs Mark Haugaard's rethinking of power-over, Willem Salet's dialectics of public norms and performative aspirations, the 'systems' turn in deliberative democracy theory, and Mark Warren's related work on authority.

Keywords: Common good, communicative planning theory, deliberative democracy theory, power-over, power-to

HOW DO NETWORK RESOURCES CONSTRUCT EXPERT INFLUENCE? EVIDENCE FROM EXPERT INVOLVEMENT IN URBAN PLANNING DECISION-MAKING IN CHINA (116)

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Background

The effective use of expertise in decision-making process is an enduring topic in Planning theories. Integrated Planning over knowledge-policy boundaries can respond to turbulent change. The exploration of knowledge-policy relationships in the planning domain and the effective participation of planning experts enables increasingly flexible adaptation of its development patterns to changing trends and forecasted challenges and problems.

Research Gap

Expert involvement has received increasing academic attention, and expert typology, organizational types and knowledge utilization have been well documented and theorized. However, the literature on expert involvement is remarkably silent on how to understand internal structure of expert groups and the influence they bring.

In this article, we seek to fill this gap by theorizing and empirically demonstrating the internal variation in planning expert network. We discuss two related questions. First, when we consider experts as a sub-dividable organizational structure, what are their respective key factors? Second, how do these structural features generate influence? We use cases mainly from urban planning decision-making in China. Although some studies have focused on urban planner as a type of expert, analyzing the impact of experts on citizen participation and implicitly specifying the role of planning experts in policy process, the role of such experts as the most important actors interacting with and influencing other actors in terms of what impacts they have on decision-making has not been effectively analyzed.

Method+ Theoretical framework

We do so through an in-depth qualitative analysis on urban planning decision-making in China. Based on existing literature, participant observation and interview data, the study elaborates an expert network model that analyzes how government choices, organizational characteristics, and capital in network resources shape expert influence.

We try to construct a theoretical model of expert influence by analyzing action logic of expert network. As invited observers, we participated in the meetings related to Regulatory Detailed Planning (RDP), which is one of the two statutory planning in China. The process continued for six months. Our data is collected from participant observation and interviews, together with documentation from government and urban planning experts. When present research setting and research design, we draw a context of urban planning decision-making in China.

Possible results & outcomes

Near-powered expert network possess strong political capital by being government agents and knitting strong administrative ties. Academic expert network's authority comes from complex knowledge power. Market-oriented expert network frequently uses economic capital to exchange interests with government to achieve cooperation. Socialized expert network improves

network centrality by exchanging resources with the media. Based on a deep learning approach, we also discover that there are disparities in the expressions and attitudes of experts in different networks when participating in decision-making, which may affect their influence in policy making. Thus, the empirical analysis indicates that what role an expert gets in policy making is very much a consequence of different planning expert networks.

Contribution

Based on this, we develop the concept of “resource empowerment expert network” to understand the logic of resource flow in the network and discuss how this concept can contribute to the broader literature on expert involvement.

This study contributes to the existing literature on expert involvement in three ways. First, it goes beyond expert typology and reveals that, similar to decision-makers, there is a complex network within experts, extending the existing literature on expert involvement. Second, it attempts to operationalize the concept of expert influence by constructing an analytical framework, as long as it enriches the application of network tools. Third, it extends existing methods by adapting participant observation. We conducted this participatory research as one of the main actors in the project or policy process, which is popular in recent years and present a more detailed picture of urban planning decision-making in China.

Keywords: Expert Involvement, Network Resources, Expert Network, Urban Planning, Decision-Making, China

TRANSFORMATION THROUGH TRIALOGUE?! PERSPECTIVES AND EXPERIENCES ON THE COLLABORATION OF ACTORS FROM ADMINISTRATIONS, ACADEMIA AND ORGANIZED CIVIL SOCIETY (131)

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Transformation towards sustainability in cities requires the collaboration of a range of actors, at different levels, and from multiple disciplines – spanning from local administrations and companies through citizens to academia. Especially when planning with uncertainties (such as with climate change) joint forces need to be built in order to respond to changes. Within recent years, multiple experimental settings, such as living labs, have been established with the aim to include a range of actors to find joint answers to those changes (Bulkeley et al., 2019; Fuenfschilling et al., 2019). However, many difficulties arise in the collaboration between actors engaged in these experiments. Communication problems regarding different perceptions and expectations, time restrictions and motivational issues of participants are only some of the most common concerns (Walk, 2013; Weyrich, 2016). These difficulties can often be seen as a result of actor-specific logics of action, which are framed by the actor's sphere of action (e.g. administration or research), which might result in different and conflicting terminologies or time spans in the realization of projects (Wanner et al., 2022).

An interdisciplinary team from academia, administrations, and organized civil society ran reflexive workshops in 2022 to find out why a structured and long-term collaboration for sustainability transformations in cities has not been achieved so far. A focus was set on the actors most involved in transformative city development processes and living labs – transformative researchers, local administrations in city planning and development departments and organized civil society (city makers).

In this paper we present first insights into results gained in the workshops on 1) *the greatest challenges mentioned*, 2) *the specific contributions each actor can add to collaboration in transformative city development processes*, as well as 3) *the first ideas for an improved collaboration*.

The analysis shows that actors from research, administrations, and organized civil society have great potential in their collaboration through the specific contributions they can add to the city development processes. However, challenges resulting at least partly in the actor's spheres and their logics of action stand against a long-term and structured collaboration. The first ideas might help to establish first structures, nevertheless, the base for this still needs a strong commitment of single persons involved in the processes.

Keywords: transformation, long-term collaboration, administration, research, citizens

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AWARENESS ABOUT THE PHENOMENA OF LAND TAKE IN THE ESTONIA (143)

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The Roadmap to a Resource Efficient Europe stated the milestone in 2011 by 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally, and the rate of land take is on track, intending to achieve no net land take by 2050 (European Commission, 2011). OECD report Shrinking Smartly in Estonia presented in 2022 that Estonia had the sixth-highest growth among OECD countries in the amount of built-up area per capita in the period from 2000 to 2014. Over the same period, the Estonian population decreased by 5%. Despite depopulation, the amount of developed land is increasing in Estonia (OECD, 2022). Therefore, eleven years later, the OECD report introduced that Estonia, a European Union member state, still has intensive land take despite the European Union target.

Planning Law is one legal field that regulates land use. The valid Estonian Planning Act from 2015 defines planning activity as broad action. The planning process allows for achieving a comprehensive spatial solution that balances various interests in the planning procedure, which takes into account environmental sustainability, the economical use of natural resources and the improvement of the quality of life (Ministry of Justice, 2013). More precisely, the Planning Act states the principle of expedient, reasonable and sustainable land use, which means when creating spatial plans, appropriate use of previously used areas or insufficiently used areas must be promoted where possible (Parliament, 2015). Therefore, the planning process should consider environmental sustainability and the economic use of natural resources that should avoid land take, but it still happens.

The hypothesis for why land take is intensive in Estonia is that the political objective is missing or stipulated confusingly, and the awareness about the phenomena of land take is low. The situation is better in these countries (Austria, Belgium, Germany, Luxembourg, Great Britain, and France), which have set a quantitative objective for limiting land take (Decoville and Schneider, 2016) compared to Estonia. Higher public awareness can help to achieve policy targets (Khatibi et al., 2021). The study results are obtained using content analyses and documentary studies to present how land take is handled in Estonian regulations, documents including planning documents and media in 2015 - 2022. As the recent Planning Act is valid from 2015, it is selected as the beginning and the last full year close of the study period.

Keywords: land take, awareness, Estonia

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REGIONAL PLANNING STRATEGY, STRATEGIC PLANNING: EXPERIENCES WITH REGIONAL PLANNING STRATEGY IN NORWAY (149)

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This paper is built on institutional theory and strategic planning theory, to grasp the two main questions: (1) How is the Regional Planning Strategy (RPS) as a new tool in the Planning and Building Act (PBA) understood and implemented in practice, and consequently how is this implementation to be understood as an institutional change of the regional planning system? (2) How is the strategic orientation understood and implemented?

Strategic regional planning where institutionalized into the Norwegian planning system in 2008 in a new two-step model: (a) regional planning strategy (RPS) and (b) various types of regional (strategic) planning (STP) tailored to each individual regional challenge.

This new tool, RPS, is defined in the Norwegian Planning and Building Act, section 7-1 (PBA 2008):

“The planning strategy shall give an account of important regional development trends and challenges, assess long-term development potentials and determine which issues are to be addressed through further regional planning.”

The main intentions was to make the political priorities for regional planning more targeted, and increase regional planning's efficiency and flexibility (Miljøverndepartementet, 2007–2008). At the same time, the regional room for action was framed in section 6-1 *National Expectations of Local and Regional Planning*. Here it is stated that every four year national authorities must prepare a document with national expectations for regional and municipal planning.

The basis for our analysis is a study of the implementation of the RPS in all Norwegian counties in four 'generations PRS' from 2011 to 2021.

We find that the translation, contextualization, and re-contextualization of the PBA regarding how to implement the RPS is clearly diverse in 2011/12, the first time such documents are made. Even a hierarchical mode of implementation of a new element in the PBA seems to enjoy great freedom in terms of translation and re-contextualization between tiers. The variety confirms the already vast evidence in the literature of the challenges concerning top-down implementation (cf. Hill, 2013; Røvik, 1998). Since this hierarchy consists of regional publicly elected bodies with a certain degree of autonomy from the central government (the counties and the municipalities), the counties feel free to translate the PBA into their own regional context. This was done without deviating too much from the National Expectations.

We find in generation two, a convergence of concepts between the counties, but diversity reappears in new ways in generation three. The counties establish their own regional planning systems where the RPS's are more a plan than a strategy for planning ahead. Another expression of the increased professional and political ambition or competence to oppose, to choose their own way to make RPS, is transformed into new ways of dealing with FN 17 targets and neglect national goals for planning.

The implementation praxis of both central and regional government level contributes to the hybridity of the planning system by (a) the already established side-by side logics of negotiated policy development in a networked governance system and a planning authority and government logic of decision-making, and (b) by the main re-contextualization of the RPS from a planning strategy to a plan and c) counties establishing own regional planning systems.

Keywords: Regional Planning Strategy, Strategic planning, Planning implementation

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DISCREPANCIES IN DEMOCRATIC DEMANDS AND EXISTING POLICY AGENDAS IN URBAN SUSTAINABLE DEVELOPMENT (158)

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Cities have emerged as policy actors of global relevance in sustainable development. Their policies are crucial for the realization of the sustainable development goals (SDGs). The substance of urban policy agendas thereby varies greatly in their ecological, social, and economic priorities. Cities incorporate diverse policy issues in their urban sustainable development agendas, such as protecting biodiversity, promoting circular economies, or reducing poverty. We do, however, have only little comparative knowledge about cities' sustainable development agendas and how these different possible configurations of urban sustainable development are perceived by the public.

This paper therefore aims to study the preferences of residents in urban sustainable development and compares these residential preferences with actual policy agendas. To do so, we conducted a preregistered, original survey experiment with a total of 5'800 respondents from eight systematically selected European cities, namely Frankfurt, Helsinki, Antwerp, Milan, Manchester, Valencia, Marseille, and Lisbon. In the experiment, survey participants had to assess urban sustainable development policy agendas that were randomly consisting of six out of 17 policy issues that we derived from literature. In addition, we collected and coded 219 specific urban sustainable development plans in these eight cities to find out what these eight cities actually do in terms of planning for sustainable development.

The results reveal a discrepancy between the demands of residents in terms of urban sustainable development and the actual pursued policy priorities by the cities. While the eight European cities pursue strategies mostly related to issues such as education, biodiversity, public transport, and urban green spaces, residents prefer policy issues that secure their everyday needs such as cost of living, public health, education, poverty, and unemployment. This points to a discrepancy between democratic demand and urban sustainable development agendas, but probably more important to the need of securing basic human needs when cities want to pursue profound sustainable development policies in important SDG issues such as climate change, biodiversity, or renewable energy.

Keywords: urban sustainable development, urban policy, public opinion

WHAT DOES “AUTHENTICITY” MEAN IN JAPANESE CITIES? A CASE STUDY OF KANAZAWA CITY (192)

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Japan has a unique form of urban authenticity. It has been maintained by preserving the historically formed urban space with wooden structures as well as by actively creating modern urban space during the post-war economic growth period. The authenticity continues to be established under dynamic equilibrium, while constantly being exposed to changes in people's perceptions and the potential for urban development. This is due to the interaction of the three authenticities discussed in previous studies which are 'objective authenticity', 'constructive authenticity' and 'existential authenticity', (Boorstin,1962, Bruner,1994, Cohen,1988, MacCanell,1973, Ning, 2017) whereby the perceived authenticity at a certain point in time is newly established as 'emergent authenticity'. (Cohen,1988) This shift does not happen easily, because citizens prefer to preserve traditional authenticity and oppose new authenticity. Consequently, the layered authenticity is formed despite initial rejection, as perceptions fluctuate and adapt with the public over time.

This study focuses on such processes of fluctuations and adaptations of authenticity, particularly in Japan, where this has occurred rapidly and frequently in the post-war period.

Authenticity in Japan has been discussed in terms of local identity in the following three contexts. First, in the process of developing legislative plans for the preservation of historic urban spaces, each city government has identified its specific historical features and described them as a local identity. Second, for the local revitalization of declining cities, local identity has been promoted to differentiate them from other cities and to attract industry and tourism. Third, with the aim of gaining public approval and administrative assistance for urban redevelopment, the rationale for the design and content has been stated by the developers in terms of local identity.

These discussions have mainly taken place in local cities that have inherited historical urban spaces established in the early modern times and have been developed in the modern times. Particularly in Kanazawa City, Ishikawa Prefecture, in the Hokuriku region, 'harmony between preservation and development' of urban space has been a municipal policy since the late 1960s, and discussions on local identity have been active among the city government and citizens. (Yamade,2013, Yamade,2015)

This study analyses three urban development projects that took place in Kanazawa since the late 1960s, and in which authenticity was publicly discussed from the complex context: (1) the development of Kanazawa Castle Park, (2) the redevelopment of *Omi-cho* Market and (3) the design of the 21st Century Museum of Contemporary Art, Kanazawa. (Figure 1)

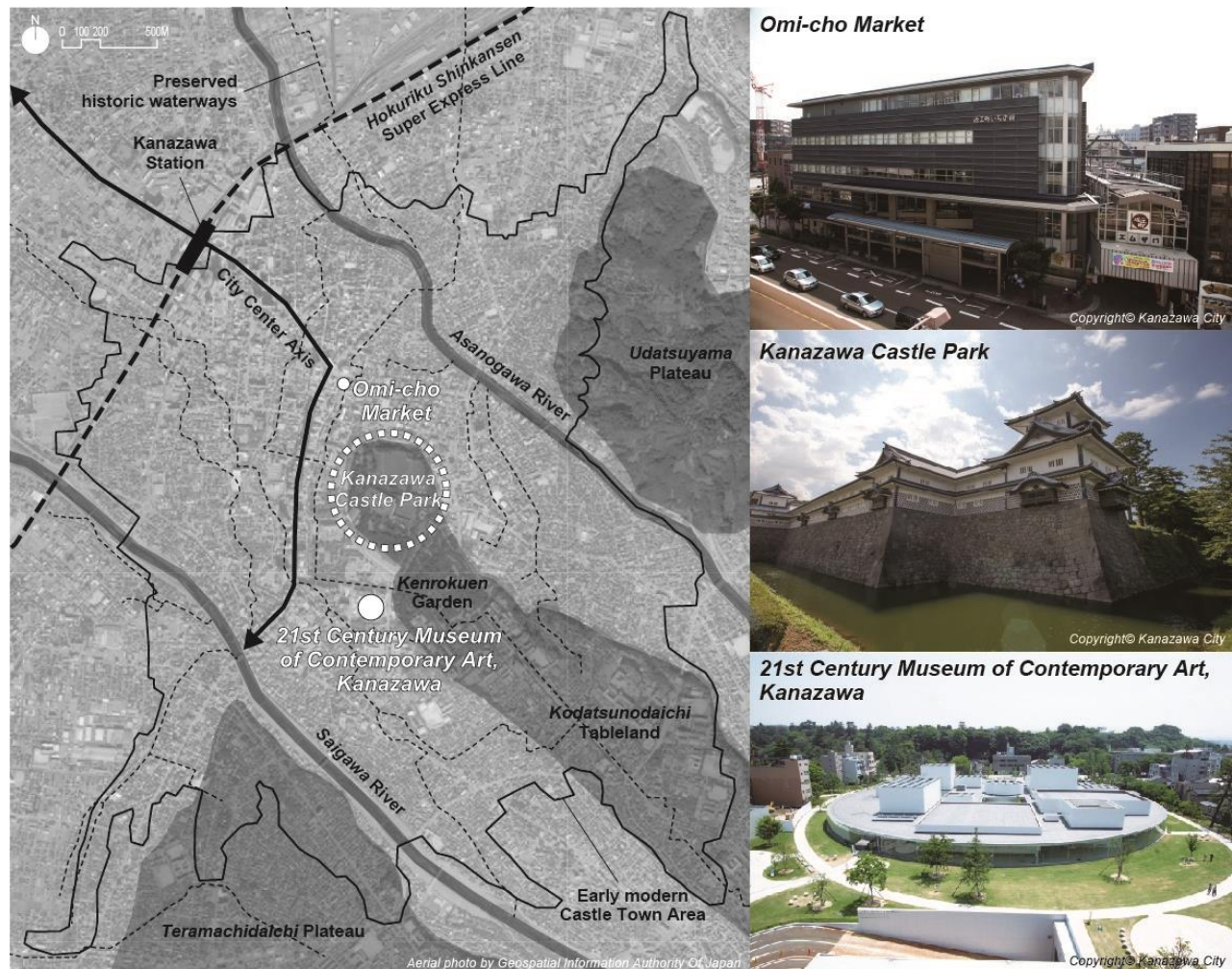


Figure1. Location and photographs of the three development projects

The three perspectives of the analysis are as follows.

- 1) What triggered the fluctuations in perceptions of authenticity?
- 2) What was valued and what changes in authenticity were accepted?
- 3) How was the new authenticity accepted and adapted with citizens?

The possible results are as follows.

After the initial plan was presented in each of the three projects, authenticity was discussed by various actors, including councils, communities, and newspaper reports, which triggered fluctuations in perceptions. In the process of project implementation, various individual narratives of authenticity were incorporated into the plan. The process of incorporating authenticity into planning involves (i) specific elements in the plan are evaluated by the urban context and future vision of the city, (ii) the elements are adapted to the surrounding environment, and (iii) the elements are restored with reference to a certain point in history. Through these processes of incorporation, Japan's unique authenticity has been adapted with citizens.

Keywords: Authenticity, Local identity, Japanese city, Urban development

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LAND VALUATION IN DENSIFYING CITIES: ACTORS' DECISION-MAKING STRATEGIES IN EFFECTIVELY STEERING URBAN SUSTAINABLE LAND USE (229)

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Land valuation – the *process* through which land is assigned a value – is a highly contested and socio-political process. Because the value of land has a strong effect on the question how land is used and distributed. It ultimately affects who is able to live where, how, and why. We argue that it is therefore important to gain a better understanding about land valuation processes through examining, *first*, how the process of land valuation functions in a context of urban land scarcity and densification, and *second*, how involved actors' goals and strategies of land valuation vary among each other in such a context. To answer these research questions, we introduce an actor-centered new institutionalism approach for the qualitative case study analysis of the «Rohr/Platten» densification area in the city of Opfikon within the Zurich metropolitan area. We find that the goals of the different actors (profit-orientation of private actors vs. sustainable development of public actors) in combination with the existing institutional setting can explain the actors' land valuation strategies. The current paradigm of densification and the strong legal protection of land titleholders support the strategies applied by for-profit developers and landowners. Yet, local planning authorities must find ways to deal with the power and the profit-oriented logic of land titleholders by means of active land policy to create more socially inclusive outcomes of densification processes.

Keywords: Densification, land valuation, new institutionalism, affordable housing, commodification, social exclusion

TRUST AND INSTITUTIONAL DESIGN: A COMPARATIVE ANALYSIS FROM THE ISLAND OF IRELAND (249)

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There is a broad consensus that western democracies are suffering from a long term decline in political trust. While this is due to complex social change and its interaction with many other factors (including populism, models of political engagement, technological change etc), Quilter-Pinner et al 2021 have suggested that trust can be broadly determined by two key factors; the performance of government; and the processes of government. These factors also help explain the decline of trust in planning systems, planning professionals and the elected decision-makers. While commentators have lamented this decline in trust (e.g. Swain and Tait 2007, Laurian, 2009) there has rarely been an attempt to empirically explore the extent and drivers of decline in trust within planning.

This paper attempts to do this through a comparative analysis of the findings of parallel surveys of stakeholders in the planning systems of Northern Ireland (NI) and the Republic of Ireland (RoI), undertaken in 2020. While sharing the island of Ireland, these two planning jurisdictions have varied institutional designs and due to an array of administrative, political and professional factors could be said to have different planning cultures. Our findings suggests that there is a growing crisis of trust in both planning systems, and this paper will interrogate what the surveys tells us about the issues that appear to trigger distrust in each jurisdiction and link these to issues of institutional design. The paper concludes by highlighting the priorities for reform in each system, while synthesising broader insights for how we understand trust in planning more generally.

Keywords: Stakeholder opinion, Trust, institutional design

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A CRISIS OF LOST VALUES: REDISCOVERING THE RELATIONSHIP BETWEEN URBAN BEAUTY, DEMOCRACY, AND COMPLEXITY (275)

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This article explores the relationship between two important aspects of the Western philosophical tradition that many present as being in crisis: democracy and beauty. Specifically, it explores the concepts and their meanings in the planning field, with a specific lens on the production and appreciation of urban environments. It argues that the two crises (i) are more related than one might think and (ii) share the same roots, namely the rejection of *complexity*. To delve into these issues, it will answer the following fundamental questions: “Why are the concepts of urban beauty and democracy in crisis?” “How are the two crises interlinked?” “What are the main conceptual and practical implications?”.

To embark on this research, some specifications to better focus the debate are in order. First, in discussing urban beauty, this article refers to the local scale – the street level – urban places and spaces that individuals can experience at scales that can be referred to as walkable. Second, the reflections included in this article deal with what can be defined as an *ordinary built environment*. In other words, the focus here is on urban areas that are mixed and residential, not special ones (e.g. merely commercial and productive areas). Third, the focus on *urban* beauty means that the interest is in dense and populated areas typical of cities. Lastly, the word “complexity” in the text has a precise meaning, which is embedded in the basic lexicon of *complexity theories of cities*.

Keywords: Democracy; Urban beauty; Complexity; Planning rules; Urban development; Built environment

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RATIONALISING INSTITUTIONAL CHANGE: AN INVESTIGATION INTO THE GOVERNANCE OF DEVELOPER CONTRIBUTIONS IN NORTHERN IRISH PLANNING (306)

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The action of portioning and re-attributing the uplifts in value associated with the granting of planning permission has been a perennial concern for governments. This concern has been further compounded by the modernisation of governance activities associated with planning and development activities. Contemporarily, this action has been understood as part of a wider activity of Value Capturing. In 2015, planning powers were transferred to local government across Northern Ireland as part of a wider process of governance modernisation. These major institutional changes ignited a renewed interest in Developer Contributions and the distribution of development gains.

Whilst contemporary research chiefly focuses on the outcomes and mechanics of approaches to Developer Contributions, this research takes the novel of approach of taking a step back viewing them as a planning concept with distinctly normative characteristics. As such, Developer Contributions dictate a certain approach to practice, where policies, programmes and processes are bound by power relations which contour and define how decisions are made, and how the associated benefits are attributed in turn. Moreover, these outcomes are defined by the relationships between different actors across the governance network. This study closely examines the nature of those relationships to establish the wider rationalisation process which governs such institutional changes.

The main aim of this research is to evaluate the governance arrangements surrounding the extension of Developer Contributions across Northern Ireland. It employs a Single Case study approach assessing the impact across Northern Ireland, whilst also utilising an embedded case study of Belfast City Council. The analysis is driven by a Discourse Analysis, which is applied to wide range of data sources, including policy/legislation documents, a national level questionnaire and semi-structured interviews. For the analysis, the thesis adopts an agency centred approach, which includes 61 voices across the State/Market/Civil Society nexus (Public, Private, Civil Society and Political). The study develops a bespoke theoretical framework, and by suturing the ideas of Discursive Institutionalism and Governmentality, assesses the wider rationality process which drove institutional changes in the Northern Ireland planning system.

This research presents two knowledge contributions, specific to both the Northern Ireland case study and to the democratic legitimacy and governance of Value Capturing. First, the study develops a framework for assessing the contemporary governance of Developer Contributions, notably five key characterisation points which define the rationalisation process governing the policy development and decision-making process. These being that: *Developer Contributions present varied discursive construction(s) evidenced through Variegated claims on knowledge; They are used to fill a public financing gap; They present temporal shifts in rationalities; They internalise uneven power relations and have a restricting effect on agency; and when they are not transparent, they open the space for perceptions of corruption.* Moreover, for the governance of Developer Contributions in Northern Ireland more specifically, the thesis presents two evidence-

based policy recommendations, focused on the creation of collaborative and redistributive 'Community Regeneration' fund, centrally managed and locally distributed.

Keywords: Developer Contributions, Governmentality, Discursive Institutionalism, Value Capturing and Governance

THE VARIOUS FACES OF PLACEMAKING (311)

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Urban geography emphasizes “place” as the intimate relations between the individual’s identity, discursive habits and immediate environment. The place is considered responsible for sociocultural links and creating a sense of belonging within a community (Relph, 1976). The roots of placemaking go back to the 1960s when the awareness of good urbanism’s characteristics started to increase (Jacobs, 1961). In the mid-1990s, the term “placemaking” became widespread as a useful planning tool for enhancing the community performance of public spaces.

Placemaking is often presented as an alternative to formal, comprehensive, top-down land-use planning. In terms of process, placemaking seeks to skip over statutory planning stages and focus on concrete, relatively rapid changes in the built environment. Regarding purpose, placemaking is not targeted toward spatial development but seeks to enhance vibrant community spirit. Thus, placemaking offers an open-ended, unstructured framework for planning and implementing focused interventions, hoping to raise bottom-up interpretation of places that could substantially transform the social and built environment (Hamdi, 2010; Ellery and Ellery, 2019; Castello, 2016).

This study critically examines how the relatively loose framework articulated to placemaking operates and which forms it may take. Specifically, the research asks: which types of relationships between funders, professional planners, municipal authorities and community delegates drive the implementation of placemaking projects? To answer this, we investigated four major community placemaking projects in Beersheba and Yeroham, in southern Israel, and a few small projects in these cities. We applied a qualitative method, including 16 in-depth interviews conducted in 2018 with funders’ representatives, placemaking entrepreneurs from municipalities and associations and independent artists. In addition, observations were made of the project spaces after completion.

Based on this investigation, we present four models of placemaking, organized around two main axes: the goal axis, which ranges from a broad community goal to a narrow, predetermined aim, and the motivation axis, which ranges from internal to external motivation. The four types of placemaking emerging from the combination of these considerations are (1) *traditional*: participatory-oriented placemaking, resembling the ideal image of bottom-up community processes, (2) *governmental*: an institutional-entrepreneurial placemaking seeking to affect socio-spatial processes, (3) *artistic-economic*: placemaking tailored by foundations and donors or artists or designers, often for the sake of earnings and fame, and (4) *segregative*: placemaking which, intentionally or not, represses unaffiliated population.

This typology serves as a warning sign for possible ways that processes with loose boundaries can be exploited, and the setbacks to which they can lead. It offers a helpful framework for further advancements in placemaking, making it an effective tool for socially and environmentally sustainable urbanism. In addition, this framework exposes the tension between democracy and governance in planning. We point out the overuse of the placemaking concept and technique in ways that are not necessarily optimal and may even harm an existing community fabric. The study

illustrates the complex relationship between the various factors – particularly donors and municipal representatives – and their direct impact on the process. Because of these relationships, the general title that defines a project as community placemaking can be used to embellish a less communal or non-communal process due to the complex relationship.

Keywords: Placemaking; local democracy; urban transformations

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THE IMPORTANCE OF PARTICIPATIVE PROCESSES IN REGIONAL FORESIGHT (319)

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In today's uncertain reality, the regional development planning processes require broad and differentiated knowledge about what are the driving forces of change and the crucial priorities of the regions. In addition, international challenges and the impact they will have at the local and regional level need to be addressed with new planning approaches. Incorporating Foresight into planning methods can make regions more prepared and resilient to the challenges of the future.

Foresight is an instrument for informing institutions and development policy bodies. Its use in planning contributes to manage change and uncertainty and can make long-term planning more resilient and flexible. According to the "Practical Guide to Regional Foresight", Foresight involves five essential elements: Anticipation, Participation, Networking, Vision and Action.

The inclusion of diverse groups with differentiated viewpoints is considered critical to avoid missing weak signals or trends that may not be obvious or not seem directly related to regional planning priorities. Community involvement in Regional Foresight makes the process more inclusive and can lead to more equitable and sustainable solutions. Active and meaningful participation can provide more valid guidance on the decisions that need to be made by planners and at the same time increase the levels of legitimacy and societal acceptance of applied policies.

The aim of our research is to highlight the importance of participative processes in Regional Foresight. In particular, we will attempt to provide an overview of the conditions of participation by reviewing the most important findings in the recent literature. One of our central concerns is to illustrate the dimensions of participation, such as the way of engagement of the institutions and the public and networking. Moreover we search how to ensure equity of participation in order to be expressed the true objectives of all stakeholders. Our ambition is to develop a coherent, effective and applicable framework that explains the crucial role and the essence of participation in Regional Foresight in today's turbulent era. This paper presents and discusses some first guidelines in this direction.

Keywords: Regional Foresight, Long Term Planning, Participation

ENABLING ENVIRONMENT FOR PUBLIC-PRIVATE PARTNERSHIPS IN URBAN REGENERATION PROJECTS: ANALYSIS OF THE PORTUGUESE, ITALIAN AND BRAZILIAN SCENARIOS (333)

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Urban regeneration projects have been part of urban planning in different cities to recover strategic areas and combat the consumption of new land. In many cases, partnerships between the public and private sectors are signed to meet the demands of these projects. Despite this, a few obstacles are present in the way these practices are developed, reflecting the essence of this contracting instrument and the particularities of the sector itself, namely: they are high-risk investments due to low remuneration and long-term horizons; numerous sources of uncertainty and lack of market information that results in more prudence on the part of investors; the difficulty of information on demand and the social impact that the projects involve.

Given the obstacles observed, it is important to identify the critical success factors for the better development of public-private partnerships (PPP) in urban regeneration projects. To this end, a framework on critical success factors in PPP arrangements in urban regeneration projects was proposed. The proposed framework considered five distinct clusters, three related to the internal environment and two associated with the external environment.

Regarding the internal environment, this refers to the entire internal environment of the partnership itself. The three clusters related to the internal environment refer to the PPP phases: the pre-contractual phase, the contractual phase, and the contract management phase. Regarding the external environment, this involves the entire environment beyond the partnership itself, considering as clusters the enabling environment, i.e., the entire environment that can be controlled, and the exogenous factors, i.e., all factors that cannot be controlled. For each cluster, the main critical success factors that can improve PPP practices in urban regeneration projects were identified.

Aiming to validate the pre-established framework and, consequently, to add knowledge regarding PPP agreements in urban regeneration projects, this study proposes to analyze three case studies corresponding to three different countries, i.e., Portugal, Italy, and Brazil. It will be based on the framework and seek to understand how the critical success factors are worked in these countries, favoring or disfavoring PPP projects in urban regeneration.

The application of the framework for the analysis of the reference scenarios, in addition to validating the proposed framework, enables a greater understanding of best practices in PPP arrangements in urban regeneration projects as a whole. Thus, it is expected that the study will help public and private managers regarding this procurement model.

Keywords: public-private partnerships, urban regeneration, enabling environment, critical success factors

CRITICAL SUCCESS FACTORS FOR PUBLIC-PRIVATE PARTNERSHIPS IN URBAN REGENERATION PROJECTS: A FRAMEWORK PROPOSAL (356)

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provide a variety of infrastructure and services. The use of PPPs in urban regeneration projects, although more recent, has been gaining prominence in different contexts as a response to urban degradation and urban gaps left in cities, as well as to reduce land consumption.

The success of a partnership can be more easily achieved when it meets certain factors, called Critical Success Factors (CSFs). Critical success factors may vary according to the purpose of the partnership, the context in which it takes place, and the different phases of a partnership, among other issues. In this sense, many authors focus on studies about the CSFs in PPPs in different scopes and contexts.

However, the literature on the theme in relation to public-private partnerships in urban regeneration projects is limited, demonstrating a gap to be studied. Based on this, this paper aims to identify the CSFs for PPPs in urban regeneration projects, proposing a framework.

To this end, the study was conducted in two distinct parts. The first part refers to the critical success factors in PPPs in general. Since this is a topic widely addressed by different actors and periods, a brief literature review was conducted to synthesize the main factors identified, analyzing and categorizing them into groups. Regarding the clusters, five clusters were proposed, two referring to the external environment and three referring to the PPP's internal environment. The clusters related to the external environment refer to the entire environment external to the public-private partnership itself, being divided into enabling environment, i.e., the entire environment external to a PPP that can be controllable to favor or not a partnership, and exogenous factors, i.e., factors external to a PPP that cannot be controlled. The clusters related to the internal environment are aligned with the different phases of a PPP and refer to the pre-contractual phase, the contractual phase, and the contract management phase.

The second part, in turn, refers to the critical success factors of PPPs in Urban Regeneration projects. As this is a more specific topic, the literature already produced on the subject was not identified. In this case, a questionnaire with specialists was conducted to obtain a basis for the development of the proposed framework. The questionnaire was designed considering a first group of questions regarding the respondents' profile and a second group of questions regarding the study theme. The questions on the profile of the respondents allow a better understanding of the professional or academic experience of the respondents. The questions related to the study topic, in turn, considered the proposed clusters and the factors within each cluster and support the analysis of the CSFs of PPPs in urban regeneration.

Based on the factors identified in the literature review and according to the responses obtained in the questionnaire, the main factors of the success of PPPs for urban regeneration projects were identified and structured in the framework. Meeting the proposed objective, the study fills a gap regarding CSFs for PPPs in urban regeneration projects. Finally, the proposition of a framework of

CSFs for PPPs in urban regeneration projects can assist professionals from the public and private sectors in the development of partnerships in this area.

Keywords: public-private partnerships, urban regeneration, critical success factors

OVERTOURISM AND SPATIAL PLANNING IN GREECE: CHALLENGES (372)

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The recovery of tourism following the unprecedented crisis of the tourism industry due to Covid-19 in six decades of continuous growth resurfaced the challenges of the tourism sector. This paper will focus on one of them, overtourism, a phenomenon visible in many destinations. There is a worldwide dispute about whether overtourism exists or is the result of inadequate tourism planning and management. The purpose of this paper is to shed light on the issue of overtourism via a spatial planning approach. Specifically, the spatial planning tools and policies applied in Greece if any as a response to tourism over-crowding will be presented and analyzed. The upper aim is to finally answer if the symptoms are due to overtourism or tourism mismanagement.

The topic of overtourism is extremely relevant raising concerns and questions in particular as regards the increased tourism demand during the last year. International tourist arrivals have reached peak records reviving the pressure on the destinations. Countries lacking proper planning are facing serious problems, among them Greece. The most common consequences resulting from overtourism are the following ones: exhaustion of resources, (over)crowding of tourists, popular discontent, displacement of residents, the transformation of the neighborhoods' character, changing land uses to satisfy tourism demand, land, and public space exploitation, sharing economies, overloaded infrastructure, etc.

Spatial planning is the key instrument for sustainable tourism development. Space has a dual meaning: tourism product and receiver of the consequences. Tourism activity has a significant spatial impact, motivating (urban) changes and permanently transforming space. How much more when it comes to overtourism.

Even though, Greece has been named as the most resilient European destination for 2022 (ForwardKeys, 2022) is called upon preparedness and dealing with such serious issues that put in danger the tourism sector without further delay amid the predictions for greater tourism flows (Fitzgerald and Paterson, 2023). Thus, studying the phenomenon holds great significance since tourism is considered a lifeboat for the Greek economy.

Having clarified the importance and urgency of responding to the under-study issue, the research design in which the paper will try to enrich the current knowledge by answering at the same time to the research question is based on secondary methods. In detail, a review of the Greek spatial planning framework – tourism bills and policies, strategies, spatial planning regulations, planning mechanisms, tools, and processes, etc., will be stated providing a meaningful analysis of the state's adopted approach to tourism development. The material will be drawn from public sources – government, press, online, scientific papers, and statistics.

The value of this paper lies in presenting an insight into the overtourism phenomenon in Greece from the angle of spatial planning. Following the analysis, the discussion part is centered around a commentary on the sufficiency of the planning sector and how the tourism policies have

affected tourism development and shaped the touristic space in Greece. Ending with the conclusions, where the need for planning action and intervention is emphasized in search of new management policies and strategies aiming at reducing the negative impacts of overtourism and ensuring the well-being of local communities and tourists as well as safeguarding tourism against future disruptions. Tourism has to navigate through these challenges toward a more sustainable and resilient future by the use of proper and flexible policies.

Keywords: planning, tourism, overtourism, policies, management

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PUBLIC-PRIVATE PARTNERSHIPS IN BRAZIL: THE MISCHIEVOUS PROMISE OF PRIVATE INVESTMENT DEVELOPING URBAN INFRASTRUCTURE IN THE GLOBAL SOUTH (378)

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In the Global North, notably in the post-war period, the reproduction of infrastructure came to be a fundamental strategy for the constitution of the so-called *Welfare State*. Public investment in infrastructure was central to the strategy of generating employment and managing market demand, and lead to remarkable levels of access to the socioeconomic benefits provided by the outreach of such infrastructures (Graham and Marvin, 2001).

In Brazil, however, as it's generally the case for the Global South, the twentieth century saw rapid and large-scale urbanization processes without a set of public policies worthy of the name *Welfare State* (Kowarick, 1979, Maricato, 1982). As a result, cities saw extensive urban growth unaccompanied by the expansion of infrastructure networks, subduing poor and vulnerable populations to precarious access to sanitation, transport, education, health, culture and leisure, among other essential services.

Notwithstanding, the late twentieth century saw the rise of austerity (Blyth, 2013), and a shift in the understanding of state's role in the economy (Peck and Tickell, 2002), which greatly impacted infrastructure reproduction policies world-wide. Pioneered by the United Kingdom in 1992, the generally called Public-Private Partnership (PPP) model for infrastructure development and management has since been exported to the Global South with promises of overcoming historic infrastructure deficit through private investment (Guinsburg, 2012, Miraftab, 2004).

The legal and institutional framework adopted for the implementation of PPP models varies significantly around the world, to the point of hindering generalized evaluations of their outcomes. However, in this paper, by closely examining the Brazilian experience with the model, particularly within metropolitan contexts, where much of the country's infrastructure deficit is concentrated, and tracing parallels to other Global South countries experiences compared to those of the Global North, we intend to point out structural socioeconomic and (geo)political factors that transcend institutionalization specificities and impairs the model's potential outcomes within the Global South.

Engaging with political economy literature, we will argue that, (I) despite the off-balance nature of public expenses with PPPs, public budgetary constraints resulting from historic inequalities hinders PPP implementation in the Global South; that (II) Global South's political and economic instability increases risk perception for potential investors, tilting the risk distribution balance toward the state and demanding further public financial capacities for guaranty provisions; that (III) the intrinsic complexity of PPP contracts also hinders the models applicability given the wildly varying institutional capacity of government bodies in the Global South; and that (IV) interlocal disputes (HARVEY, 1989) within the unequal Global South context will both direct private investors interest to already financially sustainable regions and infrastructure sectors, and demand increasingly good conditions (e.g. tax relief) and high return rates to attract investors,

producing a vicious cycle within state finances, reducing public capacity to determine investment priorities and increasing spatial inequalities.

Keywords: infrastructure; development; infrastructure planning; neoliberalism

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THE HIDDEN HISTORIES OF COMMUNITY-LED PLANNING IN THE UK. PLANNING OUTSIDE, INSIDE OR WITH THE STATE? (380)

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There has been a long tradition of political organising around planning that has taken place outside or in opposition to the state. However, perhaps as a result of their episodic and ephemeral nature, accounts of what can loosely be termed community-led planning are often overlooked in traditional accounts of planning history. Following Sandercock's (1998, 33-34) call to develop "insurgent planning histories" that "challenge our very definition of what constitutes planning", this paper draws on insights from a two year project looking at the Hidden Histories of Community-Led Planning in the UK to go some way to redress this absence.

We will bring together and draw on examples from the popular or insurgent spaces of CLP across the four nations of the UK to show different traditions of realising change all in some ways coalescing around demands for new forms of citizen controlled planning, whether through direct community control of land, building community relations and identity or transforming citizens' relationships with the state. In doing so we reflect on three main themes which have emerged in our research.

The first, and central one to this paper, is a reflection on the distinction between planning which occurs inside and outside the state. An easy shorthand which is reflected in concepts such as invited and claimed spaces (Cornwall, 2004) and planning insurgencies (Miraftab 2009) our research shows that such distinctions are rarely so distinct in practice. Rather we indicate that this is a shifting and dynamic relationship which is constituted differently in different times and different spaces with boundaries that are unclear. Noting previous work on being 'in and against the state' (LEWRG 1980; Newman 2012) we discuss how CLP can be outside and with the state. We also draw on the histories we reveal to reflect on whether lessons on 'working the spaces of power' of CLP can be applied to current ideas of planning in general and radical planning in particular. Within this we reflect on our second theme, the role of counter-professionals in shaping and occupying such spaces.

In addition, we will reflect that the notion of what is hidden from history is multi-layered, paying attention to the challenges our project faced in moving beyond an identifiable 'canon' of projects, places and people to reveal what may also be hidden within these, focusing in particular on gender and race.

We conclude by arguing that these 'insurgent' spaces offer an important counter-tradition, capable of expanding the political horizons of planning in the UK and elsewhere today and rethinking the notion of being inside or outside the state. However, they are not immune

from the issues of the privileging of certain forms knowledge and expertise at the expense of other voices, including those of women and ethnic minorities. We therefore argue for ongoing work to expand planning's archive and build a critical planning historiography which can open up new directions for contemporary planning theory and practice.

Keywords: community-led planning, participation, critical planning historiographies, insurgent planning

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DIRECT URBAN CIVIC ACTIONS BEYOND THE LOCAL: AN INQUIRY ON THE INNOVATION AND POLICY EFFECTS ON SUPRALocal AND TRANSLOCAL RELATIONS (397)

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In the last decades, planning studies have explored civic actions (Lichterman, 2020) focusing on direct actions (Bosi and Zamponi, 2015) meaning self-organised actions that tackle the problematic situations they face by directly developing and practising potential solutions. These actions have been explored through different lenses, focusing on their political value (Sandercock, 1998), their social and public effects (Moulaert *et al.*, 2010), their interactions with systems of governance (Edelenbos and Meerkerk, 2016) and their internal processes of inquiry and knowledge generation (Balducci, 2004).

Across these approaches, direct civic actions have been explored as local processes, analysing their trajectories as embedded within their local urban contexts. Scholars have instead recently underlined the importance of the relations of local direct civic actions beyond the local, like translocal relations of direct civic actions with other localities (McFarlane, 2009; Avelino *et al.*, 2019; Hölzl and Hölzl, 2022), or supralocal relations with civic actions tackling supralocal problems, at regional, national and international level. What flows through these translocal and supralocal relations and how it impacts the problem-solving activities of direct civic actions at different levels remains largely unexplored.

Considering public policies as “the set of actions performed/undergone by a set of subjects (the actors) in some way related to the solution of a collective problem generally considered of public interest” (Dunn, 1981), the Marie Skłodowska-Curie Fellowship “Supralocal” aims to explore how the relations beyond the local of local direct civic actions affect urban policies locally and beyond. The research focuses on the grammars of these actions, the adoption, exchange and innovation of repertoires of knowledge, and the effects of these relations on public policies at different levels.

The research is based on two direct civic actions (in Modena, Italy and Paris, France) linked with supralocal civic actions at national and international levels. They are explored through ethnography, social network analysis, and the analysis of policies, plans and archival documents. This presentation will illustrate some of the results emerging from the first months of fieldwork, to display the relevance of the supralocal and translocal relations of direct civic actions in planning research, and the contribution of this approach to urban planning and policy-making.

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READING THE COMMONS UNDER THE THREAT OF ENCLOSURE MOVEMENTS THROUGH THE CONCEPT OF HETEROTOPIA: ŞAHİNTEPE (517)

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Mega projects, energy investments, and urban transformations are increasingly affecting daily life and exerting pressure on cities. This impact encompasses both man-made and natural tangible and intangible commons and common(ing) practices (Linebaugh, 2008). Subjecting these spaces to interventions that commodify, privatize, enclose, and control these spaces decreases their potential to create a basis for common practices. However, their transformation into areas of resistance through these interventions holds the possibility of creating heterotopic spaces and moments that reproduce the commoning process. Heterotopia (Foucault, 1986), as an expression of otherness and difference, can be seen as spaces of potential transformation with a neo-Marxist perspective. It highlights the liberating aspect of the struggle against the dominant power and uniformity imposed by the dominant mode of production. Moreover, it allows for consideration of social urban spaces where diversity can coexist.

This research, stemming from these ideas, aims to read the resistance of the Şahintepe community under the influence of mega projects and rent-driven neoliberal investments against enclosure through the lens of heterotopia and examine the potential for collective and/or common resistance to create heterotopic spaces. To achieve this, information collected from primary and secondary sources will be used to identify heterotopic moments arising from threatened commons and common practices, and gather insights into the situation in Şahintepe where resistance and the threat of displacement exist. A study using case study method and descriptive analysis technique from a neo-Marxist perspective will be presented. Thus, different aspects of the process will be analyzed using the conceptualizations of "common" and "heterotopia". Şahintepe will be examined as a place that hosts heterotopic moments and drives freedom movements through collective rebellion, protecting the rights of marginalized groups against the Kanal Istanbul Project and Yenişehir Projects.

Keywords: Heterotopia, Commons, Neoliberal Investments, Şahintepe

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PARTICIPATORY COMMUNITY INFRASTRUCTURES: COMMUNITY ASSET TRANSFER IN BRITAIN (575)

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Over the past decade in Britain a practice known as Community Asset Transfer (CAT) has emerged. This process involves local authorities transferring the ownership and management of neighborhood buildings - e.g., community centers, sports facilities, and libraries – to community groups. This shift in the provision of community infrastructures has come at a time of significant fiscal cuts to local government that are altering the social contract between communities and the state. In such a context, calls for greater community involvement risks the cooption of civil society in the service of the state and is widely critiqued (Taylor-Gooby 2012; Newman 2014). Yet, concurrently, CAT may hold democratic and progressive potential as a tool for communities to provide care and services where the state has withdrawn.

Recent work in geography has sought to outline the possibilities associated with community infrastructures. This body of work acknowledges a more than binary existence beyond reductive narratives along a reactionary or progressive continuum. Scholars draw on ambiguity (Kern 2021) and consider how more positive understandings might emerge from the messy middle ground (Cloe et al. 2014). This offers important lessons not only for the inherent ambiguities embedded in CAT practice, but also wider concerns related to public participation in planning. Not least in how scholars construct theoretical frames to understand interactions between the state and society.

In this paper, by drawing across geography literatures - specifically non-foundational feminist, and pragmatist scholars - I share my work on a theoretical perspective that attempts to navigate the complexities of contemporary community involvement. This involves both recognizing the emergence of progressive practices that exist within these spaces through reading for difference not dominance (Gibson-Graham 2006), alongside pragmatist approaches that are orientated to practical problem-solving (Wills and Lake 2020). I briefly draw on an empirical study of CAT in Britain to illuminate some of the opportunities and limitations of the approach presented.

This work, albeit highly situated, sets out to reflect and provide a way forward in thinking not only about the ethical and political possibilities for CAT but also on how this might inform understandings of public participation more widely. My 'work-in-progress aims' to address, and offer a hopeful, approach to public participation in the Global North in a context of austerity and state retrenchment, a key question for planning today.

Keywords: Community infrastructure, Community Asset Transfer, UK, Pragmatism, Feminism

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MANAGEMENT OF PUBLIC SPACE IN TRANSITION TOWARDS A USER-CENTRED PARADIGM (589)

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The management of public space has become an increasingly important issue in recent years, as urbanization and challenges have led to increased demand for public spaces. Public spaces play a vital role in the social, economic, and environmental well-being of communities. However, the management of public space is often complex and challenging, requiring careful planning and coordination among a wide range of stakeholders. public space management involves balancing the needs and interests of different users, including residents, visitors, and businesses.

In the management of public space there seems to be a shift from a rational comprehensive paradigm to a social constructivist paradigm. The current paradigm, in which technical and economic values dominate, is embedded in the existing political and societal regime and does not prioritize meeting the needs of users. A new paradigm is emerging, in which inclusiveness and other softer values are considered alongside technical and economic values. These changing perceptions of the managers of public space have repercussions on the way the public organisation performs and organises its tasks. Thus, in order to arrive at such a newly conceived future, the concepts, solutions created, and ways of working need to be fundamentally different from practices in recent past and present. The goal of government is respond to this new paradigm and deal with the fact that the values being pursued are constantly changing. The goal organisations have is clear, but the path towards it remains unclear. There are several organisations that face the issue of how to give substance to the new paradigm, or will face this issue in the future.

The aim of this paper is to explore how public organisations give substance to the new paradigm in practice. And whether the paradigm shift in public space management has led to institutional transformation in the management of public space. This asks for an in-depth understanding of the mechanisms through which paradigm shifts can drive institutional transformation, and the conditions under which such transformation is more likely to occur. The research will be conducted in the Netherlands using a qualitative methodology with data collected through observation and document analysis. The results point at the shift in perspective on public space management has led to changes in the way public spaces are managed. However management of public space is in transition – while on a policy level this transition starts to take pace, in practice, the new working paradigm is still in its infancy.

Keywords: Paradigm shift, Management of public space, transition, Public Space

THE SOCIAL ECONOMY ACTORS IN NETWORK GOVERNANCE OF LOCAL REGENERATION (628)

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The urban development approach based on economic growth has recently faced limits in regenerating the declined cities, which requires a different approach from the traditional state or market-driven development. In this regard, there has been increasing attention paid to the social economy as an alternative economic actor as well as a social innovator to tackle complex and multifaceted urban problems. As positioned alongside the state, market, and community sectors, the social economy has been expected to play multiple roles to regenerate the local areas, while mobilising local resources and pursuing more integrated and inclusive local regeneration. The potential of the social economy has also drawn increasing interest from the current urban policy regime in Korea – where the changing economic structure and decreasing population have ever accelerated urban decline issues, particularly in small and medium-sized cities. In this line, the government put an increasing emphasis on the development and involvement of the social economy sector across the regeneration processes.

In this context, this paper aims to explore how the social economy entities interact with other actors to achieve regeneration agenda at the neighbourhood or local level by using social network analysis. By doing this, it raises questions on how the form of interactions could influence the dynamic functions of the social economy and create diverse ways of regenerating the declining city areas. Through multiple case studies, focusing on three inner-city areas of South Korea, this research analyses the formation and structure of networks centred on social economy actors and reveals what are the critical elements to facilitate the interactions and enlarge the impacts. The social network analysis between the government-funded urban regeneration projects and social economy organisations indicates that each case shows different forms and degrees of connections depending on the nature of the local community as well as the local regeneration plan. In particular, it finds the critical role of intermediary officers of the local regeneration support centres, which are the quasi-public agencies to deliver the regeneration projects on-site. Beyond the relations of social economy entities with the formal regeneration policy regime, it also highlights different connections and synergies between social economy actors as well as between the actors and other sectors, through which the social economy sector could have a wider impact on local regeneration.

Keywords: Social economy, local regeneration, network governance, community capacity building

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EXPLORING GROUNDS FOR DEMOCRATIC INNOVATIONS IN LOCAL GOVERNANCE (629)

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The democratic innovation of participatory budgeting (PB) can potentially lead to greater and more informed citizen participation in policymaking and engage citizens that feel disconnected from political and policy processes (Geissel, 2019; Sintomer et al., 2008). Although the level of public engagement varies across Europe, there is a general trend towards co-creation visible in local participation – establishing and maintaining relationship between citizens and local authorities (Lender et al., 2016) – which is a significant contextual factor for the development of PB. To optimise the use of PB there is a need to study democratic innovations in different settings and the determinants of effective implementation and institutionalisation. This paper focuses on public engagement conditions and democratic innovations (with an emphasis on PB) implemented in selected European countries from a comparative perspective. The objective is to review their (1) use, (2) impacts, and (3) needs. Based on a literature review and interviews from the H2020 project DEMOTEC the paper explores and compares public engagement and the potential of PB in seven case studies: Ypsonas (Cyprus), Neapoli-Sykies (Greece), Sligo (Ireland), Rotterdam (The Netherlands), Wałbrzych (Poland), Cluj-Napoca (Romania), and Fife (United Kingdom). The paper aims to assess the main similarities and differences in the use of democratic innovations, propose practice-oriented typologies, and define needs for optimised PB implementation. Finally, it presents general recommendations and policy lessons.

Keywords: Democratic Innovations, Participatory Budgeting, Public Engagement, Needs Assessment, DEMOTEC

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‘RÉSISTANCE OLYMPIQUE’: THE URBAN IMPACT OF PARIS 2024 THROUGH THE LENS OF LOCAL OPPOSITION GROUPS (630)

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The next Olympic Games will be hosted in the French capital, Paris, and in some of its neighbouring municipalities. The social context in which this event’s edition will be held is unique for a few reasons. First, these Olympics will be the first to fully benefit from the implementation of Olympic Agenda 2020, which is a policy adopted by the International Olympic Committee in 2014 to, among others, enhance the urban sustainability of the Games and respond to the public and political opposition against the event that, over the last decade, was responsible for the withdrawn of several bids of cities willing to host it. Second, because of the worldwide context set by the pandemic and energy crises that largely influenced and changed this edition’s plans, increasing budgets and, consequently, opportunity costs that further contributed to the intensification of the event’s overall public disapproval. Third, because of the expectation put in this edition regarding sustainability promises made by event organisers and hosts, not only associated with Olympic Agenda 2020, but also concerning other commitments to align the event with the needs and priorities of modern societies, namely of an environmental and social nature. Fourth, because even though many competitions will be held in existing and temporary facilities in Paris, most of the planned urban interventions are being carried out in the neighbouring department of Seine-Saint-Denis, where Stade de France is located, which is the poorest department in France and faces several socio-economic problems and challenges.

In Seine-Saint-Denis, the most relevant residential urban projects being carried out concern the construction of the Olympic and Media Villages. Additionally, other transport infrastructure projects are being implemented in association with the Games, like planned expansions of the metro network, or the reorganisation of the traffic flows in the Pleyel Interchange. Furthermore, some sports facilities are also being built or refurbished but, with the exception of the Aquatics Centre, they are mainly small sports centres with local catchment areas. Individually, these projects have their unique characteristics and functions but, together, they constitute a strategy to transform the city, carrying the potential to provoke a deep change in urban and social structures and leave a legacy to the population. However, these theoretical benefits are not unanimously well received by local populations. Many of these projects have been facing public opposition, triggering the informal establishment of a few civic groups, each of them opposing specific interventions. Collectively, they represent a union that fights against the hosting of the Games, going along with the existing worldwide anti-Olympic movement.

We focus on the claims of these civic groups and on how they are impacted by these interventions, analysing their influence in changes of plans either through participatory processes or legal court appeals. Over more than one year, we conducted several interviews with all these opposition groups, event organisers and responsible governmental entities. We also participated in several private meetings and public demonstrations organised by opposition groups, as well as in public consultation sessions held by event organisers and governmental bodies. Furthermore,

throughout time we accompanied the evolution of the urban projects in all places that constitute the core of these conflicts by conducting several self-organised field visits and participating in tours organised by agencies responsible for the respective construction works. In this research, we analyse how these civic groups are structured and organised and what are their struggles, objectives, strategies and difficulties. We conclude on how these conflicts impact both the local communities and the event planning/delivery. We briefly compare our conclusions with similar research being conducted for the case study of the Milan-Cortina 2026 Winter Olympics.

Keywords: Public Opposition, Mega-event Planning, Olympic Games, Urban Governance, Urban Development

HERITAGE VALORISATION AS A CATALYST FOR ECOSYSTEMIC SHIFTS IN CITIES AND REGIONS: COMPARING APPROACHES ACROSS EUROPE (634)

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In addition to being an integral part of the cultural and aesthetic landscape, heritage also serves as a vector for developing new urban spaces and integrating policies across different sectors. For instance, it can be used to address flood risk and stimulate local economies.

There has been a growing realisation that heritage encompasses both landscapes and buildings. It also includes stories, past practices, and intangible values. Unfortunately, there is currently a lack of a clear understanding of how this concept and its role can be applied to different contexts.

The paper aims to provide a comprehensive analysis of how heritage is being valorised in different planning contexts. It also explores the various planning tools that are used to carry out this process. The paper draws on the lessons learned from the Interreg WaVE project, which involved the study of five case studies, including those from Denmark, Italy, Spain, and the Netherlands.

Through a variety of methods, such as interviews, site visits, and policy documents, the paper aims to provide a comprehensive analysis of how heritage is being valorised in different planning contexts.

The paper presents a typology of approaches that can be used to valorise heritage. These include the flexibility of the protection of heritage, the degree to which it can be integrated with other policies, the participation of stakeholders, and the degree of decentralisation. The paper also explores the various aspects of this process.

The typology can provide a multi-dimensional view of how natural and cultural heritage is handled in planning. It also acts as a framework for exchanging knowledge and conducting comparative research to promote the valorisation of heritage as a vector for urban sustainability and ecosystemic change.

Keywords: cultural heritage, natural heritage, heritage valorisation, heritage policy, planning, sustainability

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PROCEDURAL JUSTICE THROUGH PUBLIC PARTICIPATION? A MIXED-METHODS STUDY OF A MOBILITY PLANNING PROCESS IN HAMBURG (642)

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Consultative public participation is a tool currently used by municipalities in Germany and around the world to contribute to political decisions and increase trust in institutions as well as satisfaction with authorities. It aims to address injustices of more traditional planning approaches on different levels: besides (ideally) improving distributive justice and the recognition of different needs, consultation is seen as a means to improve procedural justice in planning. Procedural justice explicitly considers justice in the decision-making process. Participation can contribute by inducing higher inclusion and possibilities of expression for future users and especially marginalized societal groups in planning processes and inclusion of their contributions into the planning result (Alcántara et al., 2016).

Yet, we argue that consultation does not automatically lead to procedural justice, for example when only dominant social groups contribute or there is no effect of the consultation on the political decision. Even though public participation opens up the process to the general population and can thus be considered as progress for procedural justice, the circumstances under which participation is just and not one-sided are not yet clarified (Young 2010). We are interested in under which circumstances current consultation procedures actually contribute to procedural justice in planning processes.

To this end, we have investigated in detail the planning process to transform the neighborhood of Ottensen in the German city of Hamburg into a low-car area, where various formats of consultative participation were applied.

Based on a theory-based framework of procedural justice in planning (Smith, 2009; Geissel and Newton, 2012), we consider different stages of the planning process, from input and throughput to the integration of the contributions into the political decision. The main problems focused on in this research are questions of representativity of the participants on the in- and throughput level of the policy-making process. In a mixed-methods approach, we combine the perspective of the population and the participants - based on a representative survey of inhabitants and participants and differentiated by socioeconomic groups - with an evaluation based on qualitative interviews and participatory observation. Integrating insights from both approaches, we discuss how the consultation has contributed to procedural justice, and conclude with possible implications for the design of planning procedures.

Keywords: procedural justice, public participation, mobility transition, legitimacy, social inequality

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THE NETWORK OF OLYMPIC ACTORS: PLACING HOSTS AND LOCAL COMMUNITIES WITHIN THE GOVERNANCE OF THE WORLD'S BIGGEST SPORTS EVENT (644)

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For decades, the Olympic Games have been used by host cities to catalyse urban development. To deliver the demanding requirements of the event, hosts resort to large urban regeneration projects that create massive cultural and sports centres able to further generate development and attract private capital. On the other side, over the last decade the hosting of the Olympics has triggered strong public opposition, especially from local communities of hosting or bidding cities. The complains of these civic groups encompass issues that address all three sustainability spheres: the capital and opportunity costs of the event and the economic risks associated with the construction of the required sports facilities and other infrastructure; the environmental impacts of related developments and how the event is leveraged by host governments to overcome regulatory processes of planning like public consultations and impact assessments; and the social side-effects triggered by the construction of accommodation and transportation facilities and infrastructures, like displacement and ulterior gentrification.

The contestations of populations against these issues have led several cities to withdraw their candidatures to host the Olympics, leaving very few candidates for the most recent editions of the Games. Furthermore, hosts of the next Olympic Games have also faced opposition during the preparation for the event and, in some cases, court appeals by these civic groups have been efficient in stopping, delaying, and requiring changes to the urban projects necessary to deliver the event. Concerned about the future of the Olympic Games, the International Olympic Committee (IOC) adopted, in 2014, the Olympic Agenda 2020, which is composed of 40 recommendations aimed at changing the way the Games are organised and delivered to increase their sustainability, credibility and youth appeal and, consequently, the Games' legitimacy and public support. However, none of the 40 recommendations directly addresses the issue of public opposition. Furthermore, none of them directly aims at increasing the collaboration between the Olympic Movement and the Olympic Games' organisers with local communities and civic opposition groups.

This research aims to understand how these civic groups are framed within both the governance networks of the Olympic Games and of the hosts urban system, looking specifically on how Olympic Games' regulations see the role of local communities in the hosting of the event and asking for integration/collaboration of both governance systems. Having this as the main objective, the research identifies the network of actors involved in the Olympic Movement and in the hosting of the Olympic Games. Resorting to a documental analysis and a further network analysis we identify close to 100 different actors and the interrelationships between them. We highlight the role of hosts and local communities within this network. According to the results of this research, we also call for the attention that, being the most impacted by the hosting of the Olympic Games, local populations are not considered as important actors and that, in order to increase the sustainability of the event, the IOC must acknowledge this gap and correct it in future

policy-making. Additionally, we discuss on how hosts need to adopt a more proactive posture in asking for more engagement of local populations.

Keywords: Olympic Games, Olympic Governance, Urban Governance, stakeholder analysis, Public Opposition

STORYTELLING: A NARRATIVE APPROACH FOR CONFLICT MANAGEMENT IN PARTICIPATORY URBAN DEVELOPMENT? (662)

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This contribution aims to connect the discussion on narratives for planning with findings from narrative psychology on the handling and transformation of conflicts at the municipal level (Gatzemeier & Straub, 2013; Milling, 2013).

In democracies of pluralistic societies, the social, economic and political lines of conflicts are increasing, leading to planning being more frequently confronted with protests and conflicts or being the cause of both (Kühn, 2021, p. 151). This challenge has already led to an (ongoing) discussion on the further development of collaborative planning and its theoretical foundation (e.g. Bäcklund & Mäntysalo, 2010; Gualini, 2015). A significant part of this discussion is influenced by the political approach of agonistic pluralism by Mouffe (2013).

The theoretical discussion about the consequences of the normalization of conflicts as a productive force is followed by questions about the consequences for participatory urban development (Kühn, 2021, pp. 152–153). While the normalization of conflicts in an agonistic sense challenges urban planners to create public arenas for open contestation, negotiate alternative solutions, and make transformative use of conflicts and protests (Kühn, 2021, p. 154), there are only a few studies on conflict management in the urban planning practice (e.g. Verloo, 2015).

Based on the assumption that narratives make conflicts visible and that conflicts themselves are narratives, storytelling offers a way for conflict transformation (Cobb, 2013; Gatzemeier & Straub, 2013; Milling, 2013). As storytelling taps not only the rational but also the emotional level of the conflict parties, the (conscious) telling of stories can change relationships and reveal different narratives of or within a conflict (Milling, 2013; Verloo, 2015).

At the same time, the so-called narrative turn in urban planning discusses the role of narratives for, in and of urban planning (Ameel, 2021). However, a literature review on research about narratives for planning, shows there is still a lack of knowledge about the functions and potential of storytelling in the context of urban development conflicts. This contribution therefore examines the functions of storytelling with reference to narrative psychology and links findings on storytelling from municipal conflict management (Gatzemeier & Straub, 2013; Milling, 2013) with the narrative turn in urban planning. The aim is a theoretical conceptualization for the investigation of storytelling as a participatory method for conflict management in pluralistic societies.

Keywords: storytelling, conflict management, agonistic pluralism, narrative turn

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MODELS OF PARTICIPATION PROCESSES USED IN PLANNING AND DESIGN OF PUBLIC SPACES (665)

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Public spaces, constituting the skeleton on which the city is built, are an area of interest of various actors - residents, activists, local entrepreneurs, officials and numerous organizations. Therefore, it is justified to include all actors interested in a given space in the process of its planning and design.

The aim of the work was to analyze participatory processes used to create high-quality urban public spaces. In the chosen cases, the cooperation between various actors was analyzed, the principles of such cooperation were defined and the characteristics of models of participatory processes used in the planning and design of contemporary public spaces with the participation of various actors were developed. In addition, the role of various stakeholder groups in shaping contemporary public spaces was defined, taking into account the roles of process coordinators and mediators. In addition, the idea of placemaking as a tool used in participatory design of public spaces was examined.

The conducted literature and empirical research of examples from Poland, Europe and North America allowed for the compilation of models - action strategies - participatory processes. In addition, the existing models of conducting the process of public participation in the planning and design of urban public spaces, developed by researchers and practitioners of participation, were analysed.

All of the models - strategies - of participatory process, both developed during the research on the basis of the analyzed examples and described by researchers and practitioners of participation, were illustrated according to the author's method. As a result, they gained a comparable form and made it possible to draw conclusions.

The results of the detailed research showed how diverse the participatory processes are and how many ways one can reach the same goal - high-quality public space planned or designed thanks to cooperation with various actors.

In addition, the results of the research had an application dimension and allowed to determine the paths of action for individual initiators of changes - officials, residents, activists or non-governmental organizations.

Keywords: Public space, participation, models of participation process, planning and design of public spaces, placemaking

LEADERSHIP IN PROMOTING COLLABORATIVE GOVERNANCE OF RURAL REGENERATION THROUGH CULTURAL ROUTES: AN ACTION RESEARCH OF THOMSON AND MAXWELL TAIWAN MULTI-ETHNIC CULTURAL ROUTE (671)

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Cultural routes are tools for promoting and preserving shared and diverse cultural identities. They have gradually gained more attention as a strategy to promote social engagement in heritage conservation and sustainable tourism development at the local, national, and macro-regional scales in Europe and elsewhere. As defined by the Council of Europe, a cultural route is “a cultural, educational heritage and tourism co-operation project aiming at the development and promotion of an itinerary or a series of itineraries based on a historic route, a cultural concept, figure or phenomenon with a transnational importance and significance for the understanding and respect of common European values.” Compared with the previous top-down approach of state-led heritage preservation, the wide territory of cultural routes has gradually developed a network-based and collaborative model of governance to involve multi-stakeholder engagement, including public, private sector, non-profit, and civic society in cultural protection, interpretation, and application and management.

Through cross-border and cross-regional cultural themes and network connections, the spatial implications of cultural routes have carried unique meanings to the rural region. It expands the heritage protection and tourism development territory beyond the iconic urban destinations. It goes deep into rural and remote areas where tourists and resources rarely touched in the past. It also reveals the potential of cultural assets as a critical resource in rural regeneration at a regional level. Yet such a collaborative network requires leadership to initiate, facilitate, mediate, and manage the process and outcome of collective efforts. Who are the formal and informal leaders promoting cultural routes in rural regions? What do they do, and how do they promote networking and collaboration among rural communities? What role do cultural routes play in rural regeneration? These are the central questions of this research.

The selected culture route to study is Thomson and Maxwell Taiwanese Multi-Ethnic Cultural Route in Taiwan. It was the route where the first British presbyterian missionary James L. Maxwell led the photographer John Thomson to make the very first photographic documentation of the Formosa landscape and the aboriginal Taiwanese in 1871. With a collaborative effort from the grass-roots since the 2010s, this route was designated by the Ministry of Culture in 2022 as one of the first demonstration routes for the Taiwanese Cultural Route Policy to celebrate the east-west encounter and the diverse cultural ethnicities of Taiwan. This action research is based on the author’s direct observations and participation in the rural regeneration program and university social responsibility practice program in Southern Taiwan since 2016. Methods include document analysis, interviews, focus groups, and direct participation in various activities and social-media groups.

This research found that formal and informal leaders from local historians, universities, community colleges, and museums can leverage their own resources to construct networks of

participants, facilitate communications and interactions through various types of online and field activities, align the interest, and foster the creativity of participants through workshops, and build trust and defining new roles in joint actions. The spatial planning perspective brought by the university was essential to promote systematic thinking and expand the territorial possibilities of the culture route by integrating community knowledge and government regeneration efforts. The cultural route theme of “multi-ethnicity” and the frontier of foreign culture encounter has become a critical strategy to restore and strengthen the regional cultural identity of diverse ethnicity and develop meaning to facilitate collaboration in heritage protection, education, and culture tourism among communities through their collective cultural identity. More importantly, the culture route expands the stakeholders from local to cross-scale and engages trans-disciplinary participants with research, education, and economic interests that make rural regeneration more sustainable in the long run.

Keywords: cultural routes, governance, rural regeneration, leadership, heritage

ENGAGEMENT OF UKRAINIAN CITIZENS IN POST-WAR RECONSTRUCTION (708)

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The war started in 2014 and escalated into a full-scale Russian invasion of Ukraine almost a year ago. The Ukrainian people has shown the admirable perseverance, operational readiness, and heroism to protect their state and territories. Open-field battles have turned into urban warfare and the goal has become not only the annihilation of the enemy, but also the targeted destruction of critical infrastructure. Cities are being destroyed by war crimes and the damage is enormous for people's lives and for the urban fabric. But this time comes with changes, opportunities, challenges, and responsibilities. In economic and ecologic reform, in sustainable planning and the relation with the EU, and in involving civil society and decision making.

Civic participation was sporadic in Ukraine before the war, and more reactive as both of Maidan uprisings (2004 and 2013-14) demanded transparency and accountability from the government. The spatial planning documentation consisting of three levels (national, regional, and local) did not require any participatory planning principles by law until 2011. Only the law "On Regulation of City Planning Activity" approved in 2011 introduced the obligation of citizen participation in planning at the local level of spatial planning documentation. However, the processes of participation are complicated by newly acquired laws that were created to accelerate the reconstruction and new construction of war-torn landscapes.

The Martial Law, which came into force in June 2022, was created to expedite the construction of temporary housing for internal refugees in the country. The law states that no planning permission is required for new construction plans for temporary housing and critical infrastructure. Without clearly defined boundaries and the opportunity for public debate, the law severely limits the ability of residents to get involved and express their views. Equally problematic is Law 5655, passed by Parliament before the end of 2022, which does not efficiently cover public participation process. While it aims for digitisation, anti-corruption, and deregulation, it ultimately leaves developers with enormous powers in the process of supervising building permits and limits the possibilities for municipal action, not to mention citizen participation.

An effort by a group of urban planners and architects from the Ro3kvit Urban Coalition and the US-based URAG: Ukraine Rebuilding Action Group is a response to the low level of participatory planning in Ukraine. Our work aims to help community leaders, government staff and officers to develop meaningful and effective public involvement process, to support local interaction and to create community initiatives for post-war rebuilding. Aware of the daunting task, we want to listen and give voice to those who are affected. Leaving no one behind.

Keywords: public participation, planning processes, Ukraine, post-war recovery

INTERDISCIPLINARY AND MULTINATIONAL CO-PRODUCTION THROUGH URBAN LIVING LABS (715)

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Urban Living Labs (ULLs) have been studied as non-statutory innovative settings for supporting the sustainable transition through co-productive participation of diverse stakeholders. However, ULLs are often understood as local experimentations with limited impact in relation to formal planning processes. This paper reviews how the overarching concepts of ULLs can be structured to transcend national and disciplinary boundaries and the challenges of scaling and implementing action research, including multiple research disciplines. Based on this review, a theoretical framework is developed with an overall aim to understand how ULLs shows potential to engage multiple actors holding various views on knowledge and planning, and its influence on formal planning processes. The NordicPATH project is here used as a case study, to explore and refine the theoretical notion. The case spans four Nordic cities (Aalborg, Gothenburg, Kristiansand, Lappeenranta) and focus is on how to structure disciplinary epistemologies under an aligned project aim. The paper discusses how ULL governance shows the potential to mobilize formal planning processes to become more participatory. The project's governance model has been advanced and performed since March 2020, in the first wave of the COVID-19 pandemic, during forced isolation and periods of social distancing, but also extends to post-pandemic conditions. As such, the paper presents a resilient governance model for public participation in various contexts. In the end the paper argues that the success of ULLs, in influencing or having an impact on formal planning, lies not necessarily in local anchorage with planning authorities and other relevant local actors, but also on how researchers can shape and engage the collaboration efforts of a diverse research consortium.

Tentative outline:

1. Problem/introduction
 - ULLs as niche governance structures of local interest,
 - Not much literature on how to perform urban living labs in large international and interdisciplinary consortiums
2. RQ: how can governance of ULL activities and aim be structured across multinational and interdisciplinary research teams and how does these governance structures perform in entering/supporting formalized planning processes?
3. Literature review
 - Governance of ULLs, scalability, governance of more than one ULL, governance across national borders, interdisciplinary governance, ULLs and formal planning processes
4. Method:
 - Case study and action research
5. Results:

- Description of work and structures of ULL work at consortium level
 - Description of how individual ULLs entered formal planning processes
6. Discussion
- Challenge of aligning aims, activities, understandings across disciplines and borders
 - Success of ULLs in entering formal planning lies not necessarily in local anchorage with planning authorities and other relevant local actors, but also on how researchers shape and engage in the collaboration efforts of the research consortium.
7. Conclusion

Keywords: Inclusion, Air quality, Knowledge, Sustainability

A STUDY ON THE EVALUATION OF RESIDENTIAL URBAN REGENERATION PROJECTS USING THE PERSPECTIVE OF SOCIAL INFRASTRUCTURE (717)

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In South Korea, the urban regeneration project for residential area is a government-led national wide project. However, it also has been criticized for the irresponsiveness to the residents' actual needs under the top-down plan, the inability of the local government to build the community network, and the financial problem after the period of funding is over. This study seeks the solution for the issues under the view of the concept of social infrastructure (Eric Klinenberg, 2018), which has a growing interest in the urban study area recently. Social Infrastructure is a physical facility and space that forms a community and provides social functions to revitalize the community. Based on this concept, this research investigates and assesses two cases of regeneration projects in South Korea. Focusing on social and public life, the process and results of the cases, particularly the sense of community and social network of the residents, are evaluated. On top of the findings, this research suggests the effectiveness of the concept of Social Infrastructure in looking and evaluating the regeneration project.

Keywords: Residential Urban Regeneration, Social Infrastructure, Base Facilities

MEASURING THE IMPACT OF GREEN SPACE ON HOUSING PRICES: THE CASE OF BUSAN, KOREA (776)

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Nature is an important driver of regeneration in modern society. Moreover, much attention has recently been given to contact with nature due to environmental pollution, abnormal weather, new diseases, and quality of life. Hence, the city began to develop through urban planning, which invested much in maintaining existing green spaces, building parks, and expanding green spaces. As a result, parks began to be affected by the lives of residents. On that account, green spaces play an essential role in improving the quality of the circumstance. Therefore, public facilities such as parks are selected as a determinant when choosing a residence. It has something to do with the fact that when the property value was calculated according to the distance of the park, the decrease in value according to the distance showed positive impacts (Nicholls, 2000). The case study of Busan is a neighborhood park, a small-sized park, and a sports park positively influenced by nearby house prices (Lee& Choi, 2016). In this way, people welcome parks, but green spaces that have not been developed do not. For the decade, the green spaces of Busan have decreased from 61.02% to 58.06% in the past decade due to urban development. In addition, most of the green areas are distributed on the city's outskirts, and there is a problem that the green area axis is disconnected due to urban development. This means that the low-income class will likely be concentrated on the city's outskirts with many green areas. On the contrary, it is interpreted that the ratio of parks and green spaces in the living area can be relatively high in areas with few low-income classes and located in the inner city. From a fragmentary perspective, the underprivileged may have a high green space rate. The services of urban parks are unfairly provided to the socially and economically underprivileged. In this regard, this paper establishes the difference between artificially created urban parks and green areas, which are natural environment that exists and are being preserved, observes changes in land prices accordingly, and explores whether they affect the relationship with income classes. Therefore, this paper addresses the results of analyzing the relationship between housing prices based on the ratio of green areas and urban parks with social classes. The study area is Busan, where the change in the green area rate was quite different compared with the last decade in Korea. The data were derived from the 2018 Busan nature environment and park ratio based on GIS. The data were collected via a Busan city hall website and the district offices of each borough in Busan. The housing data and socially disadvantaged class data are also based on 2018, the year before being affected by COVID-19. The socially disadvantaged class was calculated based on each region's ratio of basic livelihood recipients. The classification of income class was calculated based on the ratio of general recipients of the nation basic livelihood benefits in each region, and the standard was also used based on the year 2018. This paper confirms the difference between the housing price of undeveloped green areas and those around city parks, and proves the inequality of green areas by examining the degree of correlation among the low-income class.

Keywords: Green space, Housing Prices, GIS

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TOWARDS COLLABORATIVE GOVERNANCE: COMMUNITY PARTICIPATION IN STREET EXPERIMENTS FOR INNER-CITY REGENERATION (791)

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The increasing complexity of urban regeneration issues has recently made multi-stakeholder collaboration an important part to solve policy problems. While residents form an important part in a variety of collaborative governance processes, approaches used are often criticized as too formal, and lacking more inclusive participation. Therefore, new informal mechanisms of collaboration are sought, to ensure a more effective engagement and representation of population groups. Although community-led participation is the approach that leads to a more effective collaborative process, issues of power and inequality are a challenge in many places in planning practice (Healey, 2018). Ways of civic empowerment, communication, and negotiation provide participants with transformative learning opportunities so that not only their arguments change but also the participants of the participation process themselves (Brand & Gaffikin, 2007).

In order to test urban development ideas, the notion of "urban experiment" has been developed in recent years as a recognized and effective approach. The urban environment is viewed as a creative laboratory for testing the implementation of diverse initiatives and innovations (Caprotti & Cowley, 2017). The inner-city neighborhoods in many cities are struggling to ensure vitality and liveability, thus these areas often represent a widespread location of urban experiments. In addition to these questions, the problem of community representation manifests itself in many inner cities (Grabkowska, 2015). The potential to transform city center streets and vacant areas into user-friendly urban spaces and the impact of those transformations on the city's liveability were recently tested by Riga municipality. Urban experiments varied in scale and form, resulting in street pedestrianization, urban gardens, and other temporary initiatives, which allowed more space for walking and cycling, street sales, social events and other activities. Thus, the aim of this article is to explore processes of testbed planning with regard to the role of community participation in the designing, implementing, and analyzing phases of the experiment. After presenting the findings, the article concludes with a discussion on factors that influence public participation in collaborative governance including communication, the balance of interests, and the degree of resident involvement in decision-making.

Keywords: public participation, urban experiments, collaborative governance

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RESEARCH ON THE TRANSFORMATION OF WORKER COMMUNITY GOVERNANCE AND RESIDENTS' SELF-ORGANIZATION: TAKE PINGDINGSHAN CITY, CHINA AS AN EXAMPLE (814)

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The reform of economic system has brought about continuous and profound social changes. The socialization of community governance and the practice of residents' self-organization are developing in China. China has an economic and political system that is different from that of western countries. In China, state-owned enterprises undertake the responsibility of building workers' houses and providing public services including education, medical treatment and entertainment facilities for their employees. In the past two decades, China has been carrying out continuous reform of economic and social system. State-owned enterprises are no longer responsible for the management of their worker communities. The governance of industry community has been transformed from "unitary management", which is run by enterprises, to "diversified governance", which involves the government, enterprises, market, society and other parties. In this process, self-governance of worker communities has become an important participant in community governance. This study takes a traditional coal resource-based city as an example to analyze the difficulties and challenges encountered in the transformation of community governance of large state-owned enterprises and the embryonic practice of community residents' self-organization. Through data review, field survey and semi-structured interview, the researcher visited more than 20 worker communities, obtained 74 interview recordings of different groups, including community residents, government staff, community organizers, and property management. This paper summarizes the main types and different characteristics of residents' self-organization in China's worker communities at present, and believes that local government should encourage and guide the orderly development of residents' self-organization, strengthen supervision, and promote the integration of autonomous organizations into the multi-governance system, so as to effectively assist the smooth transition of worker community governance transformation.

Keywords: state-owned enterprise, worker community, Social governance transformation, residents' self-organization

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BRINGING PARTICIPATION CLOSER TO LOCAL GOVERNANCE EXPECTATIONS IN PORTUGAL: AN EXPLORATORY STUDY (846)

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This article is motivated by the recognition of existing gaps between most common participatory practices and the hopes of participatory governance materialisation. Beyond normative mismatches, tangible gaps exist regarding the prospects and the effective results of participation, but also those resulting from the way citizens and civil society perceptions become misaligned with those of local public authorities. Thus, the paper ponders the tension between the heavy legacies of traditional forms of political action and policy delivery, embedded in modernist and sectorial structures of public administration, and the emergence of new demands originated by innovative programmatic layouts and new social movements agendas and citizenship cultures, all accompanied by growingly pressing societal challenges. The correspondent theoretical debates recover the issues of co-creation and co-production (Albrechts, 2013, Watson, 2014, Wamsler, 2016), and the way they have been confronting traditional forms of participation, hence also considering the role of civic initiatives in the reconfiguration of the public sphere (Fung & Wright, 2008, Seixas & Mota, 2021). This debate is triggered by the notion that innovative participative practices are permeating local governance practices unevenly, leading to fragmented effects of positive contamination of the more traditional ones, as has been recognized for the Portuguese situation (Seixas & Guterres, 2019, Falanga & Ferrão, 2021, Rio Fernandes et al, 2021). The article organizes relevant empirical information regarding diverse examples of innovation in local participatory practices in Portugal. The main goal of the research is to bring further observation and interpretation for the possible evolution – including its unbalances and gaps (of dialogue) between traditional and innovative forms of governance, participation over co-creation, in addition to the bridging routes that have been explored. The purpose is to identify productive lines of coalescence between the different agents and spaces, thus contributing to position more stable and permanent arrangements within the Portuguese local governance systems.

Keywords: Participation, Co-creation, Co-production, Civic Movements

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REIMAGINING HISTORIC PLACES THROUGH INVESTMENT IN AFFORDABLE HOUSING (849)

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*The research explores planning and design strategies for adaptive reuse in Canadian cities to preserve and enhance the legacy of Canadian historic places. Propelled by a growing commitment to sustainability, creative planning intervention and a blend of grassroots and public projects, heritage-led regeneration is transforming the urban fabric of Canadian cities and is creating a dynamic new civic identity (Tsenkova 2021). Heritage planning is a key component of the *New Urban Agenda* and the implementation of UNESCO's *Historic Urban Landscape Approach* guiding global and national efforts for inclusive and vibrant cities (Bandarin & van Oers 2012). We capitalise on the synergies of this approach and use it as a framework to reimagine the future of historic places in Canadian cities.*

Planners have a vital role in heritage conservation practice and the implementation of *Standards and Guidelines for the Conservation of Historic Places in Canada*. The conservation activities (preservation, rehabilitation and restoration) are a sequence of actions progressing from understanding the historic place through inventory, planning for its conservation, and intervention. Heritage planning links a comprehensive understanding of an historic place with intervention that respects its heritage value, considers all factors affecting its future, the potential for economic and environmental impacts, available resources and external constraints (Kalman 2014).

Drawing on insights from case studies of adaptive reuse in Canadian cities— Vancouver, Toronto, Montreal, Regina and Winnipeg—we focus on the social aspects of sustainability and the opportunities to reimagine the future of a historic place for affordable housing and community services. Our methodology builds on case study analysis, experiential learning, key informant interviews and critical reflection on design thinking for social innovation (Wrigley et al 2018). The research offers a simple method for classification of the adaptive reuse of historic sites using several domains: scale, function, typology, character-defining elements, authenticity, community integration and partnerships.

Historic places are an assemblage of heritage buildings and public spaces that have acquired new functions and continue to be a catalyst of community life and social interaction. We focus on innovative design to facilitate adaptive reuse through a model for people-centered, livable, and mixed-use spaces. We argue that historic places that have survived the test of time offer important lessons for more equitable planning that reflects cultural diversity, preserves authentic architecture, and promotes community resilience. This builds a more global sense of place where the global constitutes the local and the built environment builds bridges for more inclusive multicultural cities.

Keywords: heritage planning, adaptive reuse, affordable housing, regeneration, social sustainability

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PUBLIC PARTICIPATION IN URBAN RENEWAL MECHANISM: A PRACTICE OF COMMUNITY PLACEMAKING BY OPTIMIZING SOCIAL CAPITAL (855)

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In the process of large-scale and high-intensity development of contemporary Chinese cities like Shanghai, the construction of urban green space is growing rapidly. However, the operation and maintenance of community Greenland, a kind of affiliated Greenland, often show decay and neglect due to the lack of public participation. Since 2015, Shanghai government has shifted the focus on urban renewal from incremental development to stock renewal, and the strategy for urban renewal has also shifted from visual aesthetics to the organic interaction and integration between spatial renewal and community building. This study takes Shanghai community garden space renewal as a specific case to analyze how to improve the efficiency of social management and operation by optimizing social capital, so as to stimulate community vitality and promote placemaking. This paper hopes to enlighten the governance of community public space and its transformation by analyzing and reflecting on the development mode and implementation mechanism of this practice.

Keywords: public participation, urban renewal, planning transformation, social capital, placemaking

URBAN AUTONOMY IN A NEO-NATIONALIST AGE: THE CASE STUDY OF TEL-AVIV-JAFFA (871)

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This research project stems from a paradox: as more and more countries are characterized by neo-nationalist, right-wing or populist governments, their central cities (e.g. Budapest, Warsaw, Istanbul, Tel-Aviv-Jaffa) thrive as 'islands' of liberal and progressive regimes. In this process, cities make demands to influence 'big' policy issues, such as refugees, civil rights, energy and the environment that are usually considered the domain of the state. The overarching goal of this research project is to examine the city as a mediating institution between liberal urban elites and neo-national, non-liberal states. We ask what is the driving force behind the growing polarization between cities and states, what are the expectations of liberal urban elites from the city and to what extent is the growing desire for autonomy reflected in policy-making? The study focuses on Tel-Aviv-Jaffa, Warsaw and Istanbul.

The lecture will center on the Tel-Aviv-Jaffa case study. We hypothesize that there is a large group of academic, intellectual and cultural elites in the city, holding liberal and often cosmopolitan values. After many years where their interests were aligned with and represented by the state, this groups finds itself as a demographic and political minority in the country, feeling detached from political power and, equally importantly, alienated from the national regime's official values. Consequently, these elites seek to find new political institutions that will issue policies that reflect their values and protects their interests. We therefore hypothesize that these elites seek to use the city and its authorities as a tool to retain existing power and re-engage with other groups and the state from a secure institutional position. We will present preliminary findings from a recent survey that attempts to identify and characterize the city's urban elites and their expectations from the local governance. In addition, we will present a preliminary analysis of the city's position in light of the Israeli government's recent attempt to transform the judiciary system, which has been accompanied by large-scale public protest. Findings from this research have implications for other cities worldwide that find themselves in a similar position, resisting state policies and energized in light of growing neo-nationalist politics at the state level.

Keywords: urban autonomy , liberal elites, municipal government, municipal policy , city-states

FROM MEMORIAL AREA TO FINANCIAL CENTER: URBAN PLANNING AND RENEWAL OF THE EUR DISTRICT IN ROME SINCE 1936 (902)

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EUR (Esposizione Universale Roma) is a residential and commercial district in Rome, Italy. The area's planning stems from the fact that the area was chosen as the venue for the 1942 World Expo. Marcello Piacentini hosted the original plan for the district with a collaboration of Italian architects and urban planners. The planning scheme is inspired by the combination of classical Roman urban planning and the ideology of Italian Fascism, resulting in a simplified neoclassical form with buildings from Italian Rationalism. However, the Second World War delayed construction and even the destruction of some areas, and the expo was not held as scheduled. After the war, the Italian economy and society began to recover, and the Roman government decided to re-plan the commercial districts outside the city based on the EUR district. When Rome held the Olympic Games in the 1960s, the urban and architectural development of the EUR area had further developed, and various public buildings, residential buildings and public spaces were rationally planned. Nowadays, the EUR District is home to the capital's most important financial and tertiary centers and is one of the most economically active areas in Rome. This article will take the historical development process of the EUR area as the research object and combine the urban planning theory of the Roman School in the 20th century to sort out the role played by the Roman School in the construction of the EUR District.

Keywords: rationalism; simplified neoclassicism; classical urbanism; urban renewal

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BERLIN'S PARTICIPATION CULTURE: THE CHANGING ROLE OF ACTIVE PARTICIPATION IN URBAN PLANNING IN BERLIN TODAY (903)

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Background

This paper is part of to an ongoing research project conducted by researchers from Seoul National University (SNU), the Yeosijae Future Consensus Institute, Seoul, the Brandenburg University of Technology Cottbus-Senftenberg (BTU), the Berlin University of Applied Sciences and Technology (BHT) and the Anhalt University of Applied Sciences, Dessau. The idea of the Berlin-Seoul City dialogue project is to foster comparative research in fields of strategic urban planning. We intend to establish an interdisciplinary research approach to planning and planning politics. The main focus is on the urban planning history of Seoul after the democratization processes in South Korea after 1988 and Berlin after the German unification process in 1989. Please refer to the other abstracts and presentations from the research consortium: Prof. Youngsang Kwon, Dr. Hanbyul Shimm Dr. Jeongil Seo (SNU and Prof. J. Miller Stevens (BTU).

Abstract

This paper examines the actual potentials and limitations of participatory urban planning in Berlin to regain or strengthen confidence into participatory democracy processes on a local scale. Two case studies in the center and in the periphery of the city will be analyzed as examples of an actual urban planning process. This can indicate the potentials and pitfalls of contemporary citizen's participation in planning for a more adaptive resilient participatory planning culture of the future. Berlin, being one of the sixteen German Federal States has a nationwide reputation as being a "creative" and (therefore) disruptive and sometimes even slightly "revolutionary" city when it comes to public, non-institutionalized forms of protest and institutionalized participation in planning activities as a whole. This has been manifested even in popular referenda such as the popular referendum on the former Tempelhof Airfield which stopped all scheduled planning and building activities on the site (2014) and on the accepted referendum on the nationalization of large housing corporations in Berlin (2021).

This narrative of the strong role of participation on a local scale has been established in the years of public discontent with urban renewal projects as early as in the mid 1960ties in (West) Berlin and the protests of the house squatter movement and "alternative" subcultural milieus in the 1980ties. It seems as if the city has been an experimental testing ground for processes of active institutionalized and (originally) non-institutionalized citizens participation in planning institutions and planning processes.

Today even the official urban development plan *Berlin Strategy 2030*, (Berlin Strategy, 2030) published in 2015 highlights the importance of an "open culture of participation" as a dialogic process "... with business and civil society and thereby the whole Berlin community" (p.54) to "form the city – together with political leaders. The vision projected there is "A socially

responsible Berlin – Where everyone can take part”. But reality (or better citizen’s awareness) and strategic planning ideals do not always match. It has been argued in more recent research literature on local participation (Schnur, 2019) that the discourse on democratic participation on a local scale is mainly a discourse about a crisis in participation and even about the crisis of local (representational) democracy as a whole, a fragmentation of the city into gentrified milieus. Berlin is no exception from this. Public surveys show that more and more citizens are expressing concerns that the potential co-determination on a local scale gets lost bit by bit. (Vetter, 2011).

By examining two cases, a suburban neighborhood in Berlin Marzahn-Hellersdorf (Stadtgut Hellersdorf), a large-scale housing estate from the period of radical industrialization of housing in East Berlin in the 1970ties and 1980ties and a rather prominent “central” Berlin quarter (Molkenmarkt) I would like to reflect on both the potentials and pitfalls of participation for an active local participatory democracy. Both examples show limitations and potentials of participation as an active agent which may help to establish an inclusive, adaptive and resilient planning culture and thus eventually can help to reestablish confidence in new forms of participatory (local) democracy.

I will try to deliver a preliminary outlook into the options of a comparative study on participatory local planning culture in Seoul and Berlin.

Keywords: Participation, urban planning, Berlin, participatory democracy, adaptive planning culture

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BUILDINGS' AESTHETICAL EXTERIORS AS AN ETHICAL AND DEMOCRATIC DILEMMA: A NORMATIVE ANALYSIS OF THE PUBLIC ARCHITECTURAL DEBATE (930)

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Background and Aim

The architecture of our time has become an increasingly debated and important question. In media, literature, and social media, the wish for "more beautiful buildings" is frequently expressed, which is often synonymous with a demand for more classical and traditional inspired architectural styles with warm colors and decorated facades. However, the neomodern architectural style dominant in urban development is often portrayed as "ugly" and "boring" by only producing "cubic forms in concrete and steel" (e.g. Ibsen & Rådlund 2012). This study aims to analyze and map out central positions and their underlying normative assumptions in this ongoing public architectural debate about creating more buildings in classical styles. The Swedish debate constitutes the empirical focus, but similar debates are ongoing in other countries as well.

Architectural Aesthetics as an Ethical and Democratic Dilemma

Even though the wish for more traditional architecture has widespread support, independent of gender, income, ethnic background, and political ideology (Andersson & Enström 2021:64-70; Sternudd 2007:86-93), examples of such contemporary urban architecture are few in Sweden and other countries. One reason for this is that governing architectural style in a certain direction is often dismissed on the basis of it being problematic to control architectural expression by "deciding" how architects should do their job. Governance of this kind is even conceived to jeopardize or limit crucial values such as autonomous expertise, freedom of expression, and free art (Hågemark 2022). These worries are often articulated by architects and other experts who argue that the demand for contemporary classical architecture is populist (e.g. Svensson 2022).

Although these worries appear *prima facie* defensible, the shortage of public support for today's urban architecture cannot be seen as simply morally and democratically "unproblematic". The lack of variation in architectural style actually means that most citizens are dissatisfied with the aesthetics of their new urban environments. This is problematic since architectural aesthetics affects people's general wellbeing, and, in contrast to other aesthetical experiences, there is neither any freedom of choice since all citizens must experience the city as it actually looks (Mattila 2002:131-133).

Contribution

The debate regarding the shortage of public support in urban architecture is thus marked by different *prima facie* reasonable opinions and values. It is also characterized by different stakeholders and views on public participation in planning processes. In other words, the contemporary debate of architectural style therefore forms an ethical and democratic dilemma that will be scrutinized in the presented study. Coming from the field of Applied Ethics, I will analyze the presented public debate with a bottom-up perspective and show how the actual arguments relate to and articulate different normative and democratic principles (cf. Wolff

2011:9). Although architectural debates have been examined before, often from the perspectives and methods of architectural history (e.g. Murray 2008; Pech 2011; Stalder 2017), these studies do not investigate the ongoing public debate about architectural style, understood as a normative problem. With that specific focus, the presented study will not only illustrate the normative aspects of an important ongoing public debate but also pinpoint potential mutual agreements in the debate – an analysis that could help create a way forward for a more constructive discussion regarding the issue. Accordingly, I argue that the presented study is an important academic endeavor, building on and contributing to fields and issues such as values in urban design and planning, public participation as well as stakeholders in planning processes.

Keywords: Architecture, aesthetics, urban design, governance

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EMBEDDING PEOPLE-CENTERED GOVERNANCE PRACTICES IN URBAN DEVELOPMENT PROJECTS: AN INSTITUTIONAL ANALYSIS IN VIENNA AND HELSINGBORG (961)

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During recent years, localist planning practices that comprehend participative processes with local stakeholders such as social entrepreneurs, third sector or residents themselves are increasingly emerging in contemporary European planning practice (Davoudi and Madanipour, 2015). However, little has been said yet about how such practices fit in the wider play of public and private actors that are prevalent in the governance of urban place. In fact, the high degree of situation-dependency in localist approaches (Shirazi and Keivani, 2017) raises an important methodological issue concerning the relation between urban governance and local practices. While the dominant project-based rationale in European planning leads to the consequence that social policies are often operationalized via local public-private partnerships or self-organized practices, scholars keep pointing at wider economic and political structures that unmistakably influence the way that urban places are locally shaped (Blanco et al., 2014). Indeed, as institutional theory in planning and governance studies has been manifesting since the 1980s, there are many invisible structures that underlie the directly observable behavior of actors in local urban arenas (Healey, 1998).

This article contributes to the institutional embeddedness of localist planning by empirically observing how people-centered practices in urban development projects relate to the wider structures where they occur. Following Ostrom's (2009) Institutional Analysis and Design (IAD)-framework, this article explores what institutional variables affect the operationalization of people-centered practices (PCPs) in local urban development projects that aim to implement social sustainability goals. The article presents an international case-comparison of two PCPs that are part of urban development projects in West-European contexts: the establishment of neighbourhood management team in Aspern Seestadt in Vienna (Austria) and an extensive 'dialogue approach' in DrottningH in Helsingborg (Sweden).

The case-study first inductively analyses which institutional variables played an explanatory role in the emergence of the PCP in the project. Subsequently, the case findings are compared with each other and patterns of institution-PCP relations are unraveled. The results of study show how the operationalizations of the PCPs did not simply depend on strong urban policy goals for social sustainability, but instead are explained by a fortunate mix of variables: political stability among public actors, the existence of socially-oriented actors with a powerful role in local urban development processes, a strategic location that lend itself well for urban experiment, and a location where the urge for social investment was evident. These findings emphasize the importance of cherishing a place's already-existing socially-oriented institutions while also creating organizational space for innovation. Meanwhile, the findings warn for a neglect of attention for non-strategically located areas where social investment might in fact be most needed, but that in the light of 'localist planning' can easily be overlooked.

Keywords: institutionalism, localism, urban development projects, social sustainability

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OBSTACLES AND LEVERS FOR IMPACT ANALYSES OF PARTICIPATORY PROCESSES IN URBAN DEVELOPMENT: FINDINGS FROM A SURVEY AND A SYSTEMIC ANALYSIS (962)

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Participatory processes and joint policy making have been part of everyday urban development practice for at least half a century. They have been subject to research for just as long (e.g., Verba/Nie, 1972; Rosener, 1978). Questions about effects or success of participation are asked frequently. Nevertheless, empirical knowledge on the effects of participatory processes in urban development remains rare (Rowe and Frewer, 2004, p. 551; Abelson and Gauvin, 2006, p. 6; Barrett, Wyman and Schattan, 2012, p. 181). Several handbooks, guidelines and quality criteria have been published in recent years (e.g., Innes and Booher, 1999; Frewer and Rowe, 2005); however, relevant impact research is constantly assumed to be in its infancy (Abelson and Gauvin, 2006, p. 7). Against this background, the presentation explores obstacles and levers for the conduction of impact analyses on participatory processes in urban development.

In a first step, possible obstacles for the implementation of impact analyses were collected by using a creativity technique and literature work (referring i.e., to Abelson and Gauvin, 2006; Rowe and Frewer, 2004; Waldner, 2004). The results were discussed with experts in a workshop. Based on this, 15 theses on controllable obstacles were developed. They relate to the context, the interest in knowledge, resources, the subject (participatory processes) and the methodology. The theses were given to 90 people for weighting in an online survey. The results were then compared in report groups, differentiated according to the focus of the respondents' professional activities (1) and their expertise (2) in participatory processes (a), urban development (b) and impact analyses (c). In a further step, suggestions from the survey were evaluated and the 15 identified obstacles were systemically examined for interactions. This step followed the so-called paper-computer, part of the sensitivity model from Vester (1976; 2002).

The online survey and the systemic investigation show that significant obstacles are diverse and intertwined in many ways. Setting incentives and specifications was identified as the only lever to promote impact analyses. Further results show: While most of the report groups perceive the complexity of the subject as an obstacle, experts in impact analyses point out that the intended impact of participatory processes is not clear. While researchers and persons responsible for participation procedures outside of urban development see limited budgets as a major obstacle, persons responsible for participatory processes in urban development do not. In particular, the theses on the subject and the methodology were controversial. Quotes from the free text answers of the online survey illustrate the findings.

The presentation focuses on the empirical part of a recently finished dissertation project, which has been conducted and published in German (Maikämper, 2022).

Keywords: Urban development, Participatory Procedures, Impact Analyses Obstacles, and Levers

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INNOVATING LOCAL PLANNING CONTEXT THROUGH SELF ORGANIZATION PRACTICES. INSIGHTS FROM SOUTHERN ITALY (965)

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This paper focuses on a specific field of spatial planning: bottom up uses of unused spaces and vacant buildings. It explores the relationships between local actors' mobilization and innovation in the planning context focusing on the international openness of urban regeneration practices dealing with the self-organization ability of formal and informal citizens' groups.

It draws on two in depth case studies located in Southern Italy: *asilo Filangeri* in Napoli and *Manifatture Knos* in Lecce. The two cases are analyzed through the so-called 'mobile urbanism' frame (McCann, Ward, 2011), developed within assemblage theory (De Landa, 2016). This makes possible to highlight mechanisms of bottom-up urban regeneration ideas, tools and practices migrations through the international scene and their relationships with the local planning context, questioning the idea of local/global as a dichotomy.

In both cases social mobilization is met by the ability of institutions to intercept it. In particular, in Naples an urban network has been developed (Commons Napoli) gathering self organization activities developed within the urban context. In Lecce, instead, recent experiences developed within an extraordinary season of regional innovative landscape and youth policy (Barbanente, 2011; Minervini, 2016) supported the development of the initiative. The capacity to mix what Mayer (2013, p. 11) define 'movements corresponding with the creative city brand' and 'movements of the urban outcasts' is a crucial point in both cases.

Keywords: mobile urbanism; self organization; urban regeneration; assemblage

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LOCAL GOVERNANCE AND THE OXYMORON OF FORMALIZING SELF-ORGANISATION FOR DEMOCRATIC SUSTAINABILITY TRANSITIONS (979)

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Governments are increasingly relying on citizens' self-organised initiatives to tackle local challenges. The strong divide between government and civil practice is becoming more blurred. While governing spontaneous phenomena might seem an oxymoron, some current formal governance strategies already lean on self-organised initiatives. From the implementation of the energy transition to the development of new neighbourhoods, citizens are expected to form new initiatives to support and sometimes even lead these changes. Nevertheless, local governance strategies are struggling with how to incorporate these initiatives in traditional structures of governance. In the Dutch context, the *Omgevingswet* (the Dutch environment and planning act), for example, creates legal space to foster self-organised initiatives, but does not include any guidelines on how they should be implemented in practice or even how to safeguard that they generate positive results. If these initiatives are taken at their face value, without much consideration of the wider systemic effects, there is a risk that they simply replicate structural problems. As such, this raises questions of justice, democracy, efficiency, inequality, and power unbalances.

Thus far, research on self-organised initiatives has focused on understanding the phenomenon, providing insights into their emergence, individual and collective behaviour of the participants and their internal organisation. But in order to self-organised initiatives substantially contribute to sustainability transitions, there is a clear need to understand how they are affected by local regulations and how they can be included in local governance structures. Therefore, this article focuses on the entanglement of self-organised initiatives and formal governance practices in the municipal level targeting democratic sustainability transitions.

To account for the blurred boundaries between formal and informal roles of policy makers, the project will use the new institutional theory. This theoretical lens could redefine the way we look into self-organised initiatives by analysing these initiatives as assemblages of public, private and civil actors. It allows to map complex networks of actors and account for their influence on planning strategies and democracy. The main research question is: to what extent governing with self-organised initiatives can contribute to democratic sustainability transitions? To answer this question, this article investigates formal and informal relations between self-organised initiatives and local governance institutions. It uses data from interviews conducted in three different cases in The Netherlands.

The Netherlands presents a hybrid system where self-organised initiatives are intertwined with public and private actors, which constitutes a fertile ground for such initiatives to be embedded in local governance strategies. The comparative approach will enable a knowledge construction process that generates insights into the role of the local context, accounts for similarities and differences, and enhances learning insights from the Dutch practice. The case studies are based

on different types of data collection methods such as field observation, interviews, actor network analysis and existing data on democracy and sustainability performance.

Keywords: local governance, self-organisation, direct democracy, sustainability transitions

LEARNINGS FROM PARTICIPATORY INSURGENCIES IN EUROPE: INSIGHTS FROM THE HE ORBIS PROJECT (998)

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More and more we are witnessing the insurgence of civic and community-based actions trying to conquest and develop new collective modes to be heard, to have a value in decision making at different scales: from very local initiatives for urban transformation to global ones fighting for more inclusive democracies. The vast and largely spread landscape of such initiatives shows the profound lack of dialogue that still persists between citizens and institutions and represent a very rich and suggestive testbed of experiences which are valuable for a large-scale reflection.

Although the large diversity of initiatives very few models have rooted, consolidated, and adopted largely showing that more needs to be done to scale up, diffuse and consolidate such insurgent modes into practices.

Within this landscape, the proposed contribution presents the early findings of ORBIS a HE project that explores 6 civic initiatives in Europe addressing contemporary issues at different scales and settings, experimenting with different civic participation and deliberation models, and involving diverse types of stakeholders. ORBIS provides new ways to understand and facilitate the emergence of new participatory democracy models by engaging the related active communities to reflect on their actions within deliberative environments that the project will make available to guarantee a deep reflection on the lessons learnt, the obstacles, the success and failure.

The proposed contribution will discuss the key deliberative infrastructure (dialogic strategy, cognitive alignment measures, comparative mapping of argumentative statements, ...) to reinforce the learning process inside the engaged communities and among them.

Keywords: participatory insurgencies, participation model, learning through deliberation.

RE-COMPLEXIFYING PARTICIPATION (1012)

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The erasure of spaces of democracy and the systematic de-politicization of participatory urban policy-making have characterized the contemporary processes of urbanization. At the same time, a multitude of invited experiments and processes of participation, including co-production, has been organised by local institutions in cooperation with civil society and local communities as innovative and more democratic ways to implement sustainable urban transformations. Nevertheless, these new ways of citizens' engagement in urban transformations have shown problematic and ambiguous aspects. Far from being spaces for thinking and action towards sustainability, these new invited citizens' participative processes have been easily used to implement top-down, predetermined, policies and decisions which have not ever been socio-ecologically just. Issues of unbalanced power, institutional control over local communities, and instrumental use of citizens as new providers of welfare are a few among the several problems recurring in critical debates. This paper offers some further clues to such a critical perspective on new invited practices of participation by focusing on a less studied aspect: in which ways co-production and other invited experiments have impacted and changed meanings, perceptions and conceptions of participatory processes? Following this idea, the first part of the paper offers a survey of the debate concerning the new invited forms of participation with the aim of highlighting their most relevant features beyond particular and contextual interpretations. In the second part, the paper continues by reflecting on some invited experiences of participation carried out in some cities of the Apulia region (Italy) by adopting a complexity perspective, which can help to open up a less normative debate and highlight some intangible impacts on the conception of participation as a process of relating.

Conversation with citizens and planners and activists show that the above-mentioned new ways of participation although more efficient in mobilizing individual citizens and achieving some predefined goals than the traditional ones hamper the idea of the city as a collective space of action and, consequently, weaken local communities' resilience to new and old socio-environmental vulnerabilities and injustices. Delegitimization, disempowerment and isolation of dissonant voices or attempts of independent thinking are more and more considered unavoidable costs for making effective any process and defy the inefficiency of emergent and self-organizing activisms. Above all, invited innovative ways of participation to strengthen a conception of citizens' engagement as a value-free process based on individual and contingent choices in a context of efficient urban management. New forms of participation risk fostering reductionist visions of the complexity of participation and its being openings towards responsive processes of relating. The underscoring of "desertifying" and disorientating effects in favour of effectiveness is therefore a closure to sustainable and just urban transformations. Looking at intangible effects and changes in the conceptions associated with participatory processes and reconsidering them as spaces opened to emergent active collectivities can help to nurture an idea of participation in planning as practice for the communities and their caring of places.

Keywords: complexity, caring of places, participation

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TRACK 07: PLANNING FOR RESILIENCE: TERRITORIES, COMMUNITIES AND ENVIRONMENT

PLANNING METHOD OF CORRIDOR NETWORK IN MULTI-RESIDENTIAL PUBLIC SPACE (51)

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China's urbanization process is changing from speed to quality, and people's requirements for living environment and living quality are increasing day by day. The public space in residential communities and neighborhoods is one of the most dynamic places in the urban space, accommodating the daily social activities of residents. In recent years, under the impetus of domestic policies, the planning concept of creating a pleasant environment for residential areas has been applied to improve the quality of new residential areas, but it has not improved the living environment of old residential areas, nor has it alleviated the fragmentation of public space in urban residential areas. Under this background, the research first analyzes characteristics of more than one public space of residential area, neighbor, with supplementary public space, connected corridor network, improve the cohesion nodes, build a distinctive and identification, is advantageous for the promotion of public space connected corridor network planning method, and probes into the public space connected corridor network application in the actual program. The planning method improves the continuity of the public space system in urban residential areas and provides a feasible method for design practitioners to practice in multiple fields.

Keywords: Connecting corridor; Network planning; Public space; Planning method

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CLIMATE CHANGE ADAPTATION IN THE RUHR METROPOLIS: THE PROJECT „KLIMA-WERK“ AND ITS APPROACH TO A WATER-SENSITIVE URBAN PLANNING (77)

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The Emscher River redevelopment project is nearing completion: since 1992, 328 kilometres of the Emscher and its tributaries have been reshaped to create a vibrant watercourse that closely reflects its original natural state. The Emscher has been free of all wastewater discharge since the end of 2021. This project – built at a cost of over 5.5 billion euros – marks the transformation of an entire region that improves the quality of life in the communities. Channelling wastewater into an underground canal creates new spaces for innovation above ground: The city districts redesigned within the scope of urban development programmes create an exceptional atmosphere for local residents owing to their proximity to the many attractive green spaces and bodies of water along the Emscher River system.

An awareness of the role of water in urban planning and an integrated water management system are crucial for climate protection and measures for adapting to the consequences of climate change, as well as efforts for enhancing the quality of life for local residents. Launched by the EmscherGenossenschaft in 2014 and founded by the Ministry of Environment with an initial budget of 250 million Euros, the project „Klima-Werk“ aims at implementing different measures of climate change adaptation in the Ruhr metropolis area. Its main aims consists in achieving 25% less Stormwater runoff to wastewater treatment plants and in increasing the evaporation rate by 10% until 2030.

In this case, the “Klima-Werk” closely adapts to the concept of „sponge city“, to be applied to the whole Ruhr Metropolis region. Retaining (storm)water at its source contributes to a greater resilience of our cities and rural areas in the face of extreme meteorological events. Beyond the positive effects on the local climate, the sponge city concept offers a lot of potential for the design of sustainable cities with good living conditions, particularly when it comes to the housing sector.

The climate change adaptation measures implemented by the “Klima-Werk” encompass green facades, green roofs, tree rigolas and the general unsealing of surfaces to increase the capacity of rainwater infiltration, among others. These measures are primarily implemented in so called “focus areas”, where several disadvantages, such as a high risk of floodings, heat hotspots and a lower income structures, accumulate.

The overarching goal is to create a water-sensitive, attractive and sustainable region, to strengthen the regional consensus for sustainable urban drainage as to increase the region's ecologic resilience. In this context, the service organization, acting as the executive branch of “Klima-Werk”, provide services, such as consulting, expertise and technical assistance to the partner municipalities. Based on a bottom-up approach, its aim consists in developing long-term strategies to strengthen the region's ecologic resilience.

The successful implementation of climate change adaptation measures at a regional scale depends on comprehensive and interdisciplinary thinking and acting instead of sectorial approaches of local city bureaucracies. The limiting factor in local administrations is often not a

lack of human resources or technical solutions, but rather the insistence on functional responsibilities, the refusal to commit to joint objectives and a lack of perspective from outside a department's subject area. In this sense, the "Klima-Werk" seeks to contribute to the development of a more participatory approach of regional governance grounded on extensive networking and community building, that can be applied not only to the climate change adaptation programme but also to other strategic fields of urban transformation, such as mobility and transportation, urban infrastructure and economies.

Keywords: Climate change adaptation; resilient cities; sustainable urban planning

EVALUATING THE CONTRIBUTION OF GREEN INFRASTRUCTURE TO URBAN RESILIENCE: THE CASE OF IMRAHOR VALLEY (81)

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There is a sick world in the universe where the uncertainty of the future is increasing, unexpected events are happening more frequently, and current problems are revealing themselves more and more. Humanity and all other living beings in nature are experiencing a world where their life is under threat and difficulties are constantly encountered. In the 21st century, global pressures at the urban scale, namely climate change, economic fluctuations, social injustices, present new challenges, and vulnerabilities. On top of all these problems, it has not been easy for the world to struggle with the COVID-19 pandemic, the biggest challenge of our day, and other environmental problems for the last 1 year. Climate change and environmental quality issues have started to be argued much more after COVID-19. This is because rapid urbanization and unsustainable approaches, together with the pandemic, are destroying ecosystems and biodiversity, and increasingly reducing human well-being and urban resilience. Therefore, city governments have become a center for taking precautions against disasters and risks, and ultimately building back better. At this point, it can be clearly emphasized that resilient cities develop the capacity to cope with today's challenges by considering the specific characteristics of city geographies, and that green infrastructure (GI) plays a prime role in providing adaptive solutions to the volatility of cities. GI provides many benefits in cities such as improving air quality, waste management, carbon sequestration, reducing energy demand, and social and societal benefits. Valley areas, which have been preferred since the beginning of human history due to their proximity to water resources and creating a safe place for people, are one of the most important components of GI systems and they generate local air flows to cities due to their morphological structures. Moreover, they have notable potential to provide resources such as water, fertile soil, and food, as well as to make cities more environmentally resilient. The overall aim of this research is to reveal the vulnerabilities of Ankara, the capital of Turkey, against environmental crises, shocks, and stresses, and to evaluate the contribution of the city's last and completely unspoiled valley, Imrahor, to the city in terms of resilience. In addition, this study provides essential policy recommendations for nature-based solutions to strengthen the GI quality of the valley as an outstanding air corridor for the city and to mitigate a priori future environmental risks. Although the Imrahor Valley, which was adversely affected by the neo-liberal policies pursued in the 1980s, has an ecological value that can contribute to the environmental and social resilience of the city, it has gradually started to come under the control of construction with mega projects, partial plans, and decisions since 2000. In order to carry out the research, the plans and projects from past to present, field photographs, and satellite images were examined first, and analysis-synthesis maps were produced by using secondary data of soil structure, geological and morphological characteristics of the valley. Therefore, it has been discussed throughout the study how it is possible to prevent the current problems of the valley and to ensure the resilience of the capital and its citizens by implementing the most appropriate GI strategies and policies as an ecosystem service. These results, with the findings and solution proposals obtained from the study, will confirm the potential to enhance urban resilience by the way of arranging valleys as a

GI component and will make a great contribution to the existing literature by emphasizing the necessity of restructuring the planning process that includes appropriate protection-use balance policies.

Keywords: urban resilience, green infrastructure, Imrahor Valley, climate change, nature-based solutions

URBAN LIVABILITY MEASUREMENT CONSIDERING CLIMATE RESILIENCE (90)

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This study is to create a livability index system as an evaluation tool to make city resilient to climate change. A necessary condition for a livable city is a resilient city. Regions with high livability are more resilient to climate change and disasters. Recently, as climate disasters have become more frequent, climate change is recognized as a climate crisis, and abnormal climate is the greatest danger to human. However, climate resilience was not properly considered in the existing measure of livability. To measure livability considering climate resilience, exposure to climate disasters and social vulnerability indicators, including the low-income population with high damage and weak resilience in the event of a disaster, were included. For this study, first, the livability index was derived through the scoping review, and the livability index system was established considering climate resilience. Second, the livability of 219 cities in South Korea was measured. Third, we saw the difference in livability between coastal and inland regions where geographical characteristics are prominent. As a result, disasters and damages caused by climate change tend to occur intensively in specific spaces. In the livability index, which is the sum of all the livability indicators, the clustering of regions with high livability decreased over time. In addition, the coastal area showed a higher livability index than the inland area, but looking at each indicator, the areas of disaster safety, vulnerability to climate change, and society and environment were found to be low. Therefore, when measuring livability, it is possible to assess regional problems and current conditions more accurately by examining detailed indicators rather than judging only the comprehensive index. In particular, regions with low climate resilience are highly likely to have low livability as they are regions with high disaster risk in the mid- to long-term.

Keywords: climate change, livability, resilience, index, measurement

UNDERSTANDING AND EXPLAINING DEMOLITION PATTERNS IN US AND GERMAN SHRINKING CITIES (147)

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In so-called “shrinking cities”, confronting vacant and abandoned properties is a high priority for local officials and urban planners. Vacant and abandoned properties are problematic: they are subject to deterioration, and may cause problems for neighbors and for the city as a whole. Among these problems are vandalism, crime, and property depreciation. Vacant and abandoned properties are vulnerable to vandalism because neglect triggers first modest, then severe damage. Vacant and abandoned properties also increase crime rates in surrounding areas, depreciate surrounding property values, contaminate soil and underground water, and decrease urban amenities and infrastructural efficiency. Without intervention, vacant properties can send neighborhoods into a downward spiral of further abandonment. To reduce the problems caused by property abandonment, many policymakers in shrinking cities concur that demolition is an effective measure (Mallach, 2012).

This study analyzes demolition patterns in two mid-sized, isolated shrinking cities, the U.S. city of Flint and the German city of Dessau, between 2002 and 2016. By applying spatial analysis methods, we found significantly different patterns of demolition in the two cities. While scholars have noted a “doughnut” abandonment in US and a “perforated” pattern in European shrinking cities (Hollander et al., 2009; Schetke & Haase, 2008), this study found Dessau to have a “doughnut” hole surrounded by a ring of intact structures, while Flint was “perforated”, with scattered vacancy throughout the city. These differentiated demolition patterns are caused by differences in housing tenure, physical and social structure, and demolition policy. Compared with the US, eastern German shrinking cities have much higher percentages of rental housing under public or NGO ownership, enabling easier relocation and demolition in Germany, while the US’s high homeownership rate presents a barrier for public or NGO intervention in urban vacancy. Dessau has a distinct ‘center-periphery’ urban structure with prefabricated multi-family housing concentrated in its urban center, also permitting concentrated demolition. Flint’s urban structure is a relatively homogenous carpet of small houses, leading to scattered urban vacancies, except in its north end and southeast side, where Black residents were once restricted due to the tragic history of racial discrimination and segregation in the US. Although the US established laws restricting discrimination, systemic racism triggered white flight from Flint in tandem with housing integration, leaving the city with a declining population and diffuse vacancies. And eastern German shrinking cities have benefitted from Germany’s state-driven demolition model, many of which have had design initiatives that complement state-funded demolition. Flint’s mostly complaint-driven demolition model is shaped by the piecemeal abandonment patterns of that city, causing the city’s “perforated” demolition. In conclusion, each city’s demolition policy, though unique to each respective city in some aspects, is also deeply embedded in each city’s respective national context. This finding is likely to limit direct comparability for policymakers or

policy transferability, but offers potential for policy learning in shrinking cities that may possess similarities to one or more aspect of either city. Further transnational studies of demolition and other shrinking city spatial and planning policies will contribute to additional lessons for scholars and policymakers of shrinking cities and their demolition strategies.

Keywords: Shrinking cities; Demolition; Transnational comparison; Urban vacancy; Housing abandonment

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COMMUNITY RESILIENCE: A DETAILED LOOK AT HOW TWO DIFFERENT NEIGHBOURHOODS COPE WITH AND RECOVER FROM THE JULY 2021 FLOOD EVENT (160)

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Sudden extreme weather-related disasters like the 2021 European floods prove to be primarily social disasters and challenge neighbourly communities. For a long time, planners and politicians responded to such disasters by strengthening physical and technical infrastructure for hazard prevention (Aldrich and Meyer, 2014). With the recognition that future extreme weather-related disasters cannot be avoided or be managed solely by technical solutions (Voss, 2008), the community resilience of neighbourhoods has become more important.

Vulnerabilities and resilience are unequally distributed, and certain neighbourhoods can be more vulnerable and resilient than others. Previous studies have shown that collective vulnerability results from socio-ecological inequalities and exacerbates the impact of disaster events (Cutter et al., 2008). Accordingly, questions arise as to how different neighbourhoods cope with and recover from sudden disaster events, what resilience capacities these neighbourhoods have, and how community resilience can be promoted through urban planning.

The study presented uses two case studies (i.e. affected neighbourhoods in the city of Hagen, Germany) to examine how two different urban neighbourhoods cope with and recover from the July 2021 flood event. The research focus of this study is on the internal characteristics of these urban neighbourhoods and their influence on community resilience and collective vulnerability. Particular attention is paid to the influences of the type and distribution of social capital as well as the type and extent of place attachment on community resilience. For this purpose, the study employed a mixed methods approach, including forms of semi-structured and standardised surveys, statistical analysis, and participatory methods such as participatory mapping and a social network analysis.

The study shows that the two case study neighbourhoods, which differ significantly in their social structure, cope with and recover from the flood in very different ways. The results reveal significant differences in the dynamics and approaches to coping and recovery within the neighbourhoods, but especially between them. The presentation provides information on which socio-spatial factors are decisive for the different ways of coping and recovering. For example, neighbourhood networks interact with local social infrastructures to play various roles and have varying relevance for different population groups. Furthermore, the paper shows how urban planning can proactively promote the resilience community of the different neighbourhoods.

Keywords: community resilience, flood disaster, coping, recovery, vulnerability

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HOUSING, PLACELESSNESS, AND NEW GEOGRAPHIES IN POST-EARTHQUAKE L'AQUILA (162)

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Post-disaster reconstruction is a complex process. It deals with the underlying vulnerabilities of the territories affected, the stress and pressures that connote its aftermath, and the hopes, challenges, and potentials of what comes next. This contribution underlines the complexities posed by the emergency and reconstruction efforts in post-earthquake L'Aquila, Italy. It reveals the approach to shelter and housing interventions in a fragile and fragmented environment that have eventually resulted in the increase and reproduction of pre-disaster vulnerabilities.

The purpose of this contribution is to offer a critical examination of the aftermath of 2009 L'Aquila earthquake. It considers the elements of the recovery process, addressing major initiatives that have resulted in new geographies, stirring feelings of uneven discrimination and tension, and becoming major obstacles to equitable rebuilding of houses and livelihoods. The analysis of the processes and outcomes of temporary and permanent post-earthquake housing programmes yields information about the extent to which processes of recovery serve not only physical needs but the expediency of broader political and socio-economic forces that can overwhelm and distort any rational scientific agenda.

Keywords: Housing; Earthquake Disaster; Post-Disaster Reconstruction

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THE CONCEPT OF DIVERSIFIED ZONING FOR AN INDUSTRIAL AREA IN THE HEART OF THE SUBURBS AS A SOLUTION FOR THE ENVIRONMENTAL AND SOCIAL PROBLEMS: THE CASE OF EURO-PARK KOBIERZYCE (169)

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Spatial planners recently are facing issues of combining the interest of all, especially nature and society, which is often at the expense of other actors. The challenge of providing the high quality of life through smart and sustainable place is never complete enough, due to constantly changing world. Only through the collaborations and responsible governance it is still possible to keep everyone satisfied and profitable, as space is desired, especially in highly-urbanized area. As a civilization we should keep in mind that not only space is non-renewable resource, according to climate change also an access to utilities, so how should we struggle with this and be able to stay living in cities?

A rural territory occupying more than 400 hectares in the south of Wrocław struggled with a strong suburbanization and industrial development since 20 years currently, which made it weak and not efficient anymore. The Authority had been led to strategic reflections about diversification of zoning for better urban spaces to minimise negative impact of spatial chaos and to solve the functional and environmental problems. It is about to use the new technology and sustainable planning for finding a vocation for 83 hectares which are left in order to create a self-sufficient and green urban unit for everyone in regional scale. On the basis of fieldwork, meetings and analysis the idea develops a diagnosis of problems in EURO-PARK Kobierzyce. With this in mind, the concept shows the scenario for combining the interest of all users by connecting communities in specific sectors, adapting the existing environmental conditions, implementing circular economy and smart buildings to revive of the suburban area and maintain a sustainable, coherent spatial composition resistant to climate changes and improving the quality of life of the dwellers what is needed in the suburbs in general. A model of a compact, green, 15-minute city, where all the necessary amenities, workplace and recreation will be in one place is a solution for the problems in the outskirts of Wrocław, but also takes the suburbs to the next level.

Urban fringes as a first need a smart spatial governance and development what in a consequence will make them independent from the central-city in the agglomeration and resilient in states of emergency, what we could all experience in 2019 - the outbreak of the COVID-19 pandemic. All we need is planning for adaptation, what drives to resilience.

Keywords: europark, Kobierzyce, arp, compactcity, greencity, greenovationvalley, technologypark, urbanplanning, smartcity

BOOM OR DOOM FOR RECLAIM LAND PROJECTS IN TIMES OF RISING INTEREST RATES: THE NEW FINANCIAL REALITY FOR SUCH LARGE INFRASTRUCTURE PROJECTS (193)

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Reclaim land projects are challenging as they draw on the commons, even though they benefit cities. Reclaim city projects to date have, inter alia, improved congestion, offered transit to underserved city sections, revived blight, and cultural heritage city precincts. Such projects can also provide more housing with greater affordable and mixed-use opportunities for single dwellings, families, and the growing number of smaller households, as well as urban parks, schools, and childcare facilities. They can also improve the carbon footprint for cities, implement electric vehicles infrastructure and the planting of more trees in urban areas. With high inflation and a different attitude to real estate investment, post pandemic, national and municipal governments may be more cautious to plan and finance such projects. In this presentation, we discuss opportunities and challenges for future reclaim land projects in terms of city and citizen benefits and disbenefits, and the financial and legal realities for such projects given global inflation and more stringent finance opportunities. We suggest that such large infrastructure projects are still important for cities and could be financed with private public partnerships involving greater participation from pension funds and large landholding multi-nationals, who would be more willing to take on such risk.

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COUNTRY ROADS, TAKE ME HOME: WHY WE NEED NEW SPATIAL IMAGINARIES FOR MOBILITY AND LAND USE IN THE NON-URBAN AND HOW TO CREATE THEM TOGETHER (195)

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Urban transport is a hot topic, but much less attention has been granted to communities living outside of urban centers, struggling even more with persistent car dependence. How can we live and move in the countryside, in sustainable and inclusive ways? We posit that there is a lack of fitting spatial imaginaries (i.e., taken-for-granted, collectively held understandings of space, see Davoudi et al., 2018) for organizing life in the non-urban territories of tomorrow – imaginaries that move beyond the compact city paradigm (i.e., the ideal of dense, mixed-use urban centers, bounded by pristine landscapes, see Westerink et al., 2013) and beyond the idea of simply “urbanizing” the countryside. Instead, they are rooted in the local reality, and embrace rural qualities and practices. Generating sustainable and inclusive imaginaries for the non-urban is urgent. Because imaginaries have performative power, as our understandings of space influence the decisions we make and the plans we draw, they are crucial in shaping our futures (Watkins, 2015). Without fitting imaginaries, we are destined for unfitting futures. So how can we create these imaginaries? And who should be creating them? This article first sketches a theoretical framework, relating the quest for a plurality of contextualized spatial imaginaries to the call for a re-democratization of post-political planning practice (Metzger, 2011). Instead of letting experts decide on the “best possible” future, we argue that we should be dreaming up the many possibilities together, through citizen collaboration based in productive dissensus (Albrechts et al., 2019). For guiding such participatory action, the article provides an interdisciplinary literature review for an overview and assessment of possible methods, and concludes by proposing a preliminary protocol for experiential testing and refining.

Keywords: spatial imaginaries, action research, methods, non-urban, mobility

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REFRAMING REGIONAL ECONOMIC RESILIENCE FOR COOPERATIVE REGION (208)

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Regions are affected differently by various socio-natural shocks, such as natural disasters to economic crises, and the process of overcoming them also varies depending on the socio-economic structure of the region. After rapid economic growth in the 1980s, Korea has experienced widening regional disparities. This makes regions more vulnerable to external shocks and regional inequality is spatially fixed and structured.

The purpose of this study is to derive a regional economic resilience model that can detect and adapt to various shocks, and to establish a cooperative resilience region with non-resilient regions to revitalize the rural regions. In this, regional resilience refers to the capacity of certain regions to prepare, resist or adapt to shocks that affect the core elements of the regions, residents, and their activities.

This study examines regional economic resilience by dividing it into two dimensions. First, the dimensions of residents are measured through employment and population. Employment represents regional labor market performance, and the impact of shocks is primary in the labor market compared to output, and more pronounced. Population is a proxy for defining the resistance of the labor market conditions, which are suitable for application in rural areas where the number of employees is too small to overestimate the change in resilience. Resilience at the corporate level refers to the degree of regional productivity investment; also being complementary to the dimensions of residents. They consist of capital productivity and the gross operating supply share of national income, which means the dynamics of aggregate demand and technical efficiency and income distribution, respectively. After that, we apply three multimodal resilience metrics to examine the recovery process of the three indicators aftershocks. It consists of instantaneous resilience at specific time instants, overall resilience and average resilience over a time period, and has the advantage of considering the meaning of rebound of engineering resilience and hysteresis of ecological resilience. Finally, cooperative resilience region is established by deriving regions with low resilience and applying a cooperative regional economic model to those regions. Low resilience regions relevant to cooperative action have similar conditions, such as depopulation of working age, small businesses vulnerable to shocks, poor fiscal independence, which cause a vicious circle of decreased regional development and growth. Cooperative regions not only reduce transaction costs by regional governments, such as building infrastructure regional to transportation and communication, but also promote cooperative production for economies of scale and scope to reduce production cost, and supply a wide variety of goods and services. This study provides a strategy for sustainable internal growth in rural areas by enhancing regional resilience with smart planning, without massive fiscal investment.

Keywords: Regional resilience, Regional planning, Cooperative resilience

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Funding:

This work was supported by Korea Environment Industry & Technology Institute (KEITI) through “Climate Change R&D Project for New Climate Regime”, funded by Korea Ministry of Environment (MOE) (2022003570002).

THE TRANSFORMATION AND RESILIENCE OF PRECINCTS IN POST-APARTHEID SOUTH AFRICA (223)

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The 21st century is characterised by unpredictable change occurring at an unprecedented pace and on an unparalleled scale – often exacerbated in the context of global turbulence. Many of these transitions occur in cities and have a profound impact on the way people conceive of and use the urban environment. According to resilience thinking, things will always change and thus to resist it, is to increase our vulnerability, miss opportunities and limit our options (Walker & Salt 2006). Instead, it requires moving beyond our prior conceptualisation of space and time and building greater adaptive capacity to deal with changing trends and forecasted challenges. Adaptive capacity refers to the ability of the system to respond to changing circumstances. Yet, in considering adaptive capacity in space, one needs to consider both space and time. While spatial resilience is strengthened through principles such as diversity, redundancy, intensity, proximity and connectivity, time plays a critical role in the transformation of the built environment and the way these principles or attributes influence the nature of and opportunities at different scales; whether city, precinct or public space.

This paper focusses on the transformation and resilience of various precincts in post-apartheid cities in South Africa. The discussion applies the adaptive cycle to trace the transformation of six precincts through four phases: growth, consolidation, release and re-organisation. Although the adaptive cycle was originally developed by Holling and Gunderson to explain various phases of transformation in eco-systems, it has since been applied to urban studies in relation to social and spatial development. The paper presents various transformation patterns in precincts in different contexts. The findings show that, while all precincts changed, some altered faster and others slower. In addition, they did not always follow the same sequence. Drawing from resilience and whole-systems thinking, the analysis shows that it is counterproductive to negate urban transformation and demonstrates the need to work with change. The author argues that the adaptive cycle offers a valuable mechanism to work with rapid change by offering a way to understand spatial transformation over time and identifying the most appropriate interventions that would be suitable at a particular point in time. This could capacitate urban planners to increase urban resilience, harness new opportunities and increase their options to facilitate social and spatial development in a context of global turbulence.

Keywords: Urban transformation, precinct planning, resilience, adaptive cycle, South Africa

CHOICE OF COOKING AND LIGHTING ENERGY SOURCE IN HOUSEHOLD: EMPIRICAL EVIDENCES FROM THE URBAN INDIA (227)

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This research attempts to identify the socio-economic factors influencing the choice behaviour for cooking and lighting energy in urban areas of India. Several studies have pointed out that in India, approximately 30% of the total energy consumption is in households, excluding the transportation. As the choice-set includes unclean fuels such as kerosene, firewood and so on, it becomes imperative to study the factors affecting the behaviour.

The data from the Household Consumer Expenditure Survey (2011-12) conducted by the National Statistical Office (NSO) of India has been considered for the study. This research adapts Multinomial Logistic Regression Analysis to analyse the energy choice behaviour. It is hypothesised that household characteristics which influence the choice behaviour are household size, land owned, monthly expenditure on fuels, total monthly expenditure, the fraction of total expenditure on fuel expenditure, employment type, housing ownership, number of meals served to non-household members, and availability of public distribution system (PDS). It is assumed that households make choices based on their characteristics and preferences to maximise their utility. The selected variables predict the fuel choice among 'Coke, Coal & Charcoal', 'Firewood & Chips', 'Cow dung', 'Kerosene' and 'Electricity' for cooking, and Kerosene, Gas and Candle for lighting.

The results show that the economic variables of the household play a key role in choice behaviour. The availability of fuelwood and cow dung to agricultural families, and kerosene through PDS to particular socio-economic groups have caused economically abled households to stick to these unclean fuel choices for cooking. The results highlight that households which use cleaner fuels spend less fraction of total expenditure on cooking and lighting fuel. The amount of food cooked (for household and non-household members) also influenced the behaviour.

Keywords: Energy Mix, Household Energy, Cooking Energy, Lighting Energy

RESILIENT INNER CITIES: STRATEGIES FOR THE TRANSITION OF CITY CENTERS IN POST-PANDEMIC-TIMES (237)

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City centers are of outstanding importance for the city – due to their centrality, their supply function, as meeting points and places of exchange, and also because of their meaning for the image of the city. Different strategies had been developed to maintain them as such places. But the inner cities are under constant pressure to develop and renew themselves.

The COVID-19 pandemic in particular had an enormous impact on the functionality of city centers. Declining visitor and shopping frequencies led to falling sales, sales areas were downsized, and less money was invested in stores. In addition, insolvencies, store closures and vacancies increased. As a result, and due to interrupted supply chains, the supply structure deteriorated. Due to temporary lockdowns and contact restrictions, exhibitions and cultural events had to be canceled or could only take place with low attendance. Digital transformation progressed, online retail continued to expand, new delivery services appeared, and mobility behavior changed. The number of daily paths decreased due to increased home offices, local green and open spaces were increasingly visited and, in some cases, overused. These are just some of the observed impacts of the pandemic. The long-term consequences cannot yet be fully assessed and named. A reinforcing effect of previous trends by the COVID-19 pandemic is becoming apparent, but new trends are also emerging.

Digitalization, the steady growth in online retailing (Stepper, Kurth, 2020: 161) and social changes such as demographic change, individualization and changes in work and mobility behavior have been posing challenges to centers for many years. But climate change, with the necessary adaptation measures and the goal of reducing greenhouse gas emissions and sequestering carbon, also has a major impact on inner city development.

The aim of the paper is to provide an overview of the changes and challenges in inner cities in post-pandemic times, and to develop strategies for resilient inner city development plans. Resilient in the sense of urban resilience means that inner cities must be designed preventively, flexibly, creatively, multifunctionally, modularly, climate adapted as well as digitally and mobile for future crises (Kurth, 2022: 91 f.). These aspects have to be considered by municipalities for resilient and integrated development plans in future – combined with new objectives of the EU Leipzig Charter.

Keywords: inner city development, transition, COVID-19 pandemic, climate change, urban resilience

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RESIDENTIAL BEHAVIOR OF HOUSEHOLDS WITH HOUSING DAMAGES DUE TO DISASTER (248)

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Resilient community planning facing natural disasters is a significant task in modern societies. Disasters have caused physical and social damage to many homes and residential communities globally. From the perspective of households, it is directly related to residential behavior, such as housing tenure choice and maintenance (Lee and Van, 2019). Structural damages from a disaster make households take involuntary residential behavior that leads to a collapse of the residential community (Lee, 2020; Morrow-Jones and Morrow-Jones, 1991). This residential behavior may reflect differently depending on the various aspects of the household (Van Zandt and Rohe, 2011). A comprehensive understanding of the relationship between the impact of disaster and residential behavior is crucial for planning a post-disaster resilient housing and community policy. Meanwhile, there is little research on the issue, and the evidence on determinants of residential behavior remains scattered.

This study empirically addresses residential behavior following a disaster using a survey dataset collected by NDMI (Korea National Disaster Management Research Institute). Residential behavior can be viewed as a series of decisions taken in stages, evaluating various conditions and alternatives step-by-step to reach the final choice for the best outcome. The decision-making process can be investigated using a bivariate probit model, which can efficiently explain the residential behavior of households. This study uses the bivariate probit model to examine the residential behavior of 1,176 households that experienced disaster-related housing damage. The results showed that the residential behavior of households reflects the urban community and the households' socio-economic context. This research explores significant questions related to the residential behavior of households that experienced housing damage, yielding important insights for policymakers and urban planners.

Keyword: post-disaster, housing damage, residential behavior, housing tenure, housing maintenance

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A NATURE DATA PROBE TOOLKIT: EXPLORING THE POTENTIAL FOR ENHANCING NATURE-CONNECTEDNESS BY REVEALING HIDDEN NATURE (257)

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Non-state actors are playing an increasingly significant role in decision-making processes shaping our built environment (Mathers, Dempsey & Molin, 2015); rooted in their local knowledge and relationship with space. In the context of urban greenspaces this active involvement of the community in the governance processes and caring for urban greenspaces offers an opportunity to address broader challenges of biodiversity loss and the need for behaviour change around the climate emergency. Moreover, with increasingly restricted local authority budgets, this active involvement of the community for ‘place-keeping’ in green space management in partnership with the public sector and where applicable the private sector has become even more critical (Mathers, Dempsey & Molin, 2015). Improving public participation and encouraging environmental stewardship can, therefore, help to address the challenges of green space governance and mitigate the resulting decline of greenspaces.

However, urbanization and the consequent the ‘invisibility of nature’ in cities is increasingly creating an ‘extinction of experience’ of nature, creating greater challenges for improving participation of communities in better greenspace governance. Research attributes this increasing ‘extinction of experience’ of nature (Miller, 2005) to be partly responsible for the existing unsustainable lifestyles (Alcock et. al, 2022) such that a disconnect with the natural environment detrimentally impacts people’s regard for taking care of the nature around them; wherein nature becomes a background for everyday life. In this context, influencing the collective behaviours and choices of individuals are key for the global aspirations of attaining sustainable development goals (Alcock et. al, 2022; DEFRA, 2018; UNEP, 2011).

Literature establishes a positive relationship between individual perceptions of nature-connectedness, and the tendency for exhibiting pro-conservation behaviours laying emphasis on behavioural ‘intentionality’ such that engagement with greenspaces through simple nature-based activities emerges as the largest significant contributor to inducing pro-nature conservation behaviours in individuals (Richardson et. al, 2020). Therefore, enhancing nature-connectedness by improving engagement with nature in greenspaces is critical to fostering environmental stewardship in communities and in turn, can help address some of the challenges around greenspace governance in cities. (Lumber et. al, 2017; Martin et al, 2020; Richardson et. al, 2020). Citizen science in this regard, can offer a unique opportunity to not only enhance engagement but to also create better models of greenspace governance (Sorensen *et al.*, 2019).

Since the conception of citizen science, the scholarship has argued that it has the potential to deepen connections between people and nature (Overdevest, Orr, & Stepenuck, 2004). More recently, the literature has referred to theories of place to further suggest that attention in this area could explain citizen science’s potential for fostering further engagement in environmentally responsible behaviours (Toomey, et al, 2020). However, we identify a gap in the research as to whether participation in citizen science projects can connect people more closely with place and

encourage people to participate more fully in being stewards of urban greenspaces. Existing discourse around the use of citizen-science based interventions for greenspace management primarily focuses on 'revealing information' that could help reduce the negative environmental impacts of human activities. This research, however, aims to explore its potential for promoting nature-connectedness by revealing hidden nature and therefore, utilizes citizen-science as means for fostering behaviours that actively contribute to greenspace management and restoration.

The methodological approach in this research study aims at empowering citizens through collaborative place-based citizen science such that collective learning and participation can enable these non-professional researchers to transform themselves from mere collectors of data to creators of community knowledge and in turn generators of social change (Eberhardt & Evans-Agnew, 2018);(Sorensen *et al.*, 2019). Therefore, a Living Lab approach was adopted in this study to utilise the inherent knowledge of the local community in developing the digital experiments in the pilot site using a Nature Data Probe toolkit and explore its potential for enhancing nature-connectedness by revealing hidden nature. The Living Lab as an action research method was used to analyse whether place-based citizen science using a Living Lab toolkit can improve nature connectedness in the participants and empower them to act as stewards of greenspaces in their surroundings. Further, the toolkit was developed as an intervention to improve nature-connectedness by encouraging active engagement with nature in the park with the objective of creating empathy for the natural environment in the citizenry.

We describe an action research method working with participants from a secondary school located close to a large urban park in Plymouth, UK. The workshop with 126 participants from a year eight group of teenagers aimed to test whether we could find pathways to nature connectedness using a purpose-designed living lab toolkit. These findings emphasize the need for improving participation and exploring an inclusive co-stewardship-based governance models for greenspaces to alleviate these barriers to accessibility and public engagement particularly for groups traditionally underrepresented in participation processes as in case of this study. The results found that participants were more observant of hidden nature following the workshop and that an increase in the number of participants and of the specific and descriptive responses identifying nature was observed. These findings indicate that a deeper awareness of the natural environment was created and in summary we discuss the implications of this as a pathway to increased participation in greenspace governance. These findings are consistence with literature and strengthen this research's argument in recognition of the untapped potential of Living Labs to improve public engagement with greenspaces.

Keywords: Nature, cities, digital, participation, living labs

A STUDY ON THE REGENERATION STRATEGY OF OLD URBAN AREAS FROM A RESILIENCE PERSPECTIVE: THE CASE OF ERQI SQUARE AREA IN DALIAN, CHINA (279)

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The regeneration of old urban areas faces many problems, such as low quality of space environment, functional decline, weakened vitality, and insufficient capacity to deal with emergencies. The existing regeneration strategies are mostly concerned with spatial quality and functional enhancement. However, there is a lack of consideration in risk response, and there is an urgent need to integrate resilience thinking into the regeneration response. With the objective of exploring the regeneration strategies of old urban areas from a resilience perspective, based on the existing literature, the connotation of resilience in the regeneration of old urban areas is clarified. As a complex socio-ecological system, it is argued that the resilience of old urban areas needs to be enhanced at multiple levels and in multiple processes. A four-dimensional resilience analysis framework including economic, engineering, environmental and social dimensions has been constructed, in addition, a three-stage research process covering the analysis of the area's resilience needs, the delineation of the space for resilience enhancement and the proposal of resilience optimisation strategies has been proposed.

Taking the Erqi Square area in Dalian as an example, relevant data such as topography, heat map and POI are used and analysed by applying GIS software. Combining the response of resilience to different risk disturbance stages such as resistance, adaptation and recovery, the resilience enhancement strategy is proposed in four aspects, including economic, infrastructural, environmental and social. It is proposed that in the economic dimension, reconstructing the industrial support system and introducing diversified economic forms, such as the street-stall economy and creative economy, to maintain the diversity of the urban economy and urban classes, meanwhile establishing a business model that combines market and public welfare is conducive to enhancing the economic resilience of the old district. In the infrastructure dimension, it is important to improve the infrastructure of the district and enhance the quality of spatial resources for medical and educational facilities. Increasing public service facilities such as elderly care and cultural and sports facilities through functional replacement can keep the area's facilities running stably and can also enhance the area's engineering resilience. In terms of the environmental dimension, reconstructing the ecological environment by combining the natural conditions of the site, improving the area's ability to cope with heavy rainfall by reconstructing the water system and improving the green space system, as well as carrying out the construction of sponge facilities at different levels, is conducive to enhancing the ecological resilience of the area. In terms of the social dimension, it is proposed that adopting a multi-party collaborative game to win-win organizational operation model can enhance social resilience by improving the ability of multi-party groups to collaborate in dealing with uncertainty, and possible policy recommendations are also put forward.

Keywords: urban resilience, old urban areas, risk response, urban regeneration

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THE IMPACTS AND SUGGESTION OF FOREST CARBON SEQUESTRATION STRATEGY ON LAND USE CONVERSION WITH NET ZERO CARBON EMISSIONS BY 2050—A CASE STUDY OF TAINAN CITY, TAIWAN (287)

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Multi-nation have begun to advocate net-zero carbon emission projects to control the disaster according to climate change becoming progressively severe. Besides proposing carbon reduction strategies, carbon-negative strategies also must be addressed. The countries have “forest carbon sinks” policies to expand the area of forest land. Especially, Taiwan’s(R.O.C) Forestry Bureau has a blueprint for increasing the size of forest land to 66,000 hectares before 2040. However, Taiwan’s geographical environment with crowded, and high population density, the environmental burden that will be the bottleneck of building forest land. It must face the issue of competing with other land uses.

The carbon sinks as a nature-based solution have considerable ecological value and social benefits due to the function of carbon sequestration. The research of carbon sink is found that the process of converting different land uses into forest land use for carbon sinks has different risks. The multiple benefits brought by ‘Right Tree for Right Place’ for forest carbon sinks are worthy of further evaluation. There have been some studies with InVEST provides a ready means of integrating diverse natural and social science spatial data onto a ubiquitous grid system that can propose indicators and evaluation methods for the value of ecosystem services. By this method it will be possible to calculate carbon sink value, natural environment value, and human well-being value.

In conclusion, This research aspires to investigate Tainan City and apply InVEST to appraise the environmental, social, and economic benefits of programs from different options and methods of management in the strategy of expanding forest land by the Forestry Bureau. The outcome of this research will reveal three points, including the benefits and conflicts of multiple values of forest carbon sink in Tainan City, the prospective region for building forest carbon sink in Tainan City, and the conflict between forest carbon sinks and other land uses. Considering the multiple values of forest carbon sinks into landlord issues, suggest the relevant statute of land transformation in the future.

Keywords: Net Zero, Land Use Conversion, Forest Carbon Sinks, Ecosystem Services, Forest Biodiversity

CHALLENGES AND OPPORTUNITIES FOR CLIMATE-FRIENDLY "STREET OPEN SPACE" - EXPERIENCES FROM TAIPEI (292)

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In Taiwan, major cities are going through a large wave of construction and urban renewal, paving the way for more sustainable design. Combined with adjacent building setbacks and underutilized street shoulders, citywide sidewalks (street open spaces hereafter) play a significant role in climate-friendly design because they grow with urban renewal, are large as a whole, are located along street networks, and are immersive once pedestrians leave. Widening street open space, using nature-based solutions (NBS) design, and incorporating green transportation are three types of urban planning and design tools that can be used to shape the physical built environment, and result in climate-change mitigation and adaptation. In policy implementation, stakeholders' perception of climate-friendly planning and design tools is critical, but rarely studied.

The purpose of this study is to examine how and why stakeholders from government agencies and the private sector view climate-friendly planning and design tools for street open spaces. Findings about the opportunities and challenges of these tools can contribute to understanding, fostering, and facilitating the associated policy. Stakeholder analysis for Taipei is conducted through semi-structured interviews, which are partially customized for different groups of stakeholders. A total of nineteen stakeholders have been interviewed, ranging from national and local government officials from urban renewal, urban planning/design, building administration, transportation, and civil engineering agencies, to private sector representatives, including architects, urban designers, developers, business owners, pedestrians, non-governmental organizations, and academics.

The preliminary results show opportunities and challenges are presented for the each and overall of the three types of tools. Since pedestrian-oriented design has gained more support from both public and private sectors, the widening of street space is becoming more optimistic through burgeoning building setbacks and transforming street scooter parking into green-paved sidewalk. A number of factors, however, will determine whether widening is successful in the future: As a result of inadequate planning, particularly for community streets and small parcels of land, the width may be inadequate; policies, regulations, and plans are inconsistent; city-wide overall planning is lacking in creating a consistent pedestrian pathway; mandatory regulations and voluntary approaches are required; there are private and government-owned parcels involved, as well as numerous sectors.

In addition, the use of such major NBS features on street open spaces as green-based design, permeable paving, multi-layer planting, and rain gardens has achieved some success due to the following reasons: increasing adaptation of climate change resistance in terms of rainwater runoff retention and greening by relevant public sectors, including urban planning, architecture, and water resources; the development of more advanced materials and techniques, and the increased acceptance or likeness of street greenery by the public. NBS's future is threatened by insufficient

street width. Additionally, there is a lack of underground space due to facilities such as basements and cables.

Finally, pedestrians and cyclists in Taipei need not only a continuous pathway but also some shade for thermal comfort. In addition to the opportunities and challenges listed above, shaded pedestrian pathways provided by trees may require systematic design.

In order to implement NBS features and green transportation, a city-wide plan is required to ensure adequate width and consistency of street open space. Further, the coherence between width, NBS and green transportation features may contribute to the mitigation and adaptation of climate change. By adopting "green-based" designs instead of gray-based designs, the inefficient use of street space can be reduced. It is recommended to implement NBS features wherever possible. Lastly, shaded pedestrian pathways can be used to guide planting density.

Keywords: Climate change, Sidewalk, Building setback, Nature-based Solutions, Stakeholder analysis

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Resilience is an emerging topic in the field of tourism, which is generally presented as a resolution to lessen the vulnerability and risk of destinations and organizations, as well as a shift in perception of tourism development. Nevertheless, there is still little agreement on a single concept of resilience. Several ongoing debates are linked to the conservationist versus the adaptive approaches, understanding resilience as an outcome or a process or about what type of resilience is being addressed (Lew, 2017; Hall, 2018; Sellberg *et al.*, 2015). Moreover, most studies approach tourism resilience only from an economic/business perspective without considering a destination's ecological, social, political, and economic resilience; thus, having partial information about the system's vulnerabilities, the origin of changes, and the interaction of the different system components with the changes (Hall, 2018).

Contrastingly, tourism destinations are complex systems in which people, nature, economy, and politics are part of a single socio-ecological system that cannot be treated as discrete entities in isolation from the rest (Cheer and Lew, 2018; Jovicic, 2019; Hartman, 2021). Socio-ecological systems should aim to maintain the equilibrium within the system to be resilient and preserve the desirable system functions in the face of changes. In addition, following the concept of Panarchy (Gunderson and Holling., 2002), natural and human systems are connected to uninterrupted adaptive growth cycles, accumulation, shocks, restructuring, and renewal. This means that changes continuously occur within a system at different rhythms and cross-scale levels (Lew, 2014; Barbés-Blázquez and Scott, 2017).

This approach conflicts with the current governance structures in charge of implementing measures and policies pro-resilience of a destination precisely because they are attached to their official destination limits' own areas of jurisdiction (Thimoty, 2002). This led to several inconsistencies, such as a lack of co-development initiatives and fragmented regulations, policies, and promotion (Beritelli *et al.*, 2007; Ioannides *et al.*, 2006; Kang *et al.*, 2014; Yang, 2018). Moreover, following the cross-scale perspective of changes, a destination may be affected by changes occurring geographically far from the public administration in charge of the decision-making. In the face of this complexity, tourism destinations should be considered as "multiplicities defined by sets" where a mixture of heterogeneous elements interact with each other under a constructive process that establishes a specific type of arrangement (Briassoulis, 2017).

This conceptual paper introduces a number of epistemological dimensions of resilience in order to face the challenge of social-ecological tourism systems resilience under a different approach of governance (Hartman, 2018), pursuing adaptive governance to foster the emergence of fittingly co-functioning tourism and non-tourism assemblages at destinations (Briassoulis, 2017; Lew *et al.*, 2017; McKercher, 1999). Thus, cross-scale and multi-sectorial resilient governance structures are essential to foresee the changes and make resilient decisions (Hartman, 2018; Amore *et al.*, 2018). With the purpose of doing this, the authors claim the need for a system of

tourism intelligence that, through big data technology and indicators, allows tracking in real-time or in a short period to predict scenarios (Gibson and Tarrant, 2010, Kitchin *et al.*, 2015) and, ultimately, take pro-resilient decisions which consider social, political, economic, and ecological stakeholders and how they interact with each other in a multi-scalar systemic perspective (Getimis, 2012).

Keywords: Tourism destination resilience; complex tourism systems; socio-ecological systems; cross-scale governance; smart decision-making

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INTERACTION BETWEEN FORMAL AND INFORMAL ACTORS IN THE SHADOW OF POLICY-MAKING: CASE STUDIES OF COMMUNITY-BASED URBAN PLUVIAL FLOOD RISK MANAGEMENT IN THE NETHERLANDS (305)

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Drawing on the concept of ‘interdependency’ (Alexander, 2001; De Roo, Yamu, and Zuidema, 2020) and ‘multi-level governance’, this paper makes a reflection on the planning process of interaction between formal actors (this paper mainly focused on local authorities) and informal actors (this paper mainly focused on community residents) in community-based flood risk management, and explored the factors that trigger their relations change through time (Trell and van Geet, 2019). Two micro community-level cases in the city of Amsterdam and Rotterdam in the Netherlands, which are most exposed to flooding due to climate change and bottom-up initiatives are encouraged (Francesch-Huidobro *et al.*, 2017), are selected as comparative case studies. Based on the analysis of policy discourses and semi-structured interviews, the research will explore three aspects of actor interaction in community-based flood risk management: the rationales for local authorities to (not) involve local communities, how and to what extent do the role of local authorities change (to get back in control) when the local community (not) initiate flood adaptation action, and the factors that trigger their relations change in the interaction process.

This article aims to contribute to the development of flood risk management in which the local context and actors are fully involved. Flood risk management at the local level differs widely, having evolved in different socioeconomic, institutional, and uncertain local settings (Snel *et al.*, 2022). This research can be a source of inspiration for how the Netherlands, with a centralized decentralization policy system, deals with local flooding situations in an inclusive way. Building upon planning and complexity theory, this article also points to the need to recognize interdependencies in the planning approach to flooding issues with its specific local uncertainties.

Keywords: Multi-level governance; Flood risk management; Interdependency; Actors’ relational dynamic; Complexity

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EXPOSURE-ANALYSIS AS A BASIS FOR CLIMATE CHANGE ADAPTATION MEASURES – A CASE STUDY FROM AUSTRIA (314)

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An increase in economic damages due to natural disasters can be observed worldwide (Hoeppe, 2016). Besides socio-economic developments (population development, increasing wealth, settlement development), the increase of extreme events due to climate change is likely to also influence the rising damage (IPCC, 2022). Consequently, climate change mitigation is essential. However, even if there is an immediate increase of climate change mitigation measures, there will still be an impact of climate change in the future. It is therefore necessary to implement adaptation measures in order to increase resilience and limit the damage potential.

Our research aims at investigating the possibilities of an exposure-analysis as a basis for the implementation of climate change adaptation measures. In cooperation with the region “LAG Nockregion-Oberkärnten”, in the south of Austria, we explored this topic. The region is prone to different natural hazards and has been affected by them in the past. The first step of the exposure-analysis was the detection of the damage potential based on localisable hazards (ex.: extreme fluvial floods, pluvial flooding, avalanches). The analysis of the damage potential includes building land and buildings. Further, the potential future settlement expansion in hazardous areas based on undeveloped building land was explored. In addition, an on-site workshop with representatives of the municipalities was held, to discuss the findings from the exposure-analysis. Using these methods, we will answer following questions: What is the current damage potential in the region? In what way can the results of the exposure-analysis be used as a basis for climate change adaptation?

The first part of the results shows the current damage potential in the region. For example, 25,5 % of building land is affected by surface runoff and 5,1% is situated within the runoff area of a 300-year flood. However, there are differences between the municipalities. Building land affected by torrents can vary between 0,9% in one municipality and 48,1% in another. In a next step, maps were developed for each municipality to show potential areas for settlement expansion located in hazard prone areas. This can serve as a basis for understanding where spatial planning can start to find ways to adapt to climate change. However, it has to be acknowledged that the results are prone to the uncertainties of climate change impacts, such as the further increase of extreme events. Still, the exposure-analysis can help the municipalities to discuss different strategies to handle the uncertainties of climate change. This can lead to decisions no longer being made on the basis of limited knowledge, but to heightened awareness and recognition of existing uncertainties.

Keywords: exposure-analysis, natural hazards, climate change adaptation

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CITIZEN SCIENCE TO EXPAND PARTICIPATORY PLANNING: POTENTIALS FOR CLIMATE ACTION IN AN UNPREDICTABLE WORLD (345)

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This paper reflects on the potential of citizen science in spatial planning when facing complex issues as climate change. The paper presents a framework that builds upon existing typologies and methods of citizen science and how it can be conceptualised as an extension of participatory planning to ensure democratic legitimacy in the face of climate change. Climate change has added levels of complexity and uncertainty for the future to come. Planners struggle to integrate citizens in their quest for certainty and evidence-based planning centred around techno-managerial expertise. Despite the communicative turn in the eighties, spatial planners have stayed in control of the planning processes and a democratic deficit prevails in spatial planning. This leads to a discrepancy between the mainstream planning approaches and self-organised citizen's initiatives. Many studies have recently explored the plurality of citizen science and identified multiple benefits for policy-making such as enhancing transparency, engagement of citizens, its possibility to be initiated by any societal actor, as well as information flow and comprehension between involved actors. However, in its current conceptualisation, citizen science does not address the broad concerns of communities and environments. Based on existing typologies of citizen science, this paper conceptualises citizen science as a potential extension of participatory planning where citizens could gain a recognized role in planning processes. This role implies the input of new dynamic and situational environmental perspectives on complex issues such as climate change. The paper explores how the concept of citizen science could add citizens as legitimate key-agents in the formulation of climate related planning decisions; as such it also offers solutions to the limitations of commonplace participatory engagement.

Keywords: citizen science, participatory planning, complexity, democratic legitimacy, climate change

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DAS QUARTIER – A CENTRAL BUILDING PIECE TO TARGET GLOBAL CHALLENGES IN VIEW OF THE SUSTAINABLE AND LIVABLE CITY (347)

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Urban lifestyles are subject to constant change. They shape and reshape our cities in their built form. This change can be seen in cities, for example, through zero waste stores, cargo bikes, or new forms of living (e.g., co-housing concepts or micro apartments) and working (e.g., co-working spaces, work cafés or working from home). Many shifts in everyday life during the COVID-19 pandemic have amplified many of these trends and are causing planners to rethink the city and their districts.

This research offers insights into how to capture these new social challenges for our cities in planning terms and how to formulate ideas for a sustainable and livable city. To do so, it investigates the urban quarter, or in German, the Quartier. These terms, often discussed in urban sociology and used ambivalently in practice, is often associated with positive connotations. But how can the Quartier be defined spatially, which central urban building blocks and which uses or functions must it entail?

In a resilient, livable, and future-oriented city, the Quartier must reduce action radii of its inhabitants in the sense of the often-called 15-minute city to provide a variety of functions (Moreno, 2021; Schnur, 2008: 39). In this context, the Quartier cannot be a rigid construct, but it must define essential benchmarks to understand and further plan cities at this scale from an urban planning perspective (Feldtkeller, 2020: 34). Schnur's definition of the Quartier as a "fuzzy concept" (Schnur, 2008: 41), based on his empirical studies of existing urban neighborhoods, serves as the basis for a model dimensioning of a Quartier to about 700x700 meters in its core with a loose fringe of spatially and socially overlapping functions. In this, central urban axes or clusters of supply and exchange with a multitude of uses and active ground floors can be found, which Jane Jacobs already described in 1961 as "street neighborhoods" (Jacobs, 1992: 120). In addition, in the urban context of cities quieter side streets that emphasize residential living and green functions can be found. These, in addition to the urban arteries, are two of the central urban building blocks of a Quartier the research examines.

Through an analysis of its social but also spatial dimensions, the research addresses how the Quartier can be seen as a crucial spatial frame of reference for urban qualities. Urban development draws structural-spatial conclusions on urban planning issues based on the social dimensions of the quarters-concept. Informed by current urban living patterns and societal challenges, a stronger spatial reference to the Quartier and a clear urban planning definition, or in sense of the English language the neologism of the term, can contribute to a better understanding of the exceedingly complex organism that is the city. Thus, it helps planners to adapt to the challenges and cultural expectations of this time and shape the new normal in the mixed used, 15-minute city.

Keywords: 15-minute city, livability, everyday actions scopes, neighborhood, urban morphology

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GEOGRAPHIES OF DEVELOPMENT IN TWO ITALIAN MASSIFS. HOW A CHANGE OF PERSPECTIVE COULD SUPPORT INNOVATIVE PROJECTS FOR MOUNTAIN SPACES (371)

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Over the last decades, depopulation processes, impoverishment of the variety of established economic activities, and reduction in biodiversity affect the rural environments in Italy. Together with those remote regressive pressures, new demands emerged, like global warming and the need to rethink our habitats after COVID19 and re-discover of the values of these environments by a new cohort of neo-rural inhabitants.

All those tensions produce a variety of answers by the public administrations and the local communities, based on a set of funded programs that ask for projects to generate forms of endogenous growth, to produce sustainable development, and to stimulate inclusive processes of social innovation in low-density rural contexts.

The quality of these projects depends on the capacity of administrators, civil servants, practitioners, and activists to understand the real conditions of the design contexts, exceeding stereotyped readings, and clichés and their ability of setting up new territorial representation able to support their action, that we define “*geographies of development*”. Current practices are often based on standardized, sectoral approaches and/or administrative dimensions, simplifies the existing territorial relationships and propose solutions based on delocalised “best-practices”, ineffective and unsustainable in the medium-long term.

In the urban studies field, according to Steinberg (2014), there is a need for a cultural leap towards new ways of understanding the relationship between the form of settlements and the geology of nature. Steinberg’s ability to reconstruct the ecological history of urban evolution suggests the opportunity to return to representing territories through readings and descriptions. These descriptions emphasize the relationships between physical and geological geographies with territorial systems. It will be a question of returning to physical geographies and historical relationships such as the idea of massifs when we reflect about mountains (Ferlinghetti, 2020), to support projects oriented to local, endogenous a durable development.

The contribution analyzes the geographies of the mountain massifs as an opportunity for the enhancement of endogenous resources with a view to a sustainable strengthening of the economic and social system of the territory. In the massif conceptualization, the mountains are systems more complex than the union of their valleys in which consolidated knowledge, practices and relationships, are the territorial capital that projects should take in account to exceed the deterritorialization process. Therefore, we are not proposing a nostalgic view of the mountain as a museum or a sort of “garden – or playground - for the city”. Changing our point of view, we suggested that the geographical descriptions became the basis for projects in which new and

more articulated activities linked to contemporary forms of living, moving, consuming, and inhabiting the space will provide opportunities for the endogenous development. These activities are conditioned, today as then, by the orographic characteristics of the landscape.

The approach adopted is the co-evolutionary one (Norgaard, 1984), which reads the dynamics between environmental and social systems. This co-evolutionary perspective leads to a review of entrepreneurial choices, market dynamics, interactions with the production structure, the economic system as a whole and the processes of use of natural resources, intersected with the geomorphological, physical, and climatic dynamics, as a matrix for the structuring of the landscape.

As case studies, we involved two mountain groups of north Italy: the massifs along the Adige river (Veneto region) and the Orobic massif (Lombardy region), with examples from academic experimentation of the University of Padua and the University of Bergamo. The morphological structure of the massifs, with their valleys, with settlements, infrastructures, crops, and productive activities contained in a reticular system, deeply constrained within orographic limits, becomes the ideal model for experimenting with systems that take from the physical conditions of the landscape positive opportunities of transformation.

Keywords: mountain massif; valley section; geographies; coevolutive approach; landscape planning.

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TOWARDS THE 'DRAINAGE CITY': ACTIONS AND TOOLS FOR SOIL DE-IMPERMEABILISATION (381)

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The epistemology of risk (articulated in hazard, vulnerability, and exposure) has reached such maturity in scientific terms, in its widespread perception and, though not entirely, in the national public discourse, that it demands an extensive and taxonomic study of the techniques and tools relating to the 'water cycle' of contemporary cities and territories. It is precisely in the relationship with water that the city project intervenes, at different scales, with greater success on the different vulnerabilities of different contexts induced by climate change. And if one can act on water (the tradition is thousands of years old), one cannot act on winds, which are also subject to great changes, as Gilles Clément recently reminded us. The 'drainage city' investigates and re-designs precisely the relationship between the built environment resulting from the relationship between impermeable/permeable/renaturalised soil and the water cycle, triggering some effects and limiting others that reconfigure the overall performance of the whole living environment. The research needs a comparison with the advancement of the issue in the national and international context: today field of studies, experiences, practices, and standards that can be traced back to the so-called Adaptive Planning and Urban Design. In relation to this, the main objective of the paper is to recognize from general to specific usefulness and field of application (with particular attention to different scales and urban and territorial geographies) of the so-called de-sealing techniques, meaning by this, the various forms of subtraction of built spaces that imply the de-impermeabilisation of the soil (literally "to unseal"), including among these also those more specific to "sustainable urban drainage systems". The methodology will therefore consist of a comparative analysis that will imply the identification and systematization of "techniques" and "fields of application"; firstly, starting from the reconstruction of a registry deduced from a disciplinary literature with no national boundaries, and subsequently, with a specific investigation in the Italian context of state of the art. Therefore, the investigation will tend to move on three levels aimed at constructing the properly operational tool such as the Synoptic Framework of Techniques, Fields of Application, and Standards. The first level will concern the multiplicity/variety of aspects and specific conditions recognizable in the sources considered (objectives, outcomes, geographies, scales, supporting financial sources, etc.); the second, the possible correlations with the tools of government/land management; the third, a comparison between the two previous levels in the national and international field.

Keywords: Soil sealing, De-sealing, Sustainable urban drainage system, adaptive planning and urban design, regional and urban planning

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INTEGRATION OF LOCAL AGRI-FOOD SYSTEMS IN SPATIAL PLANNING: FOODSHED ASSESSMENT THROUGH ECOSYSTEM SERVICES (395)

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The removal of food growing from a city's land use system increases the vulnerability of agri-food systems (AgrFS) and weakens sustainability efforts, in the 21st century, when the urban population continues to increase. The pressure of urbanization on natural and agricultural areas, the climate crisis that we unequivocally acknowledge, and the failure of the current food system, which the COVID-19 process has clearly shown, reduce the resilience of regions/cities/societies, while raising our concerns about their future. Therefore, AgrFS will play a central role in the sustainable development agenda.

Academia and national/regional/local governments are in search of new planning tools so that cities/regions can develop local food systems against the risk of future food shortages and turn them into self-sufficient settlements. “The Foodshed Assessment (FsA)” is also emerging as a planning policy tool that is increasingly used to discuss the geography of urban food supply and to describe the links between food growing-consuming regions at different scales. However, FsA is still a new field, and the objectives and methodologies of studies vary widely. Also, there is no consensus when determining the boundaries of local foodshed spatial coverage. Foodshed boundaries are determined according to political boundaries or a certain distance from the place where the food is consumed. The site-specific ecological values that support AgrFS are the most overlooked part in the determination of these boundaries. Nevertheless, it's necessary to define the qualities that can reveal the ecological functionality of the specific city/region for an integrated spatial planning and policy. In this research, it's suggested that this gap is filled with the “Ecosystem Services” (ESs) approach.

ESs are defined as all the direct or indirect benefits that humans derive from ecosystems (MEA, 2003). AgrFS have a multifaceted relationship with ESs because they are simultaneous providers and consumers of them (La Notte, 2022). For instance, ESs such as crops, water purification, carbon sequestration are provided by AgrFS too, where ESs such as pollination, nutrient regulation, pest/disease control underpin the productivity and ensure the sustainability of AgrFS (Power, 2010). The way of agri-food practices determines the lifetime and the quality of ESs. While the quantity of the use of chemical inputs can cause the destruction of ESs, the existence of an agro-ecological system can also provide a range of ESs. Research on the use of ESs knowledge in spatial decision making has become a very popular topic (Gret-Regamey et al., 2017; Tezer et al., 2020; Goldstein et al., 2012; Menteşe et al., 2019). However, there is few research focusing on ESs and AgrFS (Rusinamhodzi, 2019; Varyvoda and Taren, 2022) Since AgrFS cannot be considered independently from ESs, the proposed methodology has the potential to contribute to the existing literature.

Accordingly, it's aimed to develop a planning tool that will guide the handling of local AgrFS within spatial planning by integrating foodsheds with ESs approach. Experiments on how the proposed planning tool should be handled within the current planning system were made in Istanbul.

The methodology for the study consists of four steps:

1. Content analysis based on secondary source literature research related to the “local AgrFS”, “foodshed” and “ESs”.
2. Definition of the “Foodshed Assessment” based on predicted ESs indicators for decision-making on local AgrFS.
3. Evaluation of existing national/regional/local-scale planning systems and tools affecting Istanbul, with a focus on foodsheds and ESs.
4. Cross-scale discussion of the integration of the FsA into the Istanbul planning system.

This research will contribute local AgrFS as a priority area in spatial decision making. Its opportunities won't only create win-win relationships between AgrFS and ESs, but also increase food resilience, food security, and regional/social/environmental resilience at different scales.

Keyword: Agri-food system (AgrFS), Foodshed, Ecosystem service (ES), Spatial planning tools, Istanbul

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HOW TO MEASURE CULTURAL RESILIENCE? A PROPOSAL TO EVALUATE THE CULTURAL RESILIENCE OF CITIES THROUGH INDICATORS (408)

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The initial idea for this postdoctoral research proposal starts from the concept of connecting resilience with culture, as a new measure of urban development and evaluation. The global effects of climate change such as rising temperatures, rising sea levels and extreme weather events have a major impact on cities and urban life, but also in historic places and monuments, due to their basic construction materials and their different urban planning. Based on the above, the proposal concerns the connection of resilience, as a new parameter of the evaluation of the tangible and intangible cultural assets of cities, through the creation of a model for assessing the impact of cultural resilience in places. Considering that every city or historical place, traditional settlement the concept of cultural resilience constitutes a new methodology for the evaluation of the cities, most of which are under pressure or crisis of their system (economic, environmental, tourism, etc.). The creation of a model for evaluating the cultural resilience of cities through the basic concepts and parameters of resilience (innovation, green city, open data, etc.) and culture, ensures their continuity in the future and their transfer from generation to generation. The proposed tool is structured by three initial parameters (resilience, culture, human) and creates a new multicriteria methodological tool, which can be applied in every place.

Keywords: cultural resilience, resilience, indicators

AN APPROACH TO INCLUDE ECOSYSTEM SERVICES IN THE REGIONAL PLANNING PRACTICE FOR CLIMATE ADAPTATION (426)

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Regulating ecosystem services (ES) such as carbon sequestration and storage, water regulation or storm protection make a key contribution to climate adaptation. Thus, ES applications in decision-making processes can lead to more sustainable outcomes. Under the current environmental crisis, ES knowledge can therefore promote the necessary adoption of integrated mitigation and adaptation actions. Despite the growing understanding of the potential of the ES concept, there is little awareness in local regional planning of how to integrate the concept into concrete plans and policies. In this study, an approach for integrating ES knowledge into spatial planning as a climate adaptation tool is presented. It builds on linking land cover data with information on the expected impacts of climate change on natural systems and socioeconomic sectors. The methodology combines the review of the literature with empirical practice, and is divided into three main steps: i) identification of a set of priority ES for climate adaptation (demand); ii) mapping of the current potential supply of selected ES; iii) mismatch assessment between supply and demand. This framework is applied to a case study of the regional spatial plan revision undertaken by the Autonomous Region of Friuli Venezia Giulia (Italy). The results reveal the territorial vulnerability to climate impacts and the potential contribution of existing ecosystems to address them through the supply of relevant ES. The approach provides an operational tool for the region to design adaptation policies that promote local implementation: the scalability of the model encourages multi-level governance. Pros and cons of the proposed approach are discussed in the context of scientific knowledge contribution to better inform decision-making for climate adaptation.

Keywords: Ecosystem services, climate adaptation, decision-making, regional planning

THE RECOVERY PHASE OF L'AQUILA (ITALY): DIALOGUES AND PERSPECTIVES FOURTEEN YEARS AFTER THE EARTHQUAKE (452)

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The history of L'Aquila after the 2009 earthquake is marked by a long physical, economic, and social recovery phase. While the emergency response in Italy is quite tested and efficient, the recovery phase is set up and carried out for each event without a predefined organization. On the one hand, this allows actions to be adapted according to the specificity of the territories, on the other, it expands the time needed to re-think and re-program the recovery. Thanks to the data available on the USRA Web-GIS (Provenzano et al. 2019), an acceleration in recovery is recordable during the last few years, even if it is mainly analysed as a percentage of completed interventions (private and public).

Starting from the observation of the data, the youth lab of the National Institute of spatial planning INU questioned which spatial plans guide the recovery phase, which objectives and contents they concern, and how spatial planning looks at the transition between “recovery” and “recovered”.

The INU youth lab, through a cycle of itinerant dialogues, organized a dialogue in L'Aquila with the representatives of the two special office for the recovery of L'Aquila (Ufficio Speciale Ricostruzione L'Aquila – USRA) and the for the recovery of the other smaller municipalities affected by the 2009 earthquake (Ufficio Speciale Ricostruzione dei Comuni del Cratere (USRC), the representatives of the Municipality of L'Aquila for the private buildings sector, urban planning and public buildings sector, and mobility sector, and the representatives of the Territori Aperti project of the University of L'Aquila. The dialogue addressed the aspects related to the difficulty of framing the recovery phase through integrated spatial plans and projected towards a future perspective that is difficult to define.

The paper aims to consolidate the dialogue results to understand the lessons learned, the open challenges and the main objectives of spatial planning in such a territory through three goals: a) framing the state of the recovery after fourteen years, obstacles encountered and lessons learnt; b) understanding the evolution of spatial planning in relation to the event, recovery, and future perspectives; c) investigating the resilience of the territory through the analysis of the current condition of the physical, economic, and social fabrics.

Keywords: recovery, resilience, dialogues, risk-oriented spatial planning

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RURAL PRODUCTION-LIVING-ECOLOGY SPACE GENE: A PRELIMINARY STUDY ON THE RESILIENT PLANNING METHODS FOR ECOLOGICALLY FRAGILE AREAS IN RURAL AREAS OF THE LOESS HILLY AND GULLY REGION OF NORTHERN SHAANXI, CHINA (457)

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Plateau is located in north-central China, is the most fragile ecological environment and soil erosion of the most serious areas in China. The loess hilly and gully region of northern Shaanxi is located in the center of the Loess Plateau. The soil in this area is mainly wet sink loess, with gullies and ravines, usually dry with little rain and concentrated rainstorms in summer, and natural disasters such as floods and landslides are frequent. The loess hilly and gully region of northern Shaanxi covers an area of about 66,000 square kilometers, with about 5,269 administrative villages and 31,727 natural villages, and the rural area accounts for about 95% of the region. The countryside is a complex that integrates ecological space, production (agriculture) space and living (villages) space. After decades of ecological restoration in northern Shaanxi, the ecological, production, and living spaces of the region's villages have all improved more significantly. In terms of ecological space, through afforestation and reforestation projects, the vegetation coverage rate has reached about 53% in 2013, the comprehensive soil erosion control rate has reached about 68% in 2019. In terms of production space, local agricultural development has been promoted through arable land security measures such as "gully land consolidation" and high-standard farmland construction. In terms of living space, the living conditions of residents have been improved through the implementation of migration relocation measures in areas where geological disasters are frequent. However, some new problems are emerging. First, the vegetation planning in northern Shaanxi is dominated by highly absorbent tree species, and the total amount of vegetation is close to or exceeding the upper limit of water carrying capacity. If the vegetation area is further expanded, it will inevitably aggravate the problems of water shortage. Second, part of the cultivated land in close proximity of the production space has been grain for green, and the demand exceeds the supply; the distant arable land is far away from the village or difficult to be cultivated by large-scale mechanization, and the abandonment is serious. Third, the living space was relocated to the gully area with convenient transportation, but it is susceptible to flooding and safety problems due to heavy rainfall climate. The fundamental reason is that the previous transformation of rural in the northern Shaanxi mainly focused on a single space of ecology, production and living, neglecting the coordinated relationship between ecology, production and living in the villages of the region, that is, the production-living-ecology space genes, thus causing the problem of uncoordinated spatial pattern of the rural. Therefore, the thesis proposes a resilient planning method to pass on the wisdom of rural construction in the ecologically fragile areas of northern Shaanxi. Through the research on the rural in the loess hilly and gully region of northern Shaanxi, this thesis studied the characteristic scenes of each geomorphological subdivision of the rural and extracted seven types of genes in the production-living-ecology space, among which there are two typical genes: one is mainly distributed in hilly gully areas, and the combination pattern is planting trees on hilltops, cultivating at the bottom of

ditches, and building cave dwellings (*yaodong*) on slopes. The other is mainly distributed in the loess plateau areas, and the combination pattern is planting trees at the bottom of the gully, building cave dwellings and cultivating fields on the plateau. Finally, combined with the current and future needs of rural modernization, the rural production-living-ecology space gene is applied to the function, structure and layout of township planning, and formulates the inheritance criterion of rural spatial genes, to promote the resilience of rural areas in northern Shaanxi.

Keywords: Resilient Rural; Ecologically fragile areas; Production-living-ecology space; Space Gene; The loess hilly and gully region of northern Shaanxi, China

Funding:

Supported by the General Program of National Natural Science Foundation of China (Grant No. 52178056) and the Innovation Capability Support Program of Shaanxi (Program No. 2021KJXX-33).

NATURE-BASED SOLUTION AS A NEW DIMENSION FOR BUILDING COASTAL RESILIENCE: THE CASE OF THE MEDITERRANEAN BASIN (488)

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In recent decades, a combination of intensified human pressures, and the development of coastal areas have negatively impacted coastal ecosystems. This is mainly in the form of land use changes and the overexploitation of natural resources which in turn reduces coastal resilience (Adger et al., 2005). In the case of the Mediterranean basin, a high population density, a high concentration of economic activities along the coast, and a borderline climatic balance make it one of the most vulnerable regions worldwide to climatic changes (Ferragina and Quagliarotti, 2008).

Consequently, these conditions cause irreversible damage to landscapes, habitats, biodiversity, and to coastal configuration, thereby contributing to processes of coastal erosion and flooding. This is further worsened by the impacts of increased incidence of storms, floods, and sea-level rise, all of which are exacerbated by climate change (EEA, 2020).

Traditionally, hard engineering structures (such as groins, offshore structures, breakwaters, and seawalls) have been built along the Mediterranean coasts to protect populations and activities. However, the unsatisfactory results and ineffectiveness of these structures (Pranzini et al., 2015) have led scientists, experts, and decision-makers to start exploring and implementing more cost-effective, robust, sustainable, and environment-friendly risk management measures.

Nature-based Solutions (NbSs), as an alternative or complement to traditional hard engineering structures, are increasingly being considered a promising approach for coastal risk management.

This is based on the premise that the enhancement and protection of natural processes, can provide

multiple benefits to society, by ensuring a sustainable provision of benefits and co-benefits while counteracting the negative climate change impacts (EC, 2022).

To understand if Nature-based Solutions could be a solution for coastal risk management in the Mediterranean, this contribution provides a detailed examination based on a literature review.

From the analysis, it emerged that the consideration of Nature-based Solutions for coastal risk management in the Mediterranean is still lacking, despite their continued promotion globally.

Additionally, within the existing literature, knowledge gaps and missed linkages on how to evaluate the operational mechanisms of Nature-based Solutions for coastal risk management in the Mediterranean, make it difficult to translate these solutions concepts into practice.

At a first sight, this can be attributed to reasons such as the significant lack of a comprehensive understanding of the overall functioning of Nature-based Solutions within coastal ecosystems and related services as the emerged evidence of this research. Additionally, it can be attributed to the complexity related to the unique and peculiar climatic conditions of the Mediterranean coastal areas, as well as their high concentration of population and economic activities.

Keywords: Coastal resilience, Coastal risks, Nature-based Solutions, Mediterranean Basin, Literature review

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THE TERRITORIAL RESILIENCE MATRIX: AN ASSESSMENT TOOL FOR GUIDING FUTURE DEVELOPMENT OF INNER AREAS (502)

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“Over the past decades, a shrinking population has become the normal trajectory for many European rural areas” (ESPON 2017). The shrinkage of rural areas is a complex process driven by demographic and economic processes resulting in a long-term decline: changes in population, production, employments, and innovation (Copus et al. 2021). Many documents on sustainable development (from the Agenda 21 to the Agenda 2030) have clearly remarked the disparities among urban and rural areas and the importance of promoting sustainable rural development to ensure an economic, social, and environmental viability of nations and cities themselves. In most European countries the so-called inner peripheries, composed by rural and mountain areas and numerous small villages (Servillo et al. 2016), occupy a large part of the national territory while hosting a very small share of the population: these areas represent a crucial resource for a balanced territorial development due both to the natural and cultural capital they keep and to their potential of providing a large variety of ecosystem services to wide regional areas (De Toni et al., 2020).

According to the need for innovative approaches capable of supporting an endogenous development process in inner peripheries, this contribution explores the multiple crisis affecting these areas and provides an assessment tool aimed at evaluating the resilience features of these areas and guiding the development of integrated place-based strategies for their sustainable development.

The assessment is carried out through a set of indicators framed into a resilience matrix and selected to point out the causes of the shrinkage, such as lack of accessibility and public service delivery, vulnerable and ageing infrastructures, elderly population, digital divide, lack of economic diversity, and so on, and the availability of a potential to turn on, such as natural resources, a still prevailing presence of the primary sector, a tangible and intangible cultural heritage, public spaces to be renewed, the existence of projects, funds or initiatives already available or partially developed. The set of indicators allows a comparison among the analysed municipalities in respect to an overall resilience value, crucial to the identification of critical areas, highlighting meanwhile, for each investigated municipality, the resilience level of each considered resilience dimension, fundamental to guide future strategies.

The resilience matrix is tested on an Italian case-study: the Matese area in the Campania region, which has been recently defined by the Campania Region as a pilot area for the development of a local strategy according to the National Strategy for Inner Areas.

Keywords: resilience, inner areas, rural areas, community engagement

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REFLECTIONS ON A RISK-ADJUSTED APPROACH IN SPATIAL PLANNING (516)

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The presentation focuses on sustainable land use in term of a risk-oriented spatial planning to reduce natural hazard damage. The main issue is the adaptability of settlement areas, which are under particular growth pressure (Fuchs et al., 2017; Löschner et al., 2017). Due to the increasing frequency and intensity of natural events, resilient settlement structures are necessary.

Considering its preventive character and the influence it has on the spatial distribution and intensity of uses, spatial planning is gaining an increasingly important role in natural hazard management, , especially in view of climate change (Fuchs et al., 2015).

In terms of anticipatory planning, land use adapted to the natural forces with the aim of reducing the risk of damage should be promoted. The approach of a risk-adjusted spatial planning is rather innovated, because the current spatial use decisions usually are hazard-oriented and derived from the hazard zone plans. (Seher, Löschner, 2018). The consideration of residual risks in the range of technical protection systems has so far played a less important role in spatial planning due to the lack of a corresponding legal framework.

The main part of the presentation is the developed model for a risk-oriented planning approach in the form of a decision tree based on the hazard takes into account, the use, organizational measures and spatial planning considerations.

After that the future challenges in natural hazard management and the difficulties in implementing a risk-oriented planning approach will be presented. The discussion about a regional structural measure and settlement concept is intended to provable new ideas for a more risk-based approach in spatial planning.

Keywords: Risk oriented spatial planning, disaster risk management, adaptability

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THE SPONGE CITY AS AN INTEGRATED URBAN PLANNING AND DESIGN CONCEPT: A REVIEW (524)

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Climate change is increasingly challenging existing urban systems. In many cities, the current capacity of urban water management systems to remove rainwater is insufficient to deal with the large rainfall events resulting from climate change. At the same time, climate change causes cities to suffer from drought during increasingly long hot periods, resulting in declining groundwater tables that threaten building foundations. The Sponge Cities approach is a response to this challenge by storing excess rainwater when needed (keeping the sponge dry enough) while releasing water to face droughts (keeping the sponge wet enough).

The idea of Sponge Cities has influenced the planning of many Chinese cities and is becoming increasingly popular in climate adaptation narratives worldwide. The term Sponge Cities was first mentioned in the academic literature in 2005. Since then, particularly after 2015, the body of literature on Sponge Cities has been growing, spanning disciplinary and sectoral boundaries, including water management, climate adaptation, and landscape architecture. Many studies related to Sponge Cities lack a conceptual description of what a Sponge City is or should be. Other studies confound the concept with related terms like low-impact development (LID), water-sensitive urban design (WSUD) or nature-based solutions (NbS). While LID, WSUD and NbS may be strategies to implement Sponge Cities, a planning concept needs to consider all the elements in an urban system, including governance networks, material and energy flows, urban infrastructure and form, and socio-economical and socio-ecological dynamics. In parallel, related literature e.g., on water management and climate adaptation, shows an increase in integrated approaches and definitions in which not only water but also social and ecological processes need to be met with extra spatial capacity in the urban environment. Therefore, despite the increasing interest, an integrated definition that outlines a clear scope for the Sponge City is still missing. The lack of conceptual clarity is problematic because it hinders the effective implementation of the concept in planning practice and prevents a consistent assessment of Sponge City interventions in urban contexts.

To conceptualise Sponge Cities as a planning concept, we review the academic literature related to Sponge Cities to systematically (1) identify the most influential studies, (2) trace the origins and development of Sponge Cities as a planning and design concept, (3) compare how the concept is defined across fields of application (e.g., water management and climate adaptation), and (4) develop a definition of Sponge Cities from an integrated planning and urban design perspective, addressing conceptual and operational tensions across policy and disciplinary fields. An integrated definition is expected to provide a strong foundation for developing guidelines and practical recommendations for the planning and design of Sponge Cities.

Keywords: Sponge City, Resilience, Climate Adaptation, Water Management, Integrated Planning, Socio-ecology

ADAPTATION PLANNING IN FRAGILE AREAS: THE CASE OF CLIMATE CHANGE ADAPTATION PLAN FOR THE VENICE LAGOON (527)

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The Venetian territory is a fragile and highly vulnerable territory. The impacts of climate change in recent years have widely manifested their effects on different aspects, ranging from hydrogeological risk, overheating in urban areas (UHI), coastal and lagoon defense issues, to the deterioration of historic buildings. This has significant environmental, social and economic consequences that can affect the development of economic activities and the well-being of citizens.

It is precisely in this perspective, which considers the Italian coasts and in particular the coastline of the Veneto Region, as of the particularly vulnerable to the effects of climate, that the scientific research program "*Venezia2021*," coordinated by CORILA - *Consortium for coordination of research activities concerning the Venice lagoon system*, is inserted. The research involves a complex process of integration between tools and methods of observation and data collection, in order to contribute to the maintenance of a proper balance of the lagoon ecosystem in a perspective of increased climate resilience. In this way it will be possible to protect the natural ecological functioning of the lagoon and at the same time safeguard the benefits to society (ecosystem services) provided by the lagoon.

The *Venezia2021* research program was started in 2018 and was completed in 2022, and is funded by the Interregional Superintendency for Veneto, Trentino-Alto Adige, Friuli-Venezia Giulia regions and the Ministry of Infrastructure and Transport, as part of the works to safeguard Venice and the lagoon.

The overall objective of the research was to develop an accurate and shared strategic vision with respect to the challenges facing the safeguarding of the city and its lagoon, a world heritage site, in consideration of climate change scenarios. Specifically, thematic research axis No. 5 fits into this framework with the overall objective of developing an integrated system of analysis, assessment, planning, management and monitoring of the Venetian area capable of supporting the city and the activities that operate in it, through coordinated adaptation actions that aim to increase sustainability and resilience.

The research was developed through an in-depth spatial, to direct the planning tools of the administrations insisting on the lagoon area, thanks to the provision of mapping, objectives, adaptation options and monitoring indicators, within a shared strategic framework. In addition, this integrated path of research, has enabled the dissemination and awareness of local administrations with respect to the issue of adaptation and to convert the approach of spatial planning from sectoral-individual to holistic-shared.

This contribution analyzes the experience conducted in drafting the "*Venezia2021*" Climate Change Adaptation Plan. The goal of the plan was to provide a useful and versatile climate change adaptation tool for the Venice Lagoon and more specifically for the eleven municipalities that constitute its drainage basin. The study highlighted how the territory of the Lagoon is, at the same

time, uniform and heterogeneous. Uniform in the most purely territorial and environmental aspects, but extremely heterogeneous and varied from a socio-economic point of view. This has led to the need to analyze and propose different adaptation design alternatives, scalable and manageable by municipalities in areas and with even very different criticalities. The objective of the research also was to identify for each municipality: strategies, objectives, actions and measures that can overcome territorial limitations and vulnerabilities. These measures were defined and described in a basic abacus that supports climate zoning and provides concrete possibilities for policy makers. The Venice Lagoon Adaptation Plan, in fact, is a flexible tool that does not replace ordinary planning, but supports and implements it through strategies, objectives, *site-specific* and *impact-based* actions able to adapt to the different “souls” of the territory, without, however, losing effectiveness or limiting local initiatives.

Keywords: urban planning; planning tools; climate adaptation; urban adaptation; climate change.

ACHIEVING ADAPTATION IN MEDIUM-SIZED CITIES: THE CONTRIBUTION OF URBAN CLIMATE TRANSITION STRATEGIES IN INCREASING SOIL PERMEABILITY (535)

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It has been broadly demonstrated that soil sealing and land take have strongly impacted the contemporary city, leading to adverse phenomena such as loss of ecosystem services, urban heat island and flooding. The severe impacts on the city caused by increasingly frequent extreme or abnormal weather events can no longer be defined as “unpredictable”. These urban challenges call for specific mitigation and adaptation actions (Biesbroek et al., 2009) also because there is a growing awareness that climate change requires a substantial change in approaches to the urban and territorial transformations governance (Zucaro, Morosini 2018).

Increasing soil permeability is considered an effective intervention against climate change and its effects. By restoring soil permeability, the ecosystem services provided by the soil are also partially restored, with benefits for the environment, human health and society as well (Bockarjova et al., 2022). This can be achieved through desealing interventions, i.e. restoring part of the soils to their previous state, recovering the main functions inhibited by transformative processes, through the removal of the waterproofed layers, the loosening of underlying soil and the removal of foreign material (EEA, 2013; Tobias et al., 2018). Over the past 30 years, desealing has begun to be recognized in the scientific literature and in spatial planning practice as a possible compensation and mitigation measure (Directorate General for Environment, 2012). The approaches to desealing known in literature and practice are essentially top-down, i.e. the result of political actions and choices by local governments, or bottom-up, i.e. promoted by associations and volunteers sensitive to the issue.

Within this framework, the aim of this contribution is to investigate and compare some specific innovative strategic urban planning tools implemented specifically to guide climate change adaptation actions in northern Italian cities, specifically investigating the conditions, measures and processes related to depaving actions. This research will thus present the results of the comparison between the urban climate transition strategies of some medium-sized Italian cities, highlighting:

- the tool specific goals and desired results;
- the tool characteristics, by identifying its duration, promoters, funders and urban context;
- characteristics of the urban context: geomorphological, hydraulic, soil, vegetation;
- typologies of spaces interested by desealing actions, by previous use, ownership, size, state of use and conservation;
- purposes of the desealing action, i.e. urban challenges or problems that the action aims to solve;
- relations with ordinary spatial planning tools, i.e. urban plans and implementation plans;

- methods of financing interventions.

The expected results of the comparative analysis are to build a synthesis of some innovative experiences in the Italian context aimed at increasing the resilience of cities to climate change with a systematic approach, trying to investigate the different interpretation and application of the desealing concept. The outcomes of the study will be useful to investigate the criteria and processes underlying the choice of priority areas to be de-sealed and the physical interventions on the urban soils. It will also allow the development of a first critical reflection on the opportunities and limits of strategic plans for climate resilience, and their interactions with ordinary urban planning tools.

Keywords: desealing; soil sealing; climate change; adaptation; urban planning transition plans

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A STUDY ON SPATIAL PLANNING STRATEGIES FOR COPING WITH RISKS IN UNDERDEVELOPED RURAL AREAS: A CASE STUDY OF THREE VILLAGES IN GANSU PROVINCE, CHINA (567)

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Based on the theory of sustainable livelihoods, this paper selects three villages in Gansu Province, an underdeveloped region of China, as research samples to analyze the livelihood activities of peasants and the material capital composition with spatial attributes in their livelihood capital. When peasants are faced with risks in stages, they should dispose, adjust and optimize the material capital with spatial attributes, and propose corresponding sustainable and diversified rural planning strategies. Based on the logical thinking of "environment -- process -- result -- planning", this paper selects three agricultural, animal husbandry and farming villages in Gansu Province of China through field research and quantitative analysis, and from a micro perspective, masters the livelihood activities of peasants in the past three years, as well as all kinds of spatial physical capital and their property rights relations. It also analyzes the significant characteristics of cultivation, farming, new construction, renovation or abandonment of livelihood activities in the spatial property material capital such as pasture, cultivated land, garden land, homestead and collective operational construction land. In the face of potential ecological environment, social economy, various disasters and other risks, this paper demonstrates how peasants carry out livelihood activities and achieve risk-coping results in spatial property material capital within the existing land system and use control framework in China. According to the means and effect differences of peasants' self-organization, government intervention and social assistance in livelihood activities, the strategies and paths of rural planning for spatial property material capital are proposed. According to the theory of sustainable livelihoods, combined with the potential risk factors of rural areas and their influencing mechanisms, starting from the relationship between livelihood diversification and improvement of livelihood sustainability, corresponding strategies are proposed in the aspects of infrastructure construction of spatial physical capital, land centralized layout, ecological environment restoration, rural housing renovation and revitalization, disaster avoidance and resettlement. Then it will be transformed into the capital composition of peasants to cope with risks. Although this study focuses on typical villages in economically underdeveloped northwest China and ecologically fragile areas, which are characterized by poor natural resource endowment, fragile ecological environment, low level of economic development, and concentrated low-income peasants. But for the implementation of China's rural revitalization policy in the future, the construction of sustainable livelihood and the investment of spatial property material capital in rural areas with such weaknesses are still the focus, which has certain theoretical significance and practical value for the guidance, implementation, evaluation and revision of rural planning.

Keywords: Sustainable livelihoods; Livelihood space capital; Rural risk; Spatial planning; Rural revitalization

Funding:

Supported by the General Program of National Natural Science Foundation of China (Grant No. 52178056) and the Innovation Capability Support Program of Shaanxi (Program No. 2021KJXX-33).

PLANNING FOR DISASTER RISK MANAGEMENT: THE PERSPECTIVE OF GREECE AND ALBANIA ON ENVISIONING RESILIENT FUTURES (570)

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Climate change has (according to many) intensified natural hazards, exacerbated natural disasters and their human and economic consequences. International organizations (United Nations Office for Disaster Risk Reduction- UNDRR, Intergovernmental Panel on Climate Change – IPCC, etc.) have established frameworks for disaster prevention, mitigation, reaction, and recovery. At the same time, the Sustainable Development Agenda 2030 recognizes the need for Disaster Risk Reduction for sustainable development, with cities being the focal point for achieving safety, inclusiveness, resilience and sustainability on a global level (United Nations, 2015, p. 24). Governments, planners, and academics have also been concerned about the issue of resilience and especially of cities for which there have been projects, such as the exemplary one for the 100 Resilient Cities (2022).

Nonetheless, the complex interrelationships between resilient and sustainability goals raise the question whether the two are complementary or contrasting qualities for planning agendas (Ahern, 2011; Saunders & Becker, 2015; Grum & Grum, 2023). Scientific knowledge on disaster risk management and supporting policy discourse are therefore growing, however losses from natural disasters worldwide, increase (CRED, 2022). Different policies are implemented by different governments, but in most cases, they have a common element, an *ex post* approach, since they focus on the restoration of disaster damages and rarely include planning for the future (Skayannis & Zafeiriou, 2021).

This paper attempts to see the phenomenon from the perspective of two countries (Albania & Greece), to discuss the basic policies for risk management and planning applied in the cases of disasters (except earthquakes), of the two countries and to find the pros and cons of the policies applied, based on a set of criteria.

These criteria are focused on:

- The institutional capacities for socio-ecological and spatial resilience planning in the two countries.
- The level of knowledge (including the transfer of both scientific and indigenous/local knowledge transfer) of stakeholders on hazards, exposure and disaster risk.
- The spatial planning practices for sustainable development and management of uncertainties for disaster risk prevention, and mitigation of future impacts.

The ultimate aim of this paper will be to outline:

- how the two neighbouring countries shape their disaster risk management visions (where is the focus? on sustainability or resilience? links between them?)

- the role of spatial planning in the process of “fabricating” the visions (based on the former criteria).

Keywords: Disaster Risk; Resilience Planning; Sustainability Policies; Greece; Albania

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THE APPLICATION OF URBAN RESILIENCE IN SPATIAL PLANNING: A CASE STUDY OF SHENZHEN (584)

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Resilience city has become a universal goal among cities in recent years. The concepts of urban resilience have been adapted in terms of environment management as well as spatial planning. Climate change has caused concern in the field of spatial planning in recent decades due to more frequent possibilities of extreme weather events. Flooding caused by climate change arising from urbanization is a critical challenge all over the world, especially for fast-urbanizing deltas with a growing population and socio-economic activities. It has been noticed that the notions of urban resilience are on an upward trend relating to spatial planning policy, developing a wide consensus that there is a need to integrate spatial planning and flood risk management. This study focuses on how spatial planning deals with the issue of flood risk as it shows. Also, we propose a viable framework to assess resilience in spatial planning policy in the context of flood and climate change. To do this, this study focuses on a Chinese delta city, Shenzhen, one of the most vulnerable and exposed cities to flood and climate change. In traditional urban planning, Shenzhen focused on the economic and social development of the city with insufficient attention to its complex space and safety, relying only on the grey infrastructure of the municipality to achieve drainage, thus making it difficult to avoid urban flooding. This situation shifted as Shenzhen was selected as one of the pilot cities of sponge city in 2016, which arouse attention to flood risk. In this study, we collected spatial planning policies and documents, related to the issue of flood risk, from different sectors in the Shenzhen government, including the Planning Bureau, Water affair Bureau, and Emergency Management Bureau. Summing up information from a review of planning policies and documents and interviewing with government officials, this study aims to illustrate the implication of urban resilience on spatial planning in Shenzhen for flood risk. This study also contributes to enhancing flood resilience by showing potential approaches to integrating spatial planning and flood risk management in Shenzhen.

Keywords: urban resilience, spatial planning, flood risk management, Shenzhen

DETERMINING PLACE QUALITY INDICATORS FOR DESIGNING THE RESILIENT PUBLIC SPACES OF FUTURE CITY: A SYSTEMATIC LITERATURE REVIEW (601)

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Urban resilience refers to the ability of cities to adapt and recover from shocks and stresses such as natural disasters, economic crises, and pandemics. Today's cities face many challenges, including population growth, climate change, and economic inequality; therefore, cities need to be resilient to ensure their residents' well-being and the city's continued functioning. In this scope, two concepts, urban resilience and place quality, are closely interconnected, as a resilient city can provide a high-quality living environment for its residents. Place quality refers to a city's overall livability and attractiveness, including access to green spaces, transportation options, and community services. A resilient city that can adapt and recover from shocks and stresses also can maintain and improve its place quality. This situation includes investing in infrastructure, such as public transportation and green spaces, that increases resilience and enhances the city's overall livability. Building diverse and inclusive communities and promoting sustainable practices can also contribute to the place quality by creating opportunities for social cohesion and economic growth.

Public spaces also play a crucial role in urban resilience, providing opportunities for community engagement, social interaction, and cultural expression. They also serve as important gathering places during crises, providing residents with a sense of safety and security. Furthermore, public spaces can also help to mitigate the effects of urban heat islands and offer places for recreation, relaxation, and physical activity, which contribute to the well-being of residents. Therefore, cities must invest in designing, maintaining, and activating public spaces to ensure they are accessible, inclusive, and resilient. In short, urban resilience is essential for addressing today's cities' current and future problems and creating sustainable and livable urban environments. Besides, urban resilience and place quality are mutually reinforcing, with one dependent on the other to achieve sustainable, livable, and attractive urban environments for its residents, and in this process, public spaces play a vital role in sustaining urban resilience.

In this scope, this paper aims to determine place quality indicators for public spaces within the scope of ensuring the space's natural, physical, economic, social, and cultural resilience and to reevaluate the current indicators in line with the problems, needs, and potentials of the future. We theorized place quality as a fundamental tool that plays an active role in the development, renewal, and long-term management of space for a sustainable and resilient future, and we selected the systematic literature review method to bring together wide-ranging international and multidisciplinary research evidence. This systematic review on the Scopus database consists of 135 recent studies that cover only articles published between 2015 and 2022 in association with the future of public space, and each of these studies develops proposals and solutions with the motivation to eliminate particular problems related to public space and increase the resilience of place. Therefore, this paper explores the results of these studies through the concept of place quality and resilience, defines the constituent elements of the resilient public spaces of the future city, and collects them under a comprehensive toolkit.

This study is not a review article only; the main contribution of this paper is collecting the results of a large number of studies, examining them under the scope of two outstanding concepts about the future city, and synthesizing their findings to provide a roadmap for reaching a resilient public space, starting from the place quality. The results of this study inspire many scholars from different disciplines who are disposed to work on topics such as the future of cities, public space, urban resilience, and quality of place.

Keywords: Future City, Public Space, Urban Resilience, Place Quality, Systematic Literature Review

CO-DESIGNING DEEP-RETROFITTING: A SMALL SCALE SOCIO-TECHNICAL APPROACH TO URBAN RESILIENCE (603)

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In the large debate on how society can face the climate change crisis and become more resilient, a significant role is played by how cities are going to deal with the obsolescence of most of their built environment. Since a significant portion of such an environment is made of buildings, scholars are increasingly focusing on the contribution to urban resilience that can or should be given by deep retrofitting.

Within the recent debate on the matter, most studies focus on the technological, economic and managerial dimensions of retrofitting, especially concerning potential high-tech innovations related to renewable energy systems, building envelopes, efficient thermal plants, etc. (see Pachecho Torgal *et al.*, 2017 for a good overview).

Within the minority group of scholars who acknowledge the key role played by ‘humans’ and socio-cultural factors in deep-retrofitting, there is a growing interest in a participatory approach to design, i. e. an approach based on the importance of involving end-users as co-designers. Designers’ interest in participatory design is mostly due to their willingness to be more responsive to end-users’ needs and preferences (Simonsen and Robertson, 2013). Some scholars add to this the idea that participatory design is also an educational opportunity, enhancing non-experts’ awareness on the importance of deep renovation (Woolner, 2009). In all these cases, designers’ and architects’ conceptualization of participatory deep-retrofitting, whose ultimate goal remains ‘the building design’, do not consider, if not as a side-effect, the socio-cultural and behavioral effects of participatory design processes.

This paper intends to advance this debate but, adopting a city planning perspective on deep-retrofitting of single buildings, considers the socio-cultural and behavioral dimensions of participatory deep-retrofitting a priority. This assumption is drawn from planning literature on urban evolutionary resilience (Davoudi, 2012) which considers people and their environment as interdependent within so-called socio-ecological systems. Within this framework, even a single building can be conceptualized as a complex socio-ecological system whose structural change (including the deep-retrofitting that experts want to design) is inevitably and simultaneously physical, socio-cultural, and (may-be) technological. In this perspective, it is worth developing a design approach that leverages on the role of humans in the effort of pursuing resilience, not instrumentally but collaboratively. In other words, socio-cultural change, which is an essential component of resilience, is not just a side-effect but becomes the goal.

This paper shares lessons learned through an attempt to translate this theoretical assumption into practice, in an effort to combine socio-cultural learning with technological innovation. The effort has been supported by the e-SAFE Horizon 2020 project, aimed at developing a market-ready deep renovation system for reinforced concrete framed buildings, relying on the full integration between technological and process-based innovation (<https://esafe-buildings.eu/en/>). In particular, the paper presents the outcomes of a two-year long codesign

process for the retrofitting of a public housing building in Catania (Italy), discussing potentialities and obstacles faced by the practical translation of the evolutionary resilience paradigm when we move from the urban to the building scale.

Keywords: evolutionary resilience, socio-ecological system, deep-retrofitting

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ANALYZING THE THRESHOLD EFFECTS OF FOREST LANDSCAPE SHAPE ON THE SUSTAINABILITY AND RESILIENCE OF SOIL RETENTION ECOSYSTEM SERVICE (635)

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Soil erosion impacts environmental quality, land productivity and forest resilience, and persistence in providing ecosystem services. Forests protect soil from erosion by providing soil retention ecosystem service (SRES). The sustainability and resiliency of SRES are affected by management actions, especially landscape change. Understanding the links between forest landscape structure and SRES and defining their thresholds is essential for the optimal management of forest landscapes to preserve the SRES supply resiliently. Therefore, this research through developing a novel approach, aims to analyze the links between the forest landscape structure and SRES and then identify the threshold effects of the shape of different forest patches related to sustainability and resiliency of SRES using 402 catchments in Poland as a case study. We tried to empirically understand how SRES responds to the multiple measures and thresholds of forest structural patterns. Landscape structure-related metrics (shape (SHP), fractal dimension (FRAC), contiguity (CI), related circumscribing circle (RCC), and perimeter-area ratio indexes (PARA)) of three forest types (coniferous, broad-leaved, and mixed) were derived using FRAGSTATS to quantify the forest landscape structure. Then landscape structure-related metrics alongside abiotic variables (terrain slope (degree), precipitation (mm), soil organic carbon content (t ha^{-1}), soil water content (%), and clay ratio) were introduced as predictor variables into generalized additive models (GAMs) to assess whether landscape structure metrics could explain the provision of SRES. The response of the developed models in relation to changes in the selected landscape metric had been assigned to the other variables in the model using their mean values to determine the threshold of the landscape shape of forest patches related to SRES. Then, the responses of the model against the incremental change in the selected landscape metric were depicted. The threshold refers to abrupt transitions between ecosystem states when environmental conditions cross certain states. To determine the threshold points, the generalized additive model plots generated from the modeling practice were applied to specify the thresholds. The developed models ($p \leq 0.05$) indicate a reliable performance in estimating the rate of soil erosion. The deviance explained varies from 80.5 to 81.1 for the coniferous forest patches, while it is 79.1 to 80.1 for the broad-leaved forest patches and 80.9 to 81.4 for the mixed forest patches at $p < 0.05$, respectively. It is indicated that the shape of forest patches is crucial for the sustainability and resiliency of SRES. We found that the forest SRES provision and sustainability not only depend on the LULC type and their combination but are also, affected by the shape of forest patches (i.e., RCC, CI, FRAC, SHP and PARA). The findings indicated that there are thresholds in the relationship between the shape of forest patches and the rate of soil erosion, by which the shape of forest patches regulates the sustainability and resiliency of landscape SRES. This research provides a scientific basis to improve our knowledge of the links and interactions between forest landscape structure and resilient SRES provision and determine the relevant thresholds by integrating the concepts of forest landscape ecology and LULC management into

forest soil conservation plans. This helps effectively manage forest landscapes and resiliently maintain and enhance the sustainability of SRES supply.

Keywords: Soil erosion, resilience of soil retention ecosystem service, Generalized additive models, landscape structure

THE FLEXIBLE CITY: BARCELONA ADAPTS ITS PUBLIC SPACES TO CLIMATE CHANGE (638)

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Cities are a key contributor to climate change, as urban activities are major sources of greenhouse gas emissions. At the same time, cities are particularly vulnerable to climate change, both because extreme weather events can be especially disruptive to complex urban systems and because more than half of world's population live in urban areas (IPCC, 2022). Not to mention that climate change can have a disproportionate impact on vulnerable populations as people living in lower-income neighbourhoods, elderly or homelessness.

Resilient cities is a trending issue in the domain of urban development in both the practical realm and the academic studies (Bohland et al., 2019; Hofmann, 2021). The role of flexibility, connectivity and redundancy are largely debated in the literature as keys domains to deal with the uncertainty of a changing world. How to translate these concepts in urban tools is gaining more attention in recent years.

The paper argues the potential role of public spaces as tools to strengthen urban flexibility and resilience. This work presents a theoretical framework that investigates the relations between flexible public spaces and the achievement of urban resilience (Amorim-Maia et al., 2022). The case study analysis discusses the network of climate shelters implemented by the City Council of Barcelona, that show how urban interventions in public spaces can contribute efficiently reshaping these spaces to be flexible, inclusive and vibrant.

Due to the increase in occurrences and severity of heat waves in Barcelona, a mix of municipal facilities and public spaces across the city - such as schools, libraries, outdoors parks and gardens - have been adapted to serve as shelters, creating a network of 163 places able to protect the most vulnerable groups of citizens in case of risk.

The findings clarified that flexible public spaces act as safety valves of our cities facing extraordinary events, meanwhile, in peacetime they act as vibrant and sustainable spaces that deliver multi socio-economic and environmental functions.

Keywords: public spaces, flexibility, resilient cities, climate shelters, Barcelona

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URBAN RESILIENCE IN THE FACE OF CHRONIC CRISES AND STRUCTURAL DISORDER: HOW TO SUPPORT COMMUNITIES STRUGGLING WITH THE IMPOSSIBILITY OF CONTRADICTION CHOICES (656)

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Resilience is a concept that is increasingly used in the urban context. Through a continuous and lively debate, urban Resilience has seen its core message expand from a limited reference to the ability of a city or urban area to withstand and recover from disruptions, to embrace the definition of preventative mechanisms capable of foreseeing and mitigating negative impacts of potential stressors as well as activating continuous upgrading processes. While the greatest research effort seems to be devoted to analysing how this concept can be better characterised, implemented and achieved, along a univocal process, reports of emergencies show that in most cases resilience is nothing more than a utopia, or, at best, a broad objective to be achieved along a very uncertain and variable path.

This paper is developed within the framework of the ReCITY research project, which aims at the realisation of a socio-eco-technical system to enable and support community resilience understood not only as the ability to absorb impact or to recover from stressors, but above all as the tendency towards creativity, which refers to the potential of social systems to improve their functioning as a consequence of adversity. It proposes a paradigm shift from the implementation of mainstream resilience mostly limited to a specific type of disaster, with the aim of building transversal and systemic capacities that support the sustainable development of territories even in the absence of disasters. In the ReCity project this objective has been pursued through the creation and dissemination of software platforms and ICT technologies for communities and administrations capable on the one hand of enabling the creation and operation of horizontal smart communities for the activation of truly cooperative and supportive communities and, on the other hand, of enabling in a vertical line constant two-way communication between the administration and citizens, so as to create and offer integrated and intelligent services, i.e. smart.

This would provide the city with a nerve system that would allow it to adapt and be responsive almost to emerging dynamics and needs of all kinds, including environmental and socio-economic emergencies. Such a dual level of connections would constitute a network structure capable of integrating different types of resources to support both the sustainable development of territories through the identification and sharing of good local and everyday resilience practices and a better and more coherent system response in the occurrence of unforeseen calamitous events.

More specifically, this contribution proposes reflections on its application to the city of Taranto (Italy) and on the first results of the involvement of its local community. Taranto is an important Mediterranean port city characterized by a decaying industrial economy and overloaded by decades of widespread social and environmental problems that primarily result in a high rate of pollution with harmful impacts. This case thus presents a situation of chronic stress and long term

structural disorder due to the stratification of unresolved problems and choices. Therefore, it shows an atypical disaster situation, i.e. not limited to time and also difficult to circumscribe spatially, but structural and continuous with resulting multiple emergency implications and transversal multi-scalar effects.

This situation requires attention to contextual analysis and elicitation of local knowledge about both the details of the problem and the resources available to overcome it as the roots of the causes of disaster lie in the structure and functioning mechanism of the system itself. In such blocking conditions, promoting resilience entails agents developing a deep awareness of the current structural crisis condition through the capacity to reflect on their own conditions, constraints and dilemmas, to find and release energies to creatively generate opportunities and entirely new alternatives.

Keywords: Urban Resilience, Evolutionary Resilience, Participatory design, System Thinking

WHAT CAN WE LEARN FROM HISTORY? COMMUNITY RESILIENCE IN PLANNING AND DESIGN OF TEMPORARY HOUSING NEIGHBOURHOODS IN TIMES OF CRISIS. CASE STUDY OF FINNISH PREFABRICATED HOUSES IN POLAND AND ISRAEL (660)

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The presented study is a part of the HoPE project which examines the role of prefabricated houses in the aftermath of crises, learning from the experiences of the Finnish company Puutalo Oy's housing export to Poland and Israel in the decades following WW2. The houses were brought to both countries in 1940's and 50's, and although they were supposed to be temporary, in many places neighbourhoods or individual houses still exist and are inhabited. This situation provides an unique opportunity to study both past and present aspects and learn from the history for the future. In the times of political unrest, wars, mass migration and natural disasters this topic is more and more important for future urban planning and makes housing one of the most urgent challenges in today's world ("United Nations," n.d.). However, studies point out that not only 'roof over the head' is important, but creating conditions which enable an experience of lost home and the upkeep of daily routines (Barakat et al., 2003), and access to different services, which might be achieved by well-planned and designed temporary housing (Johnson, 2007; Stocker et al., 2021)

In this presentation, central questions are how wooden, prefabricated houses from the north of Europe were adapted to changing local needs, from top-down and bottom-up? What can we learn from past experiences for better future planning and design in the aftermath of a crisis? The main aim is to examine the adaptation of houses in settlements, immigrant camps and neighbourhoods in Israel and Poland. In Israel the study focuses on the fate of these houses in the Amishav in Petah Tikva, a former immigrant transition camp (Maabara) turned neighbourhood, and in different Kibbutz rural communes. In Poland the study focuses on Jazdów neighbourhood in Warsaw and one neighbourhood located in the Silesia in Katowice.

We applied historical GIS method looking at space and time in development of those areas (Bodenhamer, 2007) at the urban, neighbourhood and local scale, examining:

- the location of the neighbourhood within the city and its services since 1950s up to present,
- the design of the neighbourhood's layout and services within it,
- the differences between Israeli and Polish neighbourhoods (type of neighbourhoods, houses, preservation)



On the left, Houses in Katowice, Anna Wilczynska, Houses in Amishav, Tzafrir Fainholtz

The results shows first of all how different quality of housing in Poland and Israel created different quality of life, how well-thought spatial layout can enhance social life, as in the example of Jazdów, where houses were organised around smaller, common places, similar in many aspects in the utopian Kibutz, but differently than in the former Maabara camps. One of the main points was the location of neighbourhoods within the city structure or outside – such as in Silesia, and possible positive and negative aspects of it. The presentation will conclude with a set of first results in the form of lessons learnt from the past and guidelines for the future.

Keywords: Temporary housing, community resilience, urban planning

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CHILDREN-LED DISASTER RISK REDUCTION: CO-DESIGNING FLOOD RISK COMMUNICATION BOARD GAME WITH CHILDREN (661)

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Children are considered vulnerable to the impacts of climate change and associated disasters (Martin, 2010). The main reason is their dependence on adults for their survival, in addition to several biological factors (UNICEF, 2015). Their lack of knowledge of disasters and not being included in decision-making processes increase their vulnerability (Mitchell and Borchard, 2014). The Sendai Framework for Disaster Risk Reduction (2015–2030) states the importance of involving children and young people as agents of change in Disaster Risk Reduction (DRR). The support is called through legislation, and curriculum development (UNDRR, 2015). As a result, the children-led disaster risk reduction (CLDRR) research theme has been developed in disaster studies. The literature on CLDRR can be grouped into three main approaches: (1) investigating children's vulnerabilities and the special need to implement child-sensitive strategies; (2) disaster risk education in schools; and (3) supporting children's active participation in DRR activities.

The first research approach in CLDRR aims to understand children's vulnerabilities and special needs. The overall purpose is to identify child-sensitive strategies to respond to the impacts of disasters. Some scholars involve children in research to help understand their knowledge and awareness of disaster risk or their experience of disasters as victims as well as to consider the specific needs of children during interventions (Cumiskey et al. 2015; Tapsell, 1997). Looking at this approach, the problem lies in the nature of participation: children are taking part in activities that are initiated and directed by adults and aimed at fulfilling the adults' agenda (Pykelt et al., 2010).

The second research approach focuses on the importance of DRR and CC education in schools (Rye and Volt, 2019; Webb and Ronan, 2014). Education is vital to improve awareness and prevention of disasters; however, the DRR and CC education materials are not always suitable for the cognitive capacity of children of various age groups.

The third research approach in CLDRR focuses on children's capacities to protect themselves, their family members and community and to implement essential changes within their communities. There are only a few studies in the third research strand (Towers, 2015; Lawson et al., 2019). Most studies are led by NGOs, such as Plan International (Plan International, no date), the Red Cross and Save the Children (Plan International, 2010; Mitchell and Borchard, 2014). These studies include children's participation in communicating during a crisis, in decision-making processes, or in information on preventing disasters (Cumiskey et al., 2015; Wilkinson, 2000). Children are strong enough to devise solutions and act if the necessary knowledge is provided.

The “Rising Water, Safer Shores” board game is an outcome of the research activity that supports children's active participation in Disaster Risk Reduction. Children have capacities to develop the

skills needed to adapt, find innovative solutions, and protect themselves and their families. Our project started by asking: What constitutes a child's capacity for facing climate-change-related disasters? How can we engage children with climate-change-related disasters by co-designing a board game?

The game is co-designed by more than 60 children in India and the Netherlands on flooding and climate change adaptation for children aged 9-11. The activities demonstrate that educational materials prepared by children enable learning and that drawing is a universal language for children. It started in a school in Panju Island India in December 2019, where some of the children's drawings were incorporated into the board game. It continued in Enschede, the Netherlands, at an International School where the board game was tested and further co-developed using the children's ideas and contributions. With the help of a board game, we engage children in climate-change-related disasters, particularly flooding. Situated on an estuarine island in India, the board game connects children of different backgrounds with current and future global challenges.

Keywords: Children led disaster risk reduction, flood, board game, risk communication, community resilience

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CLIMATE CHANGE AND ECOSYSTEM SERVICES INTEGRATION IN TERRITORIAL PLANNING: THE CASE OF RIMINI METROPOLITAN AREA (680)

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The contemporary age of transition brings up important issues for the current scientific debate related to urban planning. These include abrupt climate variations, which have been and still are a widely studied topic from multiple disciplinary fields (*IPCC, 2013*).

The critical issues caused by global climate impacts are challenging the health and well-being of the environment and communities. The consequence is a scenario that, in the coming decades, will be affected by events with increasing intensity (*Ibidem*). Along with the more well-known and debated climate issue, the lesser-known issue of ecosystem values has emerged in recent years (MEA, 2005). Indeed, ecosystem services provide benefits that contribute not only to a better quality of life but at the same time safeguard and maintain natural resources.

The supply of ecosystem services is strongly linked to the climate issue, as ecosystem services help reduce so many of the impacts caused by climate change, such as excessive heat and unusual runoff.

It is possible to say that at the international and national level, ecosystem services have achieved considerable consensus regarding the importance of their assessment and especially their integration within the climate issue (*Salzman, 2018*).

Climate change and ecosystem services are linked to urban dynamics. Consequently it becomes necessary to place these issues at the top of the policy agendas of contemporary cities, highlighting an essential adjustment of traditional spatial planning tools. This is a widely discussed issue within the scientific debate, but it finds few examples of application within planning instruments.

This contribution describes the experience conducted during the drafting of the Rimini Metropolitan Area Plan (*PTAV*). The *PTAV* is an urban plan with strategic, structural and coordinating value that defines, from a systemic point of view, the strategic organization of the territory of the Rimini area. At the same time it aims at the welfare of the community, coping with current and future environmental and climatic emergencies, the urgency of which has been made evident by the time of the health crisis we are still going through.

The objective of the contribution was therefore to define a methodology, in a gis environment, for the assessment of vulnerabilities of climate impacts (related to heat and runoff) and the application of an assessment methodology approach for the mapping of Ecosystem Services.

The results achieved contribute to the integration of issues that are innovative and necessary within traditional urban planning tools and processes. It also contributes to the creation of a tool that can help in the design of spatial policies and strategies aimed at a climate proof approach.

Finally, this contribution aimed to describe a standardized approach through which governments can be supported in future socio-economic and environmental development processes in line with the principles of ecological transition.

Keywords: urban planning tools; decision support system; climate adaptation; ecosystem services evaluation; gis science

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PLANNING FOR NATURE-BASED SOLUTIONS: THE ROLE OF PRIVATE INVESTMENT (689)

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Nature-Based Solutions (NBS) are noted for the multiple benefits, including increasing our resilience to climate change and being beneficial for health and well-being, when properly integrated into planning at a variety of scales (Dushkova and Haase, 2020; Frantzeskaki, 2019; Kabische et al., 2016). In the UK, the primary funders of NBS have been local authorities with funding from governmental and European sources (Mell 2020). However, a decade of austerity and the removal of the UK from the European Union has led to a challenge in the funding landscape for the creation of new NBS projects along with their continued maintenance and upkeep. Local authorities in the UK are searching for innovative means of financing – particularly through leveraging private sector investment – to ensure that NBS remain a key component of their planning strategies.

This paper presents the research results of a project that aimed to understand the barriers to and opportunities for increasing private sector investment into NBS. Based on twenty interviews, with a range of actors interested in public-private partnerships in environmental planning, as well as case study of approaches in Greater Manchester (UK), the paper identifies four key factors, or barriers, that currently act to constrain investor confidence in the NBS field:

1. The embryonic state of the market
2. Perceptions of, and the need to share, risk
3. Gaps in the evidence base and a lack of appropriate demonstration projects and case studies
4. Lack of guarantee over long-term performance, and issues of maintenance

The paper draws on learning from a European Union-funded Urban Innovation Action (UiA) project (Ignition) which developed innovative financing solutions for investment in Greater Manchester's natural environment to help increase the city region's resilience against the increasingly extreme impacts of climate change.

Keywords: nature-based solutions, Urban Resilience, investment, urban adaptation

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REQUIREMENTS OF REGIONAL CLIMATE IMPACT ANALYSES. OBJECTIVES, DATA, TARGET GROUP (691)

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Climate impact analyses (CIA) aim to identify spatial areas that have a high potential to be affected by negative consequences of climate change due to a high climatic stress (e.g. heat load or heavy rainfall runoff) and a present sensitivity (e.g. high density of elderly people). This knowledge fundamentally increases (municipal) adaptive capacity, as climate adaptation strategies and measures can be created, located and prioritized in a focused manner. However, the basic objective, the intended practical value, the input data and the target group of CIA vary significantly depending on their spatial resolution. Regional climate impact analyses correspond more to a spatial screening of climate impacts contrary to local-spatial and sector-specific analyses which are to provide detailed local indications for climate adaptation.

To illustrate the challenges and requirements of a regional climate impact analysis, the presentation will focus on a comparison of the approaches of a (1) general regional CIA with a (2) sector-specific CIA at municipal level. The regional CIA was conducted for seven regions in North Rhine-Westphalia (Germany) as part of the Evolving Regions project; the sector-specific CIA was conducted for the City of Bottrop as part of the KlimaWaGe project and focuses on the climate impacts of heat and heavy rain on commercial areas. These two analysis approaches will be compared within the presentation in terms of (a) objectives, limitations and benefits of the analyses, (b) input data and implementation of the analyses, and (c) target groups of the results. In the end, the particular challenges of a regional climate impact analysis are compiled and discussed.

The objective and benefit of a regional CIA is based in its function as a screening analysis that identifies comparatively high levels of climate impacts for the region and its associated municipalities. The regional analyses take a broad and comprehensive range of climate impacts into account, whereas the sector-specific CIA focuses on specific climate impacts in a much more limited spatial scope. The regional CIA therefore allows the identification of areas where detailed specific analyses are useful. The identification of suspected areas of climate adaptation thus focuses on significantly different objectives than the sector-specific CIA, which shows direct adaptation needs at the local level as well as at the building level.

The wide scope of the regional CIA puts special requirements on the used data. Whereas municipal data are generally used for municipality-specific and sector-specific CIA, schematically uniform data sets are necessary for regional CIA in order to permit cross-municipal comparisons of the analysis results. Sensitivity data, in particular, can be much more relevant at the local level, since even qualitatively enhanced data (e.g., information on establishments and employees) can be included in these analyses.

The target groups in the municipalities, who are to use the results of the CIA in their practical (planning) activities, differ between different types of CIA. Regional CIA usually have a very broad

target group, reaching across different departments, decision-makers and the general public. Sector-specific CIA are often much more restricted and specialized thematically, and therefore address only certain stakeholders of an administration. This should be reflected in the way the results are prepared.

In summary, the presentation gives a useful overview of the challenges of establishing a regional CIA and provides important points for discussion and approaches in scientific discourse and practical planning processes.

Keywords: Climate Adaptation, Spatial Analyses, Regional an urban planning, Comparative research

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RECONNECTING HUMAN ENGAGEMENT WITH URBAN RESILIENCE IN THE ANTHROPOCENE: DATA MINING OF 12345 TO DEVELOP THE RESILIENCE HYPERNETWORK IN CLOUDBURST (724)

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Ever since humans drove the Earth's system into a new geological epoch known as the Anthropocene (Otto et al., 2020), the rapid transformation of human-environmental interactions has been constantly escalating especially in the wake of the current climate and economic crisis. To sustainably achieve this transformation in the face of tremendous natural and anthropogenic disasters, cities and their inhabitants need to collaborate to effectively adapt and sustain vital functions in various urban sectors (Meerow & Newell, 2019). This also engenders an exponential increase in studies that apply 'resilience' theory to cities with trends in fields of climate change, extremes, and hazards (Rosenzweig et al., 2019). In the Anthropocene context, the emphasis on the built environment (especially the infrastructure) as an interactive force that actively interacts with human activity rather than being passively affected by anthropogenic behaviors is gaining momentum in both research and practice (Wakefield, 2020). Therefore, the connotation of urban resilience in the Anthropocene encompasses more than just environmental or infrastructural restoration, but also how human perceive and interact with the changing urban environment in response to diverse natural and anthropogenic disasters.

A human-centered mindset in the Anthropocene, a more nuanced investigation of how to address residents' changing demand throughout the resilience process is yet to be developed (Wang et al., 2020). Recent studies have been grappling with human-oriented approaches to interrogate the resilience capabilities across the most essential urban infrastructure systems, which are colloquially known as the urban lifeline systems (Huang & Ling, 2018). To date of this paper, no well-rounded model has yet been developed in tandem with growing residents' demand and overarching perception throughout the disaster recovery process, in order to explore the interactive relationship being generated when human engage with urban responding to the disasters and relate their need with urban performance.

In this paper, the cloudburst is chosen to be the disaster case.

The questions driving this work are:

- (1) How to dissect the interactive relationship between human engagement and urban response to cloudburst in the Anthropocene
- (2) How to uncover potential impacts to public perception associated with Built environment under both normal and disrupted conditions
- (3) Through the perspective of quality of life, how to assess urban resilience in the Anthropocene based on the failure of infrastructural responses to cloudburst

In this study, urban resilience within the cloudburst context in Beijing has been further investigated through Latent Dirichlet Allocation (LDA) and hyper-network analysis model, together with a salient emphasis on public perception, residents' needs, and quality of life. The Indicators of Resilience in the Anthropocene (IRA) are extracted mainly from the aggregated community-scale data at the 12345 platform, which provides insights into resilience in the

Anthropocene to investigate infrastructural responses in the cloudburst context. After obtaining IRA and quantitative assessments based on machine learning and queueing theory, three subnetworks of the Hypernetwork model are constructed (safety and health, social livelihood, and civic engagement), revealing the disparate impact of resilience evolution on normal and disrupted conditions. The established Hypernetwork Model is applied to simulate and analyze the resilience of urban lifeline system in Beijing's case. The findings indicate the disparate evolving pattern in the extent and duration of resilience throughout cloudburst periods. The study addresses the value of community-scale big data sources for rapid impact assessment of extreme weather events, and further informs efforts toward global resilience driven by human needs in the Anthropocene.

Keywords: Urban resilience, the Anthropocene, Human Engagement, Quality of life, Hyper-network model, Machine learning

JUST HEAT ADAPTATION : UNDERSTANDING HOW LOWER-INCOME COMMUNITIES ARE INTEGRATED INTO HEAT ADAPTATION STRATEGIES IN LONDON AND AMSTERDAM (743)

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In response to more frequent and deadly heatwaves, cities are developing heat adaptation strategies. Although lower-income communities are particularly vulnerable, little is yet understood as to how they are included in current heat adaptation strategies. Using the theoretical framework of *just adaptation*, this paper analyses how lower-income communities in London and Amsterdam are included in such strategies. *Just adaptation* can be broken down into three elements: distributive justice, procedural justice, and justice as recognition. The analysis draws from in-depth semi-structured interviews with municipal officials, civil societies, and knowledge bodies, as well as policy and research documents. The findings show that heat risk, although a recognised issue, is not yet considered a priority. Strategies which support lower-income communities adapt to heat risk often fit within a logic of distributive justice while procedural justice and justice as recognition remain underdeveloped. In other words, heat adaptation strategies in both cities focus on the outcomes of these strategies rather than on the structural injustices which lead to added vulnerability in the first place.

Keywords: climate adaptation, just adaptation, heat risk, heatwaves, lower-income communities

UNDERSTANDING CLIMATE CHANGE NON-ECONOMIC LOSSES AND THE CONTRIBUTION OF PLANNING TO ENHANCE RESILIENCY. A CASE STUDY FROM RURAL MOROCCO (744)

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The unequal distribution of climate change costs, particularly affecting vulnerable regions of the Global South, has been addressed in international policy arenas, leading to advocate for the recognition and financial compensation of the so-called 'loss and damage' (Van der Geest and Warner, 2015). However, some of the negative consequences of climate change might not be always easy to identify, given their non-measurable nature. This is the case, for instance, of impacts pertaining the intangible sphere of the life of people: cultural practices and heritage, livelihoods, wellbeing, sense of place and cohesion (IIED, 2014; McNamara et al., 2021).

Until now, this debate has been generally focused on ex-post measures, namely the identification of legal and more sophisticated climate finance mechanisms to ensure fair compensation for loss and damage (Mechler et al., 2019), while the planning discipline has provided only a marginal contribution as to how its tools could help protect community non-economic values, enhancing the resiliency of places, in the attempt to reduce potential climate change impacts.

This paper contributes to address this gap, by analysing a vulnerable region of rural North Africa subject to overheating, decreasing precipitations, and scarcity of water. Reflecting on the experience of an action-research conducted in the Oasis of Figuig in June 2022, a historic rural settlements in the Oriental region of Morocco where traditional agricultural and water management practices still persist, the main aim of this paper is to explore the potential contribution that planning can offer to ensure a sustainable and fair transition towards more resilient communities, while safeguarding its cultural and social practices. Methodologically, the research has entailed field observations, local stakeholders interviews and focus group, driven by two interrelated questions: which are the everyday vulnerabilities of the local community? And how their identification can lead to politically viable adaptation measures?

The underlying assumption is that the mainstream international climate knowledge regime, despite its overall good intentions, lacks often a critical contextualisation and effective mechanisms to alleviate climate change negative consequences on the everyday life of people, and planning is still ill-equipped to provide credible alternatives (Broto et al., 2020; Verdini et al., forthcoming). As the paper will argue in the conclusion, these mechanisms should be instead deeply anchored to a transformative idea of community co-production of climate knowledge; situatedness of new public narratives; and a new imagination on how to achieve desirable resilient futures for people.

Keywords: Climate change loss and damage; non-economic values; everyday; community resiliency; planning tools

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MAPPING BENEFICIARIES OF ECOSYSTEM SERVICES PROVIDED BY PROTECTED LANDSCAPE TO SUPPORT PLANNING FOR RESILIENCE (752)

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The successful adaptation plan prepares the city or region to tackle climate challenges. One of the key elements of successful adaptation plan is the involvement of the stakeholders who come from different backgrounds and represent different interests. There are stakeholders who are direct beneficiaries of the services provided in the municipality or region, but there are also indirect beneficiaries of the good and services of the area. Out of many aspects of resilience, this contribution focuses on the environment and the benefiting communities. The aim of the work is to map beneficiaries of the ecosystem services provided by protected landscape. The case study area covers five municipalities that are part of the Ślęza Landscape Park in Poland. The Ślęza mountain is a popular touristic destination for one-day hiking trips of families and individual visitors from all over the Lower Silesia region and beyond. The main problem addressed in this presentation is how to address the resilience of the region with touristic valuable natural resources while located in the peri-urban area of a big city (in this case Wrocław) and if the ecosystem accounting framework is useful for that purpose. The System of Environmental-Economic Accounting—Ecosystem Accounting (SEEA-EA) provides guidance to recognising the contribution of ecosystem services to economy and human well-being. The SEEA-EA is used as a framework to identify ecosystem services and beneficiaries. We used the results of the regional survey on the recognition and willingness to visit case study area to understand the recreational potential of the Ślęza mountain. We identified potential ecosystem services provide within the municipalities sharing the borders with the landscape park. Local stakeholders helped us to validate the actual use of the ecosystem services and identify the direct and indirect beneficiaries. As the results of the process, we were able to map beneficiaries spatially as well as group them and link them to specific benefits. We discuss the results in relation to spatial planning and local governance. We argue that seeking co-benefits and co-beneficiaries may enhance the planning for resilience.

Keywords: ecosystem service beneficiaries, landscape park, peri-urban, stakeholder

THE RESILIENCE PERSPECTIVE FOR BETTER DEALING WITH TERRITORIAL PLANNING WEAKNESS IN NON-METROPOLITAN AREAS (765)

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Inspired by this conference track, the contribution rethinks in terms of resilience the findings of recent research on two territorial planning tools processes in a non-metropolitan area in the Lazio Region. This area is an important place of environmental challenges, cultural resources, and socioeconomic complexity, as many others all around Europe that need to be better considered by planners.

According to our previous research (De Leo, Altamore, 2022; 2023), the failures of two territorial planning tools' implementation (the 'Alta Tuscia-Antica città di Castro' within the SNAI-Italian National Strategy for the Inner Area and the River, Lake, and Coastal Contract 'Marta-Bolsena-Tarquiniia') have been strictly connected with a kind of non-metropolitan areas weakness related to:

- the lack of ordinary planning practices,
- limitations not only in economics but especially in cognitive resources and skills,
- very strong mayors' difficulty in delegating and sharing their own power on urban and planning issues,
- the inability of local systems to exchange knowledge.

But, by re-considering all these weaknesses through the lens of resilience (Davoudi, 2012), insights and proposals emerged, the authors would like to compare and discuss during the Aesop conference. Indeed, the resilience perspective suggests overcoming the territorial planning weaknesses to better intervene in non-metropolitan territories:

- by increasing the stakeholders' ability to cooperate with each other, at different levels, and with civil society, organised and not,
- by reallocating public responsibilities and roles among institutional and non-institutional actors,
- by creating permanent and collaborative processes for building shared knowledge, appropriate skills, and new abilities.

Thus, the resilience perspective offered ways to improve multi-stakeholder and multilevel processes effectively to achieve important goals in non-metropolitan areas.

Keywords: territorial planning, resilience, non-metropolitan areas, inner areas, river contract

RESEARCH ON THE PRACTICE OF COASTAL BUFFER ZONE RESILIENCE DESIGN BASED ON THE APPLICATION OF ECOLOGICAL RESTORATION SUPER-DIKE (782)

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With a long coastline, Coastal zones in China play important economic and ecological functions. However, some coastal ecosystems have been seriously degraded or even destroyed because of human activities such as Marine pollution, climate change, and other factors. Due to the shortage of land resources and the drive for economic benefits, the vulnerable coastline resources are exploited with high intensity and high density, which leads to the destruction of part of the natural coastline and the reduction of waterfront accessible space.

Under the influence of intense economic and social activities, the natural shoreline has been rapidly replaced by man-made embankments due to human activities, especially large-scale reclamation activities, which indeed destroyed the important habitat and breeding ground of offshore organisms and the transit station of bird migration. As a result, in those areas, obvious damage to the Marine and terrestrial ecosystems has been observed, which then greatly affected the sustainable economic and social development of coastal areas. At present, there are many design and construction experiences of ecological restoration of coastal landscapes applied in the waterfront buffer zone of coastal areas in response to the coastline erosion and loss caused by climate change and human activities. The developing strategies on the coastal shoreline have gradually changed from the initial unsustainable development and utilization to sustainable protection and restoration with the regenerative capacity being retained, which keeps the balance between residents' demands on the public space and ecological functions of the coastline. In this case, how to achieve recreational values for the public needs to be taken into consideration when addressing the relationship among residents, dwellings, and beachfront.

This study gives an example of the coastal landscape belt construction project in Dongguan Binhaiwan Bay Area, Guangdong Province, China, to represent the ideal of Super-dike practice within the waterfront buffer zone, which is a resilient engineering infrastructure for the coastline based on biological activation and landscaping of moisture-proof and flood control function. On the basis of the site investigation and the ecological sensitivity assessment, the study summarizes the protection and development zones at all levels within the coastline. The directions and visions are then worked out for different parts of the shoreline. Besides, combined with local characteristics, the notion of Super-dike applied in this project explores the resilient way to create coastal public space, which can meet the demands of Biological habitat restoration and seaside activities for residents. Different from the traditional embankment, Super-dike forms a widened, multi-layered, and ductile coastal landscape functional compound zone, and meets the demands of flood control, ornamental value, and daily leisure activities.

As the result, there are two findings gained from the study. On the one hand, it is important that ecological protection and rational development and utilization of the coastline are the key aspects to be considered in the planning and construction of the waterfront buffer zone. On the other hand, based on the low-impact intervention design, beachfront development need to find a way

to connect storm-water management with urban function, social welfare, landscape, and spatial order, and finally achieve resilient, safe, and sustainable development.

Keywords: resilience design; ecological restoration; Super-dike; flood control; public space

URBAN GARDENING TRENDS IN EUROPEAN CITIES AS THE PHENOMENON FOSTERING RESILIENCE IN COMMUNITIES AND ENVIRONMENT (827)

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The paper is the result of the research conducted as a part of the project “U-GARDEN: Promoting capacity building and knowledge for the extension of urban gardens in European cities.” that has been funded by the Joint Programme Initiative Urban Europe with grant of ERA-NET Urban Transition Capacities in 2022. The international and interdisciplinary team of researchers from Poland, Romania, Spain and Sweden aim to promote the implementation of urban gardens and agroforestry as key components of sustainable urban development in Europe. The results of this research were developed in an international perspective against the background of four European cities, including Warsaw, Brasov, Valencia, and Goteborg.

Cities are the main focus of demographic, economic and territorial development in the European Union. However, urbanization has also revealed the existence of social and environmental problems implicit in this process. Urban gardens are a key component of the traditional urban and peri-urban landscapes of the main European cities. Beyond food production and consumption, urban gardens provide several ecosystem services in terms of social (social cohesion and integration, belonging and community development), cultural (learning and education, maintenance of cultural heritage), territorial, or environmental benefits (reducing urban heat island effects, improving urban biodiversity, increasing the water retention capacity) (Gawryszewska 2015, 2016).

Urban horticulture has been gaining importance in Poland since the period between the World Wars. From the beginning, sources emphasized the social role of urban gardens (Lubawy 1939, Netczuk 2016). Today, the growing role of community gardens and their value in shaping the attitudes of creative citizens is evident. Urban gardens have proven to be a valuable tool for community building, as well as promoting healthy eating habits, reducing food insecurity, and increasing access to green space in urban areas (Mokras-Grabowska 2020). The study found that the benefits of urban gardening in Poland are well-documented, showing that urban gardens can improve mental health and well-being, increase social interaction, and enhance the urban environment. Urban gardens also provide fresh, locally-grown produce, reducing the carbon footprint of food production and distribution, at the same time improving soil quality and reducing greenhouse gas emissions. However, the study also found that there are challenges to the development of urban gardening in Poland, including a lack of support from local governments and a shortage of green spaces in urban areas.

This paper presents a meta-analysis of literature on the topic of urban gardens in Polish recent history with a broader perspective on European heritage represented by partnering cities. The data was analysed using qualitative and quantitative techniques, and the findings were

synthesized to provide an overview of the current state of urban gardening in Poland and abroad.

Keywords: urban gardening, social gardens, biodiversity, social cohesion, ecosystem services

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DNSH PROTOCOL AND EUROPEAN CLIMATE ADAPTATION: A GAME-CHANGING APPROACH" (830)

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The COVID-19 pandemic has triggered a significant investment response in Europe to support economic recovery, and this presents an opportunity to integrate climate adaptation measures into these initiatives. The European Commission Taxonomy for Sustainable Finance, which entered into force on 12 July 2020, requires that any large investment complies with the Do No Significant Harm (DNSH) principle. DNSH is a structural part and requirement of the Next Generation EU and Horizon Europe Fundings. It aims to ensure that investments do not cause significant harm to the environment, health, or society. This contribution explores the role of DNSH in European climate adaptation and argues that it presents a unique opportunity to transform territories and the built environment.

Traditionally, bottom-up actions have approached climate action, attempting to change planning regulations to incorporate climate adaptation measures (Adamson et al., 2018; Adger, 2003). However, DNSH requires that each investment considers its effect on territories from a risk and vulnerability perspective, enabling a more proactive approach to climate adaptation. The Taxonomy Regulation establishes six environmental objectives, including climate change mitigation, adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems. These objectives provide a framework for ensuring that investments contribute to sustainable development and climate resilience.

To implement DNSH successfully, a precise and comprehensive knowledge framework is necessary, which should cover the investment context, project design, and performance monitoring. Achieving this requires a new urban planning and design vision that is structurally linked to the investment implementation process, considering public administration needs, promoting awareness, and ensuring economic sustainability (Baker et al., 2012; Few et al., 2007). DNSH presents a unique opportunity to transform cities seeking climate resiliency objectively and systematically, but the complex requirements and the need for a paradigm shift towards a proactive approach to climate adaptation must be considered before effective implementation (Leyerer et al., 2019; Pietrapertosa et al., 2019).

In conclusion, DNSH is the first real European opportunity to integrate climate adaptation measures systematically into significant investments aimed at urban regeneration. However, to adopt DNSH effectively, a critical analysis of our technical capabilities and best practices is essential, and the combination of knowledge and expertise between academia, designers, and developers must be questioned (Leyerer et al., 2019; Pietrapertosa et al., 2019). DNSH should not become a bureaucratic burden that slows down the necessary climate action but must instead employ a multidimensional approach to ensure a climate-resilient future.

Keywords: DNSH Principle; European Climate Adaptation; Urban Regeneration; Sustainable Finance; Urban Planning; Climate Resilience

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PLANNING EVALUATION FOR BIODIVERSITY (842)

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The evaluation of plans, planning and policies are areas of knowledge that have had a great development in the last decades and have been used, above all, to operationalize evaluation and monitoring functions that seem essential to promote the improvement of the spatial planning and management process (Alexander, 2006).

In the last decades, climate change and the challenge of Sustainability have put a lot of pressure on the responses required by society from the territorial planning system. However, new concerns have arisen, namely the persistent loss of biodiversity in Europe (EEA, 2020). Both the “Global assessment report on Biodiversity and Ecosystem Services” (IPBES, 2019) –, the “Towards sustainable land use: aligning biodiversity, climate and food policies” (OECD, 2020) and the 2030 European strategy for biodiversity (2021), point land use and land cover change as the main drivers of biodiversity loss.

In this context, what role can spatial planning have in order to halt biodiversity loss and in regulating and promoting more consistent and proactive action by all actors involved in the territory? Admitting that this role can be very relevant, the question arises of how to evaluate the spatial planning system in the light of this objective of defending and promoting biodiversity. What dimensions should we consider, what criteria should we take into account and what metrics should we use? In this assessment, where do we start and where do we want to go?

This article intends to identify and cover evaluative dimensions to consider, according to a broad perspective of performance in favor of the defense/promotion of biodiversity by the spatial planning system. This includes, among others, the legal framework, policies, types of statutory plans, actions, at various planning levels and scales and soft planning documents (McWilliam et al., 2015),(Oliveira and Pinho, 2010),(Cavaco et al., 2023), (Guyadeen and Seasons, 2016), . On the other hand, the literature already proposes several approaches on how to bring about an efficient transformative change that has substantive repercussions for the defense/promotion of biodiversity. This means that, in theory, in addition to evaluating the state of the planning system facing biodiversity, we can also evaluate the transformative potential (TP) (Fedele et al., 2019), (Bulkeley, 2020) that the planning system has (or does not have) in itself. Here, TP refers to a more effective dynamic towards stopping the loss of biodiversity, in a first step, and adding biodiversity in a second step (mitigation hierarchy).

It also intends to present some results of this reflection and of the application of this evaluation framework to a concrete case study – the planning system in Portugal and the municipality of Mafra, located on the outskirts of the Metropolitan Area of Lisbon.

This paper is part of the European BioValue Project “Biodiversity value in spatial policy and planning leveraging multi-level and transformative change” (Project: 101060790 — BioValue — HORIZON-CL6-2021-BIODIV-01) which is still ongoing.

Keywords: planning evaluation, biodiversity, transformative potential

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A MULTI-HAZARD REBUILDING STRATEGY FOR UKRAINIAN HOUSING AND INFRASTRUCTURE (843)

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At the time of this writing Ukrainian cities are facing the challenge of planning the rebuilding of housing and infrastructure at the time when the war is still ongoing. Ukrainian cities experienced a number of hazards and risk factors prior to the war. A challenge for Ukraine's cities going forward will be to re-construct housing and infrastructure in a way that is resilient to further terror without undermining other resilience goals.

To develop answers to these questions, the researchers initiated an infrastructure resilience study which compares Ukraine's challenges with those of other societies that have factored anti-terrorism urban resilience into their planning approach, including those from Israel, the United States and South Korea. The study examines different scales of resilience at the level of the individual building, the city and the region and explores the potential conflicts that may occur between reconstructing quickly vs reconstructing in a way that maximizes safety for the population.

Methodology

We develop three different rebuilding scenarios. In scenario 1, a low-grade war continues for several years and frontline cities still face periodic air raids. In scenario 2, an unstable cease fire is achieved but Russia retains an aggressive posture and the possibility of an eventual resumption of hostilities is considered likely. In scenario 3, a stable peace is achieved in which it appears that the two states can live peacefully, but resilience is factored into future design in case political relations again deteriorate. We conduct an initial workshop of Ukrainian and international urban planners to consider strategies for balancing threats and alternative building strategies. We then conduct expert interviews with planners in other states who have faced similar challenges. Finally, we conduct focus group interviews of residents of frontline cities to elucidate how they weigh the benefits and costs of returning to areas and cities that are considered higher risk.

Results

Our initial results indicate that Ukraine could adopt either a high density or low-density strategy to reconstruction. Dense development offers the advantage that utilities can be buried and that the space required to protected by air defenses is smaller. A low-density housing strategy would mean that comprehensive defense would be impossible but that individual low-level structures would be less vulnerable to collapse. It would also allow greater potential for an atomized renewable power generation strategy which could provide resilience against other natural hazards. Medium density housing, which characterized much of the Soviet-era housing stock, is likely to be the riskiest approach as it would complicate both of these strategies. The most complex question moving forward is likely to be pricing this risk into home insurance which may dissuade residents from returning to cities or areas that are considered to have elevated risk.

Keywords: Ukraine, Resilient Infrastructure, Multi-Hazard, Housing

RESILIENT SPATIAL PLANNING AND GOVERNANCE STRATEGIES FOR INDUSTRIAL TOWNS FACING SUDDEN EPIDEMICBASED ON THE CASES IN CHINA (850)

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Industrial towns with specialized industries such as high technology, primary manufactory, tourism and so on, have played important roles in promoting national industrial competitiveness and maintaining local vitality in many developed countries (Henderson, 2017). In China, industrial towns mainly emerged during the economic transformation from planned economy to market economy, and as well have become important bases for national civilian production industry. Overall, the industrial towns in China have the features of high gross product and large population (more than 100 thousand permanent residents on average), which have already reached the level of small cities. However, the standards of infrastructure construction, administrative ability and staff allocation in industrial towns are basically at the township level, resulting in a serious shortage of local governance capacity compared to their economic level. The lack of proper spatial organization and governance ability leads to higher risks for industrial towns when dealing with emergent accidents such as sudden infectious diseases. Hence, it is necessary to evaluate the potential risks and shortcomings of industrial towns in coping with emergency and building their resilience in both spatial organization and social governance for future sustainable development (Ahern, 2011). Based on the research on some industrial towns in the Yangtze River Delta and the Pearl River Delta during the period of Covid-19, this paper analyzes the risks and shortcomings of those industrial towns in preventing the epidemic. In further, following the concept of resilience, the paper discusses the key points of resilient spatial planning in industrial towns from the perspectives of public space design, community unit division, public facility standards and emergency space redundancy. Finally, several social governance strategies have been put forward, including resilient allocation of medical resources, coordinated prevention mechanism, participation of social organizations, refined community governance and so on.

Keywords: industrial towns, resilience, spatial planning, community governance, sudden epidemic

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SPATIAL ELEMENTS AFFECTING THE RESILIENCE OF RURAL HABITATS: A SYSTEMATIC REVIEW (858)

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In the context of rapid urbanization and in the face of the ensuing rural decline, research on the resilience of traditional rural habitats is conducive to a comprehensive cognition of rural human-environment systems. Guided by PRISMA and based on relevant literature published in internationally recognized journals and databases over the past two decades, this study develops guidelines to narrow down the scope of research so as to accurately grasp the progress of research on the resilience of the rural built environment. Systematic correlations across scales and dimensions are emphasized, and resilience, adaptability, or related concepts are summarized and distinguished in different fields of built environment planning, analysis, and design. This paper focuses on the profound impact of residents' small-scale adaptive behaviors on the evolution of rural human-environment systems, and proposes to view the rural built environment as the result of human-environment coexistence at the meso-micro scale. The built spatial forms subsequently continue to influence the adaptive activities of the inhabitants, which is a cyclical evolutionary process. The physical-spatial information contained in the rural human-environment should also be incorporated into the rural resilience system indicators to help determine the stage of spatial development that rural communities are in, which may be a prerequisite for effective built interventions.

Keywords: Rural resilience; Rural habitats; Rural revival; Human-environment system; Built environment

RESILIENT PLANNING PROJECTS IN FLOOD-PRONE AREAS IN FRANCE, WHO BENEFITS? THE CASE OF VILLENEUVE-SAINT-GEORGES, ÎLE-DE-FRANCE REGION, FRANCE (892)

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Imported from international organizations, the United Nations (UNISDR, 2005) and the European Union (European Commission, 2010), the goal of resilience has entered the French planning system. However, its definition remains fuzzy (Davoudi et al., 2012), prone to a large array of interpretations, both by local authorities and by private actors (Olsson et al., 2015). Its dissemination is being ensured by means of soft or strategic governance: incentives, methodological guides, and think tanks led by public authorities (Davoudi, 2018). Hence, new types of public action are emerging, such as resilient urban planning operations and the acquisition-demolition of property in at-risk areas (Rode et al, 2022).

These new resilient planning projects involve a large number of actors, the “usual suspects” of urban planning: municipalities, public agencies, private developers, inhabitants, NGOs, etc. How does it affect their interests? Who benefits? And what is, at the end of the day, the outcome: is the territory with its inhabitants really better protected, thanks to a better risk management, or has resilience simply been a way of opening to urban development land plots that would have otherwise been non-constructible due to the risk of flood?

Our presentation will address this issue in light of a detailed case study conducted in the city of Villeneuve-Saint-Georges. The municipality is located in the region Ile-de-France, where the pressure of urbanization is high. A significant portion of its territory is subject to flood risk from the rivers Yerres (quartier Belleplace-Blandin), and Seine (quartier Villeneuve-Triage). They are experiencing a series of floods: June 2016, January 2018, February 2021, June 2021...

Several urban projects are being developed under the umbrella of resilience. Based on an extensive series of semi-directive interviews performed with all types of stakeholders, we will analyze the interaction between local elected officials who claim an ambitious internal policy of resilience, developers who deploy development projects in flood-prone sectors currently occupied in part by informal housing, and the inhabitants.

Keywords: Resilient planning, Flood-prone areas, Villeneuve-Saint-Georges, France

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ACTIVATE THE WATER HERITAGE TO BUILD MORE SUSTAINABLE COMMUNITIES (904)

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This paper presents an investigation that focuses on opportunities of recovering and reusing of ancient water systems. Under the aims of the Faro Convention (Council of Europe 2005), we recognize the cultural heritage and its sustainable use heritage as a driver for quality of life and sustainable human development. Framework with circularity and use of finite natural resources, today it is urgent to rethink the way we use water, an essential good for life, but at the same time a scarce good. We know that over time, Man has created conditions to survive by carrying water, capturing water, and creating systems that allow access to an essential resource. The modern infrastructures of water supply have changed the ways communities relate to water, and made these systems obsolete, although, in the context of circularity, it makes sense to think about reusing the ancient systems that used to capture and store water, moreover in the context of heritage preservation and collective memory is crucial to preserve this ancient knowledge.

This question is still pressing in territories with scarce water, such as the countries of Southern Europe and particularly in limestone territories where surface water is practically non-existent. This is precisely the case of the Serra de Sicó, a karstic territory without surface water and where vernacular architecture has developed strategies to store and conserve water.

Therefore, we propose to study a group of Portuguese villages, to analyse the ancient systems of storing and conserve water and its potential reuse today. The aim is to save natural resources moreover enhance and safeguard of the water systems heritage that is almost lost or at risk of being lost. The involvement of local communities will be crucial both for collecting information and engaging in traditional knowledge and the reuse of old systems.

We hope that this study can contribute to safeguarding and valuing the water heritage and promoting the responsible utilization of this essential resource for life.

Keywords: Water systems, heritage, vernacular architecture, circularity

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LANDSCAPE-GENERATIVE PRACTICES AS RESILIENCE BUILDING DEVICES? INSIGHTS FROM 3 EUROPEAN CASE STUDIES (922)

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Landscapes can be conceived as living and dynamic manifestations of stratified nature-human interactions shaping territories (see Corboz, 1983; Secchi, 1998). As such, they are the privileged *foci* for the observation of misalignments, tensions and contradictions in the equilibria between human activities and the physical and natural spheres. It is in the evolution of landscapes that epochal systemic changes –linked, for example, to modes of production and management– become visible. It is always in the landscape that the effects of both ecological crises and territorial dynamics related to short-sighted policy and management choices materialise. Often, they appear in the form of increased vulnerability to climate risks or conflicts on the use of space and resources. Adopting a multi-level perspective (Geels and Schot, 2007), this article assumes that the capacity of territories to face these challenges and deal with their landscape implications depends not only on broad structural changes but also on “niche changes” rooted in ways of imagining, living, inhabiting, producing and managing a territory and its resources.

Starting from this premise, the article looks at three European landscapes currently threatened by relevant environmental challenges. It specifically reflects on the resilience building potential of individual and collective landscape-generative practices. As part of the broader research umbrella of the Horizon Europe Project PALIMPSEST (funded under the New European Bauhaus Initiative), the study focuses on the agricultural landscape in the Milanese peri-urban area (Italy); on the traditional wine landscape of Jerez de la Frontera (Spain), challenged by the localisation of energy production facilities; and on the urban landscape of Lodz (Poland).

After framing the environmental challenges –with specific attention to water scarcity, unsustainable land use and air pollution– the article reflects on the legacy of traditional practices and on transformative innovation needs dictated by upcoming demands. The paper concludes by discussing whether and how greater attention to the “consciousness of a place” (Beccatini, 2015) and to the “sustainability wisdom” underlying the production of heritage landscapes might support a non-nostalgic activation of actions towards building climate and social resilience.

Keywords: Landscapes, climate resilience, Territories

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EXPLORING BENEFITS AND DRAWBACKS OF APPLYING CIRCULAR ECONOMY (CE) STRATEGIES TO HOUSING DESIGN IN DISASTER-PRONE AREAS (944)

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In many regions positioned in disaster-prone locations, people are challenged with access to adequate housing. In those areas, housing practices are affected by increasing environmental risks, including implications of extreme weather events, climate change, and earthquakes. Communities and individuals living in low-income houses are often the most affected by those situations, frequently due to uncertain housing conditions. Acknowledging the circumstances, design professionals and architects started developing resilient and affordable housing approaches. This research explores the opportunities and bottlenecks of applying circular economy (CE) strategies to housing design in disaster-prone areas. It explores housing practices fitting into the concepts of designing for adaptability, designing for disassembly, and designing out waste. Those strategies may enable the housing design to respond to uncertain environmental conditions. Additionally, they tie in with the urgency of providing environmentally, ecologically, and economically sustainable low-income housing, underlined in the literature. This paper emphasizes the need to reconsider affordable housing practices in disaster-prone areas in the (Dutch) Caribbean by introducing CE design principles and examining its benefits and drawbacks.

Keywords: circular economy, affordable housing, disaster prone areas

LEAVING NO ONE BEHIND? URBAN FIRE RISK MANAGEMENT IN INFORMAL AREAS: THE CASE OF LUANDA (955)

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Although fire risk is increasing worldwide and affecting rural areas due to climate change, it is in the urban areas that they cause a higher number of human deaths. This is due to the higher concentration of population, but also concerns other factors such as the ones related with the urban fabric, with socio-economic conditions, with the distribution of fire-fighting resources and with the data available. This has different impact in different world regions and affects most the areas poorly equipped and with lower social and economic conditions. Although most tools and knowledge is being produced in the Global North countries it is in the Global South that urban fires have more impact.

The capital of Angola, Luanda, was a city planned in colonial days for 500.000 inhabitants, but the latest estimations are of 12 to 13 million residents. As in many African countries, this growth is the result of migrations and of high birth rates. The rural – urban move was in the case of Angola caused by decades of civil war. With pacification, other dynamics emerged, with city center residents by expelled from the center to the periphery of the city. With this move, informal settlements mushroomed following the pattern of other world regions. Informality takes over in peripheral areas, close to infrastructures and exposed to different sorts of risks. In Luanda, fire risk is extremely high, due to the occupation of areas surrounding oil reservoirs.

The three neighborhoods analyzed in this case are part of two urban districts of Luanda municipality. They are literally squeezed between oil reservoirs, the harbor of Luanda, and railway lines. Exposed to this context, these neighborhoods are also the place for informal economy, social unrest and lack of trust in institutions. In addition, these unplanned spaces, are populated with constructions many times build with highly inflammable materials, equipped with poor infrastructures, with access by narrow alleyways, dead ends, making the fire fight difficult to take place.

This research will address the main vulnerabilities to fire risk of informal settlements in the context of the city of Luanda. The research carried on, allowed the digitalization of data regarding fires that took place during the last decade. This data was complemented by enquires to three neighborhoods' residents, as well as interviews to community leaders, heads of local government and heads of civil protection services. The results of the research allowed to understand the vulnerability and probability of fires in these territories. Main findings put in evidence the lack of planning tools, good data, in order to reduce the number and impact of fire events, as well as the impact of residents habits, construction and public spaces' conditions. It concludes by setting an agenda for future actions in terms of fire risk management in highly vulnerable urban areas.

Keywords: urban fires, risk management, Global South, Luanda, informal settlements

SITUATING SPATIAL PLANNING IN A TRANSDISCIPLINARY PROJECT TO ADDRESS MULTI-HAZARD IMPACT CHAINS (958)

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Recent crises have taught us hard lessons about the systemic impact of compounding disasters. Stakeholders in disaster risk management are challenged to rapidly respond by adapting their risk reduction policies and emergency plans but lack the tools to account for the cross-sectoral impacts and dynamic nature of the risks involved. A new Horizon Europe project, PARATUS (<https://www.paratus-project.eu/>), aims to develop an open-source platform for dynamic risk assessment that supports the analysis and evaluation of multi-hazard impact chains, risk reduction measures including those related to spatial planning, and disaster response scenarios while considering systemic vulnerabilities and uncertainties. This presentation outlines the aims and structure of the PARATUS project, highlighting the role that spatial planning knowledge and expertise plays and how this interfaces with other fields of expertise and practice. Multiple challenges are described, for example related to aligning of ontologies and methodologies from different fields, the quality and sharing of spatial data and other data sets on hazards, exposure and vulnerability, and the need and usability requirements for scenario models. Some examples from project case studies from Romania, Turkey and the Caribbean region will illustrate some of these challenges and how PARATUS will address them.

Keywords: spatial planning; multi-hazard risk; cascading impacts; scenario planning

RESEARCH ON ECOLOGICAL SENSITIVITY EVALUATION AND ECOLOGICAL SPACE MANAGEMENT OF MOUNTAIN CITY: TAKE FULING, CHINA, AS AN EXAMPLE (984)

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Along with rapid urbanization, China's urban and rural ecological environment is facing a great threat, especially in mountainous cities where ecological problems are already prominent. The report to the 20th National Congress of the Communist Party of China approved on October 16th 2022, clearly proposes to vigorously promote the construction of ecological civilization, promote green development in urban and rural areas, and create resilient cities. How to achieve social progress and economic development in urban and rural areas while protecting the ecological space of mountainous cities and rural areas is a hot and challenging issue of urban and rural planning in the new era. As a widely applied technical method, ecological sensitivity evaluation can analyze and predict the possibility of regional ecosystem imbalance and environmental problems; at the same time, as an essential content and link of ecological and environmental impact analysis and urban ecosystem construction regulation, it can provide an effective basis for scientific control of urban and rural ecological space.

Fuling, which has unique mountainous features and good ecological resources, was selected as the main study subject. Fuling is located in southwestern China, and its topography is dominated by hills and terraces (54.4%), followed by low mountains (31.1%) and mesas (13.3%), with flat dam topography being extremely rare. At the same time, it has good ecological conditions and high ecological conservation value, with two rivers (Yangtze and Changjiang) running through it, numerous tributaries, a forest area of 130,100 m² and a forest cover of 45.2% (the Chinese average is 22.96%).

The data used in this study mainly include DEM data, land use data, soil data, vegetation type data, etc. And this paper selects five factors, including terrain sensitivity(S1), soil erosion sensitivity(S2), rocky desertification sensitivity(S3), ecosystem sensitivity(S4) and acid rain sensitivity(S5), to construct a comprehensive evaluation system of ecological sensitivity. Each factor is classified as insensitive, mildly sensitive, moderately sensitive, highly sensitive and extremely sensitive according to its impact on ecological sensitivity and assigned the values 1, 3, 5, 7 and 9, respectively, to quantify each factor. Then, the individual factors are weighted (AHP method) and stacked through the GIS platform to obtain a comprehensive ecological sensitivity evaluation result.

The results show that Fuling City presents an ecological sensitivity pattern of "two belts, one area and multiple points" as a whole, and the "two belts" refers to the "T" ecological sensitive belt formed by the Yangtze River and Wujiang River as the backbone, the "one area" refers to the ecologically sensitive area of the Wuling Mountains in Wuling Mountain Township and Damu Township, and the "multiple points" are the ecologically sensitive points formed by elements such as high disaster-prone areas and water conservation areas scattered in Fuling District.

Furthermore, it can be divided into four levels: ecological highly sensitive area(14%), ecological moderately sensitive area(38%), ecological low sensitive area(32%) and ecological non-sensitive area(13%). The higher the ecological sensitivity is, the more vulnerable the ecosystem is and the more it needs to be protected and controlled. Based on the results, this paper divides the urban ecological space of Fuling City into four ecological function regions, puts forward different ecological function orientations and critical points of ecological environment protection, and points out other management strategies.

This paper highlights the differences between plain cities from the selected case, evaluation factors, and control strategies, aiming to provide a reference for other mountain cities' ecological space management.

Keywords: Ecological Sensitivity Evaluation, Ecological Space, Mountain City, Fuling

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MANAGING FLOOD RISK IN A RAPIDLY EXPANDING BORDERLAND: A CASE STUDY OF THU DUC IN HO CHI MINH CITY, VIETNAM (991)

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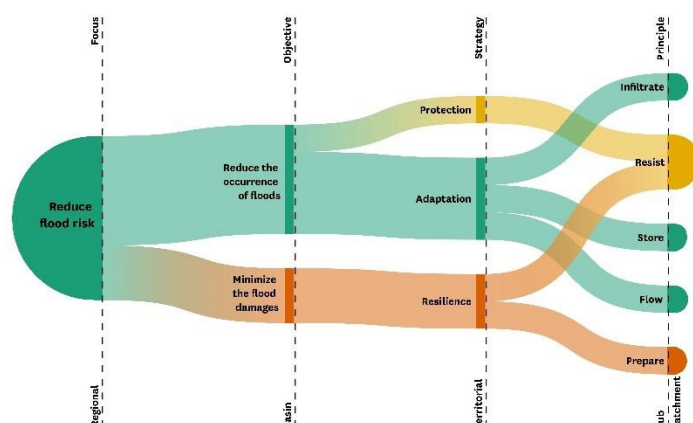
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Located in the industrial capital of Vietnam, Ho Chi Minh City, Thu Duc is a borderland caught between the city's urban expansion demands and the waters surrounding it. Thu Duc is at the centre of development plans driven by economic and real estate pressures. The area's affordable land prices and ample supply of undeveloped land make it an ideal location for developers, offering opportunities for improving transport links and creating productive and service districts. Thu Duc is expected to continue to grow and make a significant contribution to Vietnam's economic development, but at the same time this land is playing a significant role in flood management, complicating the coexistence between communities of inhabitants and the development agenda.

The rapid urbanization of Ho Chi Minh City's eastern region has put development pressure on natural systems that provide vital ecological services, such as flood control and stormwater management. The land-use plan for Thu Duc (DPI) reflects this pressure, with intensive land use envisaged in ecologically valuable areas, leading to an increased risk of flooding. It should be noted that the regulatory and planning context in which this takes place is top-down in nature, and community participation in decision-making processes is minimal. Only a few stakeholders are consulted during the planning processes, and these are generally prominent economic players. This is reflected in the land-use plan choices, where intensive land use is envisaged in ecologically valuable areas. The situation that can be observed along the left bank of the Saigon River, where nine flood control locks have been constructed to defend all densely populated locations, can represent the conflicts obtained with this type of planning. The technical control system was accompanied by a redefinition of the edges and creating pedestrian public. The operation seems to resemble good principles of urban management. However, it does not achieve its aspirations: the pedestrian area is underused and lacks a relationship with the urban fabric behind it.



In response to this development-centred agenda, two main proposals for development have emerged (Ho Chi Minh City, 2019), both of which emphasize the importance of addressing flood risk by reducing the frequency and impact of floods. In this study, we assessed the water management strategies proposed in the development plans and drew on input from the scientific and professional community (Ho et al., 2014; H. L. Phi et al., 2015, Phi 2022) to identify three key components of flood risk reduction: prevention, adaptation, and resilience. Our assessment links these components to implementation principles, with the first objective being to reduce the occurrence of floods in vulnerable areas through prevention and adaptation strategies. Prevention involves building grey infrastructure, such as dams, levees, and embankments, to protect property and people from floodwaters. Adaptation aims to retain run-off water to reduce or avoid flooding phenomena, and can be applied in both green and grey infrastructure. The second objective is to minimize flood damage, and is based on the resilience strategy. This involves initiatives for flood-prone areas to reduce damage under extreme events and is implemented through legal frameworks, such as resilient building codes, land-use planning, and urban layouts that acknowledge the risk. The challenge for planning in Thu Duc is integrating flood prevention strategies that can jointly help in managing the coexistence between the development agenda and climate change needs, ensuring a sustainable and resilient future for both Thu Duc and the broader region.



Keywords: flood risk reduction, adaptation, resilience, land-use planning

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ENHANCING FLOOD RESILIENCE IN URBAN PLANNING: A PARAMETERIZED DESIGN FRAMEWORK INTEGRATING SCS-CN METHOD AND GRASSHOPPER (1010)

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In recent years, urban flooding has become an increasing problem due to climate change and urbanization(Carter et al., 2015). The concept of urban resilience is one way to address this challenge by designing cities to adapt and resist natural disasters(Schanze, 2006). In this context, parameterized design frameworks that can incorporate flood resilience strategies have become important tools for urban planners and designers(Sunita et al., 2021, Tingsanchali, 2012, Vercruysse et al., 2019, Voskamp et al., 2021). This study proposes a parameterized design framework for flood resilient urban planning based on the integration of the SCS-CN (Soil Conservation Service Curve Number) method(Shi et al., 2017) and Grasshopper, a popular algorithmic modeling software for architects and designers. The SCS-CN method is a hydrologic model that can estimate runoff and infiltration in urban areas, while Grasshopper enables the creation of complex and flexible planning workflows. The proposed framework includes the development of a custom Grasshopper component that can automate the calculation of the SCS-CN method and use the results to generate design parameters that optimize flood resilience. The component considers various urban design factors such as land use, topography, and drainage infrastructure to generate design alternatives that can be evaluated based on their flood resilience. The framework was applied to a case study of a hypothetical urban area in a flood-prone region. The results showed that the proposed parameterized design framework can effectively generate design alternatives that optimize flood resilience. The framework also proved to be a useful tool for evaluating trade-offs among different design factors and identifying the most appropriate design solutions. Overall, the proposed parameterized design framework provides a valuable tool for urban planners and designers to incorporate flood resilience strategies into their designs. The integration of the SCS-CN and Grasshopper method can help generate optimized design solutions that can contribute to the creation of more resilient and sustainable cities.

Keywords: urban flooding, climate change, flood resilience strategies, parameterized design framework, SCS-CN method

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RESILIENCE AND MULTIRISK ADAPTION: A METHOD AND A CASE STUDY (1046)

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The places affected by earthquakes have different characteristics, which depend both on the extent of the earthquake, and the consequent damage to property and people, and on the different types of peculiarities of the site. Earthquakes that cause the destruction of entire centres are different from catastrophic events that cause little damage to some buildings. Nevertheless, the perception of risk for the population can still be strong, so much to cause indirect effects and induce people to abandon certain areas or change their habits. Added to this are the peculiarities, dimensions, morphology of the place concerned which influence the effects of the earthquake in different ways. An event that strikes a densely populated historic centre characterized by monuments and prestigious buildings is different from an event that strikes a place that is poorly built and sparsely inhabited or used above all for holiday periods. The effects may concern urban, social, economic, environmental damage or a combination of these (Sepe, 2022).

Moreover, especially in the nowadays territories, it is happening more and more often that crises of different types occur simultaneously.

The coexistence of more than one risk determines further difficulties in resolving because commonly, since the risks are sudden and unexpected, we tend to treat the last risk more carefully, leaving out the previous one even if it is equally important, and very often without taking into account the positive or negative example of the event that previously occurred in another place, also for reasons due to different or non-integrated regional legislation (Sepe, 2020; Bohland et al., 2019)

Traditional approaches to spatial planning often do not take adaptive behaviour as a starting point, believing that urban interventions can be decided on the basis of facts and estimates that are available at the time of decision-making. This form of planning is based on a static perspective, which assumes a transformation according to predictable patterns, whose starting points are "actual, desired and potential" (De Roo, Porter, 2007).

While it is true that unforeseen events occur suddenly, it is also true that adaptive and dynamic planning can better support the creation of a new equilibrium through the identification of flexible spaces (Davoudi et al., 2013; Zolli, Healey, 2012)

Accordingly, flexible planning makes possible to use local peculiarities as a starting point for the redevelopment project, resulting in lower investment costs, shorter construction times and greater support from stakeholders. The various design possibilities that can be realized with respect to the existing situation are identified through quantitative and qualitative analyses, of which the latter determine the implementation of flexible planning.

However, most of the methodologies used to analyse areas affected by different risks are aimed at focusing in particular on seismic risks without considering those relating to intangible aspects linked to the identity of the places or aspects related to urban health and liveability. And, more

in general, in relation to design aspects, urban methodologies do not consider all the results of the analyses, maybe for the difficulty deriving from translate the complexity of collected data in project interventions.

Starting from these premises, this paper – carried out in the framework of the research project PRIN 2020 SUMMA Sustainable modelling of materials, structures and Urban spaces including econoMic-legal iMplicAtions – within the ISMed-CNR Unit (with the author's responsibility) and the relative agreement between Sapienza Università di Roma and ISMed-CNR - is devoted to create an analysis and design methodology of the urban space to be applied to areas characterized by multiple risks which require integrated and flexible interventions and define post-event reconstruction / regeneration / enhancement strategies that reflect the quality of the buildings and public spaces and social inclusion – is to propose an original methodology capable of analysing the places affected by multiple risks and planning their resilience in a suitable and attentive way to both its cultural resources and its urban health and liveability. By way of example, the case of Cittaducale in Lazio region affected by an earthquake in 2016 and then interested by further crisis including that related to Covid-19 pandemic and depopulation, will be illustrated.

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TRACK 08: PLANNING FOR CULTURE AND TOURISM: PUBLIC SPACES, HERITAGE, IDENTITY, REGENERATION

MOBILIZING THE SACRED; EXPLORING THE CHANGING CONSERVATION SCENARIOS IN LOITA NAIMINA ENKIYIO FOREST (67)

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Is the sacred integral in the negotiations for the conservation of sacred indigenous forests? A link exists between indigenous sacred forest communities and conservation. This link is however mired by dynamics of dispossession and in some cases, displacement associated with modern-day conservation strategies. Empirical data drawn from indigenous sacred landscapes from Latin America, Asia, Australia, and Africa shows environmental protection laws alter the use and access rights of indigenous forest communities with detrimental consequences. This article, therefore, seeks to explore how indigenous Maasai communities are mobilizing the notion of the sacred in the negotiation for alternative conservation outcomes. This question is elaborated in three parts, first by questioning the role of the sacred in protecting forests, balancing traditional and new cultural practices and emerging social innovations and the second part explores conservation scenarios around Naimina Enkiyio forests by interrogating the transformations in response to pressure on the forests socio-ecological system. Finally, the study explores the Ilkimpa Community Conservation Association (ICCA) as a case study. An empirical approach was mobilised in the study relying on qualitative data obtained from Naimina Enkiyio the case study site. Using social innovation theory, we explore how the Loita Maasai push for a collaborative initiative arrived at from a point of convergence of community and state interest to conserve culture and natural resources through reinventing the sacred and (re)institutionalizing into a new and collectivized governance framework.

Keywords: Social Innovation, Conservation, Socio-ecological systems, Indigenous Forest community, Naimina Enkiyio

POST-COVID 19 TOURISM IMPACT ON THE MOBILITY OF CARE IN BARCELONA: A GENDER PERSPECTIVE (68)

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This project examines the impact of post-COVID19 tourism in everyday urban mobility from a gender perspective. Since the reopening of the borders after the pandemic, the volume of tourism has almost returned to the figures previous to COVID19. According to the WTO the arrival of tourists at a global level in July 2022 was only 9% lower than the data from 2019¹. The impact on residents' everyday journeys, after months with no touristic activity has had a particular incidence on the mobility linked to care. Mobility of care is generally done on foot and largely performed by women (Sánchez de Madariaga, 2009, 2013). It is a type of mobility that encompasses trips to care tasks and domestic work which includes the upkeep of the home and the caring of minors and dependent adults. To research this topic we conducted 15 walk-along interviews (Kusenbach, 2003) during June and July 2022 to women with children and residents of 3 neighborhoods of Barcelona with a high tourist inflow: Sagrada Familia, Gòtico and Barceloneta. This method allowed us to accompany women in their everyday journeys while we asked them about their experiences and perceptions. The method granted us access to their direct reflections as they moved through the public spaces of each neighborhood. During the interviews we recreated part of the trips they do during their day to day errands related to care tasks. The qualitative analysis of the perceptions and experiences of the interviewees allowed us to assess the impact the return of tourism had in the residents' quality of life. We delved into the aspects related to the everyday accessibility of these journeys and the women's perceptions of safety. Moreover, we confirmed that everyday mobility is clearly affected by gender and thus the impact of tourism in urban everyday life requires a specific analysis from this perspective.

Keywords: mobility of care, gender, tourism, COVID19, accessibility, public space

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THE USE OF A DIGITAL WEB PLATFORM TO COLLECT SPATIAL KNOWLEDGE FROM LOCAL RESIDENTS FOR A PUBLIC SPACE QUALITY EVALUATION (83)

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Previous studies on public space management framework (PSM) pointed to the need to consider social participation as an important dimension for the planning, design and maintenance of public spaces (PDMPS) (Alvarado Vazquez et al., 2021, 2022). PSM applied to the Latin-American context, mentioned that public spaces present adverse conditions and poor design and are perceived as insecure by the communities where they are located (Alvarado Vazquez et al., 2021; Bonilla, 2012).

Nevertheless, research on social participation identifies several challenges in the phases of the PDMPS, such as lack of government support, inclusion, consideration of social needs and awareness of opportunities for and for social participation (Alvarado Vazquez et al., 2022). Currently, various criteria exist to evaluate public space quality (Praliya & Garg, 2019). These criteria have been more settled in developed countries but not fully explored in the Latin-American context, such as the case of Mexico or Colombia (Paramo P. & Fernandez-Londoño, 2016; Rangel Mora, 2009). It is necessary to know the current conditions of public spaces, and evaluating their quality can help develop and re-generate them (Carmona, 2019).

It also pointed out the need for interactive, participatory methods to engage with local residents and collect their needs and aspirations could bring awareness to decision-makers and create new channels of communication. This includes the use of ICTs (Alvarado Vazquez et al., 2021, 2022; Brynskov et al., 2014; van Leeuwen et al., 2018). Some approaches started to explore the use of public participation methods for urban planning, for which the use of ICTs and GIS were combined; this is the case of public participatory geographic information systems (PPGIS) or the use of digital participatory platforms (DPP) (Falco & Kleinhans, 2018; Hasanzadeh, 2021). However, in developing countries such as the Latinamerican case, these concepts have not been fully explored to evaluate the quality of public spaces from a bottom-up approach (Alvarado Vazquez et al., 2021; Alvarado Vazquez & Casiano Flores, 2022).

This paper addresses the lack of information regarding public space quality and the lack of communication channels using ICT that allows social actors to have a say in how they perceive the current conditions of public spaces where they live. Therefore, the main question of the research is how can digital participatory platforms empower local residents to have a say in a public space quality evaluation that can support PSM. To do so, we will need to know the behaviour of users and the perception regarding aesthetic conditions of public spaces based on inward responses to the public space. Our research uses a modification of the public space quality evaluation proposed by Praliya & Garg, 2019 as an analytical model to explore how social actors behave and perceive public spaces (Praliya & Garg, 2019).

The research uses a case study approach in the Mexican context, focusing on Mexico City and Puebla in six public spaces. We employ a multimethod qualitative study, drawing on the adoption of a digital participatory platform to create a public space quality evaluation that can be used on

focus groups on-site and individually using an internet link. The paper concludes with the scientific and social relevance of using ICTs to develop a public space quality evaluation from a bottom-up approach that can contribute to the field of PSM in the Latin-American context.

Keywords: public space, social participation, technology, Mexico, urban planning

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CHALLENGES OF HISTORICAL HERITAGE IN RURAL AREA BESIDE METROPOLIS: A CASE STUDY OF THE 7TH SALT STOVE RIVER, PUDONG AREA, SHANGHAI (86)

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At first, Pudong area of Shanghai grows because of the salt industry since Song Dynasty. The basic river network was related to the production and transportation of salt. In order for salt making and transportation, river channels were constantly dredged, so that rivers not only formed the arteries of production and transportation, but also promoted villages and towns beside rivers flourishing. For hundreds of years, town and rural settlements spread along the original salt transport river channels, and their residential pattern were related to the geographical and social environment of Pudong area. The 7th Salt Stove River, with more than 800 years history and flows from east (the Seawall) to west (the Huangpu River), once played a vital important role in salt transportation, flood prevention, farmland irrigation and daily life. Residential area lies along the river, including Flagstaff Village, which has preserved Gaoquan Houses with unique Jiangnan characteristics; and Chunxin Village, in which the Great Catholic Church has 400 years history.

The aim of this study was to take the river and its waterfront villages as examples, explored the impacts and challenges of the development of Shanghai metropolis on the adjacent historical areas. Firstly, historical maps, old images, local archives and other documents were examined. Secondly, field surveys were conducted in the area, including interviews with local people. Additionally, historical information was overlapped and compared, and typological method applied to analyze transformation in historical water system and village pattern. The details of policies, population changes and villagers' construction behaviors were investigated from the perspective of land property rights.

It was found that by years of construction activities, traditional rural residential pattern has rapidly changed. Especially, Disneyland Park is only 1 kilometer away from the 7th Salt Stove River. Numerous of historical villages and Gaoquan houses have been demolished because of the park construction, and *House Rivers* related to farming and living in history have disappeared. Urban development has cut off the continuity of historical context. While, on the other hand, Disneyland Park did brought vitality to the rural areas near the river. Rural and Disneyland tourism have combined together, and Residential buildings have been used as Guesthouses.

Rural areas adjacent to metropolises has great significance. It tells the history of urban development and makes continuations of culture context. What's more, it provides residents, leisure and education spaces for all classes of people. In the process of urban development, evaluation of historical areas beside metropolis needs to be paid attention.

Keywords: heritage in rural area, cultural tourism, residential pattern, conservation, Shanghai

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EVOLUTION OF OLYMPIC VENUES IN URBAN CONTEXT: INTEGRATION, CONFIGURATION, AND HERITAGE: CASE STUDIES OF BEIJING 2022 AND TURIN 2006 WINTER OLYMPIC GAMES (129)

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The mega-event is a well-organized practice with a specific bonding between the spatial and temporal dimensions: at every phase of its evolution process from application to preparation, competitions, and finally, post-event, the area that the mega-event influences are used as a resource to match organizational objectives that can transform as the development progresses.

The goals of sustainable development in the two winter Olympic Games in Beijing (*International Olympic Committee*, 2022) and Turin (*International Olympic Committee*, 2019) have a significant share, from the initial stages of preparing infrastructure and facilities and formulating policies and strategies to short-term and long-term positive changes that affect and transform the surrounding areas in terms of socio-economic aspects in different scales.

The selected two projects are the Beijing National Speed Skating Oval and Oval Lingotto. This article first layouts general information and interpretation about Turin and Beijing. Then, it discusses and compares the sustainability of these two Olympics (Beijing 2022 and Turin 2006). In the following, the article investigates how the two cities integrate the mega event into the urban structure, the policies that were adopted, innovative and sustainable technologies of the projects, and finally, analyzes the legacy of long-term sustainability for the cities. Based on urban integration, it discusses the influence of its sports facilities on the urban and regional context, the primary method of configuration, and the evolution of the two venues. For a long time, their construction as permanent venues has innovatively influenced the structure of urban development by combining and interacting with the city's long-term goals and basic structure.

Many similarities are shared between Beijing and Turin: integrated into the existing urban structure and layout, scattered and reusable venues, infrastructure construction for region mobility, relative policies, and governance in terms of game layout and strategy. The success of the games' conduct affected the hosting city and metropolitan area's region landscape, architecture, and historic space separately, even if the two cities had vast differences in the urban fabric, population, and economy.

This is documentary research that is based on qualitative and quantitative analysis. The research method used is Inductive reasoning, or the inductive approach (Goddard and Melville, 2004).

The conclusion points out that the evolution of the venues emerged and changed along with the development of the Olympic games. The integration of the venues with the urban fabric gets essential. To understand and perceive the two city venues, the surrounding areas, and the environment that both venue and the built or natural environment affect each other must be examined. Further, urban innovation in Oval Lingotto and NSSO means using three concepts of the venues' design, function, and location to reach integration, which would be flexible, stable, and adaptable in the future. The integration is the final product of these tools, a series of processes and policies that must be carried out which can be evolved in the future. At the same time, the urban configuration of the venues is another crucial factor to be more explicit about

integrating the urban context and fabric. The integration innovation of the two venues brought changes in city and social landscapes and the profound urban legacy of long-term sustainability for the two cities.

Keywords: Urban Innovation, Mega-events, Sustainability, Legacy, Configuration

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THE PUBLICNESS OF SPACE IN HELSINKI LIBRARIES: LETTING THE OUTSIDE IN AND THE INSIDE OUT (133)

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Within the public realm of cities and in everyday life practices occur in different interfaces between streets, open public spaces, and internal public spaces. The programming, activities and rhythms of this public canvas could take various forms, which are determined by power relations among diverse stakeholders at specific moment sin time. This research examines the role of libraries in supporting spatial justice, diversity, and inclusion. More specifically, it aims to address the changing role of public libraries in Helsinki, their relation to public spaces, and the extent that their programming enables peaceful, participative, and diverse usage by multicultural and ethnic groups. These public libraries cater for residents within their vicinity, residents from the broader metropolitan area, foreigners, and tourists. The research builds on case studies from Helsinki public libraries, Oodi and Maunula, and their interpretation of publicness between the inside and outside. The research uses qualitative methods to gain insights on perspectives of administrators, professionals involved in their design, and users. Completed in 2018, Oodi is a located in Helsinki city centre, and has an open public space in front of it. This space serves as an urban transformation stitched to a well-integrative landscape combining many central budlings in the city centre. Completed in 2017, Maunula library is a neighbourhood one with an extension of a shopping centre acting as the core attraction in a multi-purpose complex. Maunula library's design process involved residents living in the neighbourhood, and the integration of public space in the design was highly valued as an extension of the library function outdoors. Both cases have introduced functions and open spaces that serve at their respective capital city centre and capital neighbourhood scales. In designing both libraries, engaging people was essential, and equally the incorporation of socially inclusive functions for learning, leisure, and socialising (Mickiewicz, 2016; Johnson, 2010; Griffis, 2010; Lawson, 2002). What has been less researched is the relation between the inside and outside, the extension of the public canvas and relation to the libraries' surroundings on the one hand. On the other hand, the invitation to activities usually occurring in open public spaces, into the library either physically or visually. This paper sets to explore several questions, starting with the design and its intention for generating peaceful, inclusive and just spaces, and the role of these spaces in supporting everyday life spontaneous encounters and activities. Noting that this is a working paper, the initial findings indicate that libraries can be new urban catalysts in improving inclusive urban space, creating public space free of consumption constraints and empowering communities. Moreover, the co-design process is one approach to creating complex public spaces that contribute to social justice.

Keywords: Helsinki, public space, libraries, diversity, inclusion

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QUANTIFYING CITYSCAPE PERCEPTION OF CHINESE HISTORIC AREAS IN VIDEO ERA BY USING TIKTOK DATA: THE CASE STUDY IN XI'AN (145)

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The general office of the CPC Central Committee and the general office of the State Council issued the "Opinion on Strengthening the Protection and Inheritance of Historic and Cultural Heritage in the Course of Urban-Rural Development", proposing heritage protection should be people-centered, and various social forces should be encouraged and guided to participate extensively in the conservation and development. Cityscape perception attaches importance to the public's evaluation of heritage, which is the scientific basis for implementing people-centered heritage preservation. At present, the media has entered the era of video, short videos have both the interactive attributes of social media (Liao, S. S. , et al.,2020) and the characteristics of video, becoming an important way to explore the urban public perception(Saunders et al.,2011) and guide the public to participate in heritage protection.

Based on a review of the literature on heritage preservation and cityscape perception, we find that although researchers have conducted in-depth quantitative research on cityscape perception factors from the characteristics of material ontology, few studies have shed light on the concrete content of perception and interactional feedback between people and historic areas. Our research aims to explore 'where public visit in historic areas' and identify 'what they pay attention to,' in the video era, to evaluate the elements attractive to the public. In this regard, we proposed and applied short video data on Tiktok to investigate historic areas in Xi'an, which is one of the most welcomed cities on Tiktok and has rich experience in conservation work. At present, the analytical method of short video is consistent with that of other traditional social platforms, which fails to make full use of the vast information contained in videos. With the support of deep-learning technology, we can accurately analyze video visual data as well as auditory data in large quantities, which are used together with social platform data for further spatial analysis. Our paper draws a conclusion about the characteristics of cityscape perception in historic areas. This study can provide a technical route to reflect public assessment on the historic areas preservation, which can be used to support the development of historic areas in China.

Keywords: Historic area; Tiktok; Cityscape Preception; Deep learning

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PUBLIC SPACE, ARTEFACTS AND (HYPER-)DIVERSITY. HOW AFFORDANCES LEAD TO VARIOUS USES (175)

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Public space provides space for all sorts of activities – from spending time alone up to participating in spontaneous or planned cultural events and demonstrations – and for encounters with others, be it fleeting encounters between strangers, interactions, or simply getting a quick glimpse of others while passing by. Different population groups and stakeholders claim public space for their various needs. Public space therefore also acts as a stage where differences and power relations are constantly negotiated (Qian, 2020).

But in what ways does public space enable or even encourage urban dwellers to pass time alongside others or interact with people that are different from themselves? What role do the physical features and the materiality of a public space have in providing a public realm that is equally or similarly inviting to people from all walks of life (Klinenberg, 2018)?

We suggest using the concept of *affordances* as a lens to capture public space's capacity to accommodate a hyper-diverse (Tasan-Kok et al., 2014) urban population. Public spaces may vary in their responsiveness (Bentley et al., 1985) to different cultural backgrounds, but also to social status, age, lifestyle, physical abilities, length of residence and familiarity with the neighbourhood.

Affordances are what uses and activities the environment or physical artefacts offer to its users (Gibson, 1986). They are non-binary and relational in that they afford different things in varying degree and varying quality to different people (Davis, 2020) – e.g. a ping pong table is used to play by the neighbourhoods' young and young at heart but alternatively also serves as a convenient table for a drink after work for the staff of the surrounding offices.

This paper examines the affordances of three public squares in Zurich (Switzerland) and their relation to user diversity. Based on direct observations and semi-structured interviews with users and non-users (n=63, conducted in the summer 2022) of the small, mundane neighbourhood squares, we analyse what the squares offer to different people and how these affordances are perceived. The same gravel surface, for example, refuses to be used by inline skaters and is perceived as inconvenient to sit on, especially with small children, but allows playing pétanque for those who wish and dare to take the required space.

We show that affordances are conditional in that their perception depends on individual characteristics, cultural context and social norms and therefore vary between different population groups. However, affordances are also contingent on the immediate context given by the positioning of people, other living entities, and social goods (i.e. objects) and the way this 'relational ordering' is synthesised by subjects (Löw, 2016). An asphalted surface does not lend itself to having a pick nick on a blanket there since this is a rather unusual activity in the context of Zurich, although technically possible. Yet for those familiar with the local habits in one of our

case study squares, this is a perfectly viable activity – they perceive this affordance differently than occasional visitors.

By linking the physical and material aspects of public squares to the diversity of its users, this paper contributes to a better understanding of inclusionary, human-centred public space. It proposes affordances as a useful theoretical device for planning and designing public squares that accommodate a wide range of uses and users.

Keywords: affordances, diversity, materiality, neighbourhood, public space

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THE PERCEPTION AND PREFERENCE OF COMPOUND SPACES IN TRADITIONAL VILLAGES IN CHINA (212)

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Most of the traditional villages in China are experiencing the spatial renewal and reorganization. As a result, a lot of compound spaces composed of modern buildings and historical buildings were born, as a part of its traditional village, they have made a tremendous effect on perception preferences of the historical spaces of traditional village. The analysis in this study utilises deep learning method, extract the visual occupation ratio and visual change ratio of modern and historic buildings from photos and videos data containing compound spaces. The specific focus is on the effect of the visual occupation ratio and visual change ratio on spatial perception preference to attempt to analyse and understand the balance between sustainable development and heritage protection of traditional villages. The paper examines the external perception representation of the combination of architectural elements inside compound space, including whether reduce modern buildings will increase people's perception preferences, and what trends in modern and historical buildings will affect people's perception preferences. Findings from these studies provide stepping stones to deal with the spatial dissonance in rapid development in traditional villages in China.

Keywords: Perception; Preference; Compound Spaces; Traditional Villages

THE CONSTRUCTION OF PEACE IN SOUTH AFRICAN PUBLIC SPACES THROUGH REGENERATIVE DEVELOPMENT AND DESIGN (224)

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Public spaces are important locations in cities and influence urban experiences in many ways. These can vary from being joyful to frightening experiences, depending on the state of cities and the socio-economic conditions influencing the behaviour of people in urban spaces. Public spaces in South Africa offer places where different people meet and interact. However, the use of public space is often restricted through a fear of conflict and violence. Recent crime statistics, released in September 2022, indicated increase numbers of murder, rape and kidnapping in the country. In the preceding three months, more than 7000 people were murdered in the country. Housebreaking was the most common crime experienced by households in South Africa, followed by home robbery. Assault was the third most common type of crime, affecting 99 000 households (StatsSA, <https://www.statssa.gov.za/?p=15700>). Murder and assault often take place in public places and entertainment facilities. Consequently, many people are afraid of public space or choose to avoid it where possible. South Africa is rated the 8th highest country in the world in terms of its fear of crime rate.

This paper reconsiders the construction of peace in public spaces in South African cities. The construction of peace includes both conflict resolution and addressing the underlying consequences of conflict, which implies a focus on peace-making, -keeping and -building. All three these elements encompass a spatial dimension – a critical aspect to address turbulence and conflict in space. Peace making implies a reconnection to place and potential, while peace building requires a restoration of the role of the space and its people in the environment and a re-integration of critical flows to ignite future opportunities in space. Peace-keeping then builds on the re-integration through co-responsibility and ongoing support. However, bearing in mind the triple challenges of high levels of inequality, poverty and unemployment, reconnection, restoration and re-integration calls for integrated planning and design to address the turbulence and fear. The paper presents a framework and various examples from public spaces in South Africa to illustrate how peace building is aligned to and can be facilitated through regenerative development and design. The author argues that the thinking and processes related to regenerative sustainability offers valuable pathways to reconsider the construction of peace in public spaces in a country plagued by conflict, crime and fear.

Keywords: Public space, peace construction, regenerative development and design, South Africa

ENGAGING DIGITALLY: ASSESSING YOUTH DIGITAL PARTICIPATION IN CULTURAL HERITAGE MANAGEMENT (239)

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There have been growing potentials of digital environment for generating new ways of engaging with cultural heritage. With the assistance of advanced digital technologies, new focuses have been placed on the digitalization of cultural heritage and digitally mediated participation in cultural heritage management. Community participation is recognized as the fundamental tool for the integrated approach to the historic urban landscape and cultural heritage management (Ginzarly et al., 2019). As future decision-makers, youth are a crucial social group within the community that should be involved in participatory heritage management. Youth, aged between 15-24, are regarded as 'digital natives', for their intensive exposure to the digital environment and their intrinsic creativity with digital technologies (Literat et al., 2018). To engage more young people in heritage conservation and preservation, various digital technologies have been adopted by practitioners to enhance participation experiences or generate innovative forms of digital participation (e.g., gamification, crowdsourcing platform, social media).

Although youth digital participation has promoted the preservation and dissemination of cultural heritage values and helped youth build up their identity and sense of belonging, it is noticed that youth have limited digital literacy and low self-protection, therefore, the misuse or overuse of digital technologies among youth might lead to the unexpected digital divide or digital exclusion. Thus, it is crucial to assess and evaluate youth participation with digital technologies in heritage management and little research has been done to focus on this topic.

To fill this gap, we aim to construct an assessment framework with criteria and indicators, then validate this framework with experts and practitioners. Firstly, a systematic literature review of published practices of youth digital participation in cultural heritage management was performed. Through thematic analysis, the review results led to the establishment of an assessment framework consisting of four criteria and 38 indicators, as well as a summary catalog of digital tools for youth engagement. The criteria focus on four aspects, namely attitudes and ethics, capacity and competence, empowerment and control, as well as impacts and outcomes. To test the usefulness and feasibility of this assessment framework, an online survey with heritage management practitioners and experts was conducted. Questions were designed to evaluate each indicator regarding whether they align with the design and implementation of the practices. Participants were asked to measure the indicators based on their own practical experiences. Through descriptive statistics analysis of the data, it shows that all the assessed indicators are deemed useful, while the feasibilities of some indicators might vary due to the constraints of the local context.

With these evidence-based results, this assessment framework can serve as a practical measurement of youth digital participation with the implication for the future design of participatory approach in heritage management. At the same time, youth digital participation was systematically assessed and the digital tools for youth engagement have been summarized and

categorized. Through the assessment, different categories of digital tools can be applied in different phases of management process and can promote youth participation to reach various levels and degrees. Theoretically, the incorporation of digital literacy and inclusion theories extended the scope of participatory research in heritage management, which might be effective to mitigate the effects of the digital divide between generations. Finally, this validated assessment framework of youth digital participation in cultural heritage management can be informative for future policy-making and decision-making.

Keywords: Digital participation; Youth engagement; Cultural heritage management; Social inclusion; Digital divide

STAND OR WALK: SYSTEMATIC OBSERVATION AND BEHAVIORAL MAPPING IN URBAN AND RURAL LANDSCAPES (250)

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In the last years, the observation of behaviors in public spaces has gained an increased interest, as there has been an increased focus on the human and social dimensions. Several authors have focused on developing different instruments to register different people and their behavior in public spaces (e.g., Pérez-Tejera et al., 2022; Valera et al., 2018). In addition, behavioral mapping has been used as a methodology that allows comprehending of the patterns of people in space for a specific moment in time and their relationship with the environment (Goličnik & Thompson, 2010). The integration of systematic observation and behavioral mapping can provide a more detailed description and understanding of how people and groups use public space and how it can potentialize the integration of specific social groups. Yet, there is not a clear methodology characterization for systematic observation of people and behavior in their public space. In this regard, this study focuses on demonstrating the use of different systematic methods of observation of people in the public space on a community/regional scale depending on the objective and physical context of the case study.

Hence, four different procedures were selected for four different case studies: (a) different standing points of observation; (b) a singular walk that crossed the municipality; (c) several walks that crossed units of the municipality, and (d) a combined method of observation points and walk. The case studies were set in two urban and two rural areas, one each in Belgium and Portugal. In each case study, behavioral maps (Goličnik & Thompson, 2010) were collected at three different moments of the day (i.e., morning, afternoon, and late afternoon) depending on the characteristics of the procedures. In addition, the behavioral maps were collected during a workday, Saturday and Sunday. The categories used in each systematic observation were adapted from the EXOdEs instrument (Valera et al., 2018) and focused on some demographic characteristics of the users (i.e., unit of observation, age, gender, apparent native or migrant, and apparent ethnicity). In addition, each user (individual or group) was registered in an approximate location while doing a specific behavior.

Based on the procedures made four different procedures were defined depending on the context of the targeted area of research. These procedures are a systematic observation (a) point, (b) walk, (c) points and (d) walks. Each procedure is characterized by specific pros and cons that can be adjusted to specific research objectives. Each method provides a different implementation way, including the description of the observations made, the way to understand what was observed and collected, and the statistical or spatial analysis of the data.

Overall, this study proposes a systematization of the possible procedures to observe people and the environment in public spaces, whether in enclosed spaces (e.g., public parks, squares) or

wider areas (e.g., parish, municipality). The use of these procedures can provide a deeper understanding of the life of public spaces, how public spaces are used and how this use reflects existing social tensions between different groups. This knowledge can be relevant for spatial planning and policy-making as it can enhance the democratization of public spaces, the integration of different groups, and the better experience of people in the environment.

Keywords: Systematic Observation, Intergroup Behavior, Behavioral Mapping

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PROSPECTIVE COMPREHENSION OF ABANDONED INDUSTRIAL SITES: STRIJP-S | EINDHOVEN AS AN EXAMPLE (273)

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Many industrial sites have lost their original function and identity and appear as “*urban voids*” in the urban landscape.

In this study, the authors focus on the project of urban regeneration of the Strijp-S in Eindhoven, the former Philips’ factory area, which was the most crucial catalyst for the development of the city in the industrial period of the 20th century. The area functioned such a machinery for the development of Eindhoven, however, was not accessible to non-Philips employees. It was a mysterious area that was forbidden for most residents.

Strijp-S lost its original function when Philip had left the city and the identity of the site was changed from “*closed*” to “*open*”. The re-evaluation of the site with its all industrial heritage has gained a new, prospective perspective for the city’s spatial, cultural, and economic development of the city.

In this context, this study tries to reveal the spatial, social-cultural, and economic relationship of the contemporary situation of the site within the urban landscape. Additionally, it aims to show the actor-relationships and planning decisions affecting the regeneration process besides evaluating the final implementation. So, this study also scrutinizes various speculations, designs, and opinions about that abandoned industrial site to draw a framework for a prospective perspective beyond its static, preservable character.

Briefly, this study aims to present a comprehensive vision to re-evaluate the potency of abandoned industrial sites for the future of the city with the understanding of transformative approaches beyond conservative thoughts for their industrial heritage identity.

Keywords: abandoned industrial sites, urban regeneration, industrial heritage

WHERE TO LAND IN CITIES IN CONFLICT? DIFFRACTIVE SPATIAL PRACTICES FOR PEACE BUILDING IN NICOSIA, CYPRUS (290)

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"No! That's not possible!! I thought we were standing at the west edge of the buffer zone, the opposite end of the other side that you are telling us! Do you mean that across the buffer zone is the Orfeas stadium? It cannot be true!" A moment of disorientation of a participant during the "Around Nicosia in 80 Minutes" action in May 2022. Fifty bikers have stopped for a pause, still riding their bikes. We are at the northern part of Nicosia walled city, the "other side" according to the Greek Cypriots, where the Turkish Cypriots are segregated since the 1963 bi-communal conflict, and inaccessible to Greek Cypriots due to the Turkish invasion in 1974. The opening of checkpoints in 2003 allowed Nicosians and visitors to cross to the "other side", the south or the north parts of Nicosia.

This paper is about the author's diffractive (Barrad, 2007) spatial practice, whose work focuses on peacebuilding in Cyprus. A practice that challenges the deformed mental maps of the Nicosians by facilitating the movement of people across the divide in the city's public spaces thanks to actions that instigate political spaces.

Since 2005, with actions such as "Call #192" (2005), the "Public-Private Convoy" (2006), "Alice in Meridianland" (2019) and "Around Nicosia in 80 Minutes" (2022), the author employs spatial practice as a method (Cuff et al., 2020) to produce in-situ knowledge and to share urban imaginaries that revisit Nicosia as a non-divided city. Walking or riding a bike across the divide, participating in playful activities, and taking a public bus on the "other side" are means of bodily engagement that challenge the mental maps of the participants, consequently, their urban imaginaries of exclusion.

The paper investigates the creation of counter-publics (Fraser, 1990) through diffractive spatial practices and their ability to build socially skilled subjectivities (Sennett, 2017). The author discusses how diffractive spatial practices provide means of transforming conflicts constructively and creatively and how they support conflict that involves the political in democratic spatial practices while resisting conflict associated with hegemonic forms of violence. The author revisits the four spatial practices that span 15 years to discuss ways of transforming conflicts thanks to the creation of instant counter-publics. Further on, to share knowledge regarding the construction of shared urban imaginaries.

Keywords: diffractive spatial practice, conflict transformation, counter-publics, public space, mental maps, urban imaginaries, Nicosia

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SOCIAL ROLE OF ZOOLOGICAL PARKS AS URBAN GREEN SPACES IN JAPAN (291)

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In this age of global sustainability, zoological parks (hereafter referred to as zoos) are as urban green spaces increasingly attracting attention in the world because of their positive influence that can directly contribute to various environmental conservation initiatives in urban areas. This trend has also been witnessed in Japan, and zoos are moving away from their former role as leisure facilities that had emphasized its aspects of entertainment, to seeking a way of acting as social educational facilities. This idea is based on the concept of "landscape immersion," which was proposed in the U.S. (G.R. Jones & J.C. Coe et al. 1976) during the 1970s with the aim to create exhibitions of ecosystem including natural environments surrounding the animals, thereby affecting the psychology of the guests and providing environmental education. Plans of zoos based on this method necessarily increases the area of green space, and the landscape design in line with the ecosystems of each animal species forms a various natural environment. This results in creating special green spaces which is unique to zoos and different from other urban green spaces. Zoo can be expected to have a positive impact on the quality of life of citizens such as improving their health and well-being because they provide abundant green space in the built environment. Therefore, this rich natural environment should not be confined within the boundary of the zoo, but should be considered for their potential of playing a role in creating diversity in urban environment. The key point is that zoos should not be used only for the specific purpose of animal observation, but should be seen as a public space by emphasizing its position as urban parks that are integrated with the social life of citizens.

This research aims to clarify the social role of zoos in improving urban green spaces in Japanese cities. To this end, we consider the perspectives from both the management and citizen sides. First, a general analysis of existing 83 zoos in Japan has been conducted based on various factors which determine the characteristics of a city where zoo is located, such as population, environment, and transportation.

Secondly, a questionnaire survey has been conducted with the administrative and management bodies of zoos and 26 out of the total 83 zoos which we sent out the questionnaire survey by email responded it. Some of the results showed that there is a large difference in understanding the concept of the social role of zoos between the practice and the government, and systems of zoos are not prepared to provide public services without making a profit as the primary objective from the government perspective. Thus, it became clear that zoos need to be recognized as a part of the city planning and the role of zoos in providing public spaces to citizens should be identified. In the next step, we plan a comparative analysis of a limited number of urban zoos from citizens perspective. By asking citizens opinions, this research aims to deepen the understanding of how the role of zoos can be extended in creating comprehensive urban green spaces in Japanese cities.

Keywords: zoological park, urban green space, social education, citizen, publicness

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RE-INTRODUCING VILLA GORDIANI: TAILORING THE HISTORICAL LANDSCAPE VALUES WITHIN THE CONTEMPORARY URBAN FABRIC (391)

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The hinterlands of a city, typically characterized by slow development over the course of history were faced with a conflicting period during the past century when urbanization was established as one of the main factors of development. This process unraveled many past remains and traces, however its fast paced and pragmatic approach often times introduced a completely new urban fabric rather than adapting with the old. Thus, these new urban landscapes displayed haphazard spaces of past periods, either in decay or abstracted and isolated. Like a badly concocted chemical formula, these urban landscapes present a multitude of components that barely integrate but rather float around one another without real commitment to the “formula”.

Such is also the case of the Villa Gordiani, an important villa of the ancient Roman period now part of a public archaeological park in the eastern part of the metropolitan city of Rome, along the via Prenestina one of the major consular roads of the ancient Roman fabric. This highly dynamic public park, surrounded by urban development and a multitude of transportation means is juxtaposed against illegible, ephemeral and seemingly out of context archaeological remains. The contemporary urban fabric fails to acknowledge the importance of these monuments beyond a casual visual observation but again, rather floats around them without any true commitment, as pieces detached from the rest of the fabric. This uncommitted relationship doesn't regard archaeological ruins as an active component, but more as a still object, a framed antiquity, an oddity in its own landscape.

In regards to this issue, this research presents the act of tailoring as a tool of action on trying to overcome the duality that exists in this public space. An initial profound research about the stratigraphy of the historical landscape provides us with a strong narrative towards recovering its values, which in turn we can use as a rule of integration of the archaeological assets within the urban landscape, moreover create a common-shared platform where interaction with heritage is a deliberate decision. Understanding heritage as a resource that can be exploited to enhance the quality of our public spaces helps us contextualize the ancient landscape as part of the contemporary life and its urban fabric, thus bridging the present dichotomy of the park. This research then develops how archaeological assets of Villa Gordiani can provide quotidian spatial and social referents, but more importantly act as anchors for secular activities such as leisure, cultural events and other social activities. And as such, the landscape becomes both a physical and cultural entity where the urban engages in conscious place-making and identity forming processes with the heritage.

Keywords: revalorization, urban regeneration, public space, heritage

RE-IMAGINE CAMPUS PUBLIC SPACES TO SUPPORT 15 MIN CAMPUS (407)

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This paper explores the notion of the 15-Minute Cities (15MC) to a less researched field of the "15 min campus" and how to use geo-citizen science to redesign our campuses environments in support of walkability. The 15MC advocates rethinking our mobility systems and the way cities are built to encourage sustainable mobility and support sustainable, climate-neutral, livable, and inclusive cities. The goal is for citizens to meet most daily needs within a 15-minute radius, by walking and cycling. We focused on the campus of the University of Twente, in the Netherlands. The campus hosts good quality roads and cycling infrastructure connecting main spaces and functions. However, it is less suitable for walking or moving around for people with disabilities or, for cultural or other reasons, prefer not to use a bike. Building an inclusive, vibrant and livable campus implies that equity of access for pedestrians should be considered in the design of public spaces (streets, squares and open green spaces) on campus. Public spaces are essential infrastructures underpinning the vibe and social fabric of the University and promoting the physical and mental wellbeing of its users. This paper reports on a project where we 1. identify bottlenecks in access and use of public spaces on campus, with focus on walkability, resourcing to a geo-citizen science approach and 2. redesign these public spaces, with the identified stakeholders and in line with a 15MC campus idea. The main stakeholders involved include UT students and campus managers, the municipality, sustainability organizations on campus, and researchers. The paper reflects on how geo-citizen science can be used to support the provision (quantity/ quality) of public spaces to promote walkability on campus.

Keywords: geo-citizen science, public spaces, walkability, citizen involvement, campus

THE COMMODITIZATION OF CULTURAL HERITAGE IN THE MULTI-CTOR GOVERNANCE OF CHINA: A CASE STUDY OF THE HONGJIANG TRADING TOWN (410)

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Given the rapid urbanization and commercialization in China, recognizing the value of cultural heritage is no longer an issue. On the one hand, with the rise of the tourism sector, the use of unique local cultural resources for place-making and marketing has become a commonly used catalyst for local economic growth. On the other hand, since the era of poverty and shortage has passed and life is becoming more prosperous in most places in China, cultural identity has gradually become the spiritual pursuit of most cities. It is not only the developed coastal areas in southeast China that have aimed to exploit the economic and social benefits of cultural tourism; such an approach has also been widely adopted in developing central and western China.

Although the time of ignoring legacies or making quick money from relics has passed, the current situation does not indicate that heritage is under full protection. On the contrary, heritage with or without physical presence is frequently positioned in a challenging situation because of a pro-growth governance model that intends to fully utilize the economic, cultural, and social values of cultural resources. Moreover, various stakeholders compete with one another to exploit these benefits in different ways. Thus, the fate of tangible and intangible heritage often lies in a more turbulent, uncertain, and problematic position under the contention, competition, and compromise of multiple agents and institutions.

Through a case study of a cultural heritage site named Hongjiang Trading Town in the western part of Hunan Province, China, the pre-sent study reviews the recent (2012–2021) progress of the preservation and reuse of its long-standing historical district and buildings. Profit-seeking commercial developers, local governments driven by political achievements, and indigenous residents have also advocated their interests in this process. Under the influence of both the public and private sectors, numerous forces have been involved in the long and tortuous road to the protection and renovation of this site.

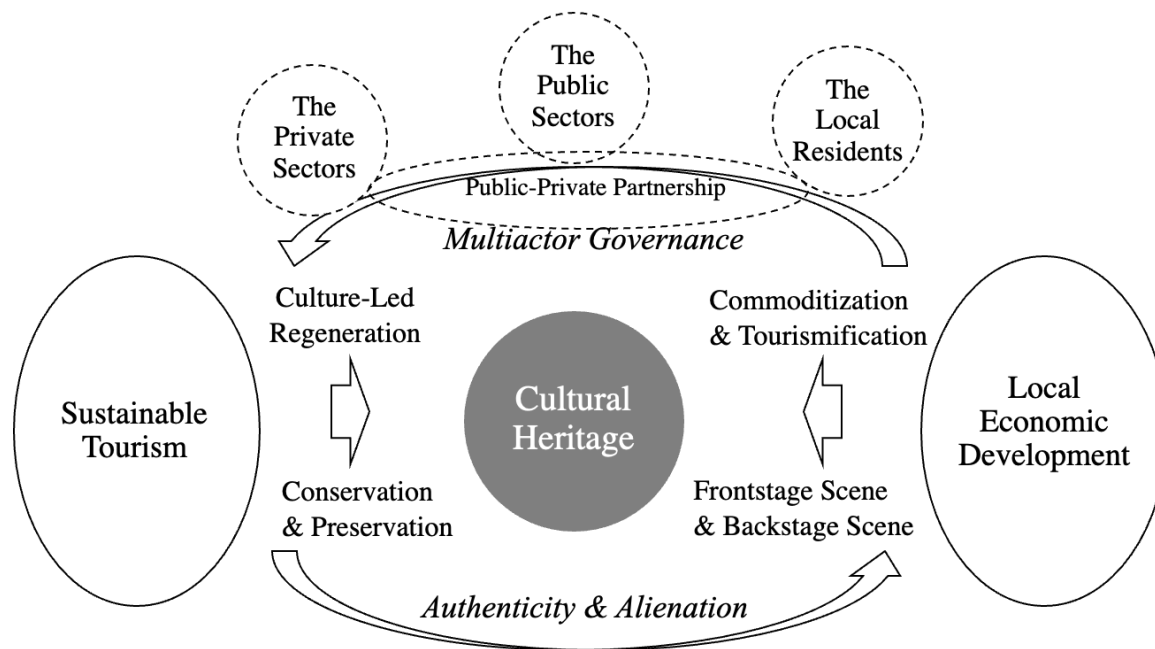


Fig. 1 . Conceptual framework of the sustainable tourism, local economic development, and multiactor governance of Hongjiang

In the case of Hongjiang, the quest for the utilization of its cultural heritage for tourism-centered local economic development evinced a typical case wherein the public and private sectors allied with the local residents to commoditize local assets. The study found that (1) the economic interests of the private investors or the public institutions were at the core of local decision-making in the context of periphery regions in China. (2) Public-private partnership is an efficient tool for bringing in external resources and forming a coalition for tourism development; however, the operation lacked a voice for conserving and preserving cultural heritage. (3) Multiple projects, such as cultural-led regeneration, tourismification, frontstage and backstage scene-scape building, and real estate development, have emerged from the partnership, which embodied the intertwined objectives and competing interests. In summary, the study illustrated the conceptual framework of sustainable tourism, local economic development, and multiactor governance of Hongjiang (see fig 1). Based on these observations, our argument is as follows.

Keywords: Cultural Heritage; Authenticity; Commoditization; Sustainable Tourism; Multiactor Governance

UNDERSTANDING TACTICAL URBANISMS IN DERELICT AREAS (411)

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This paper explores the emergent bottom-up practices in the fields of architecture and urban design within comparative perspectives of two cities. As a temporary, easily affordable interventions that gives the possibility of transforming neglected spaces into vibrant public spaces, tactical urbanism together with creative place-making strategies, presents alternative ways of creating sustainable developments in derelict and underused areas. This study examines the potential of social and physical developments through a reading of case studies of two creative spatial practices: a pop-up garden transformed from an unused derelict space in Favoriten, Vienna and urban community garden in Kuzguncuk, Istanbul. Two cities are chosen according to their multicultural population and diversity. Istanbul is selected as a design city by UNESCO Creative Cities Network in 2017 and Vienna is declared as an open and livable city by its local government.

This research will use media archives and reports, interviews with locals and local governments, site observations, and visual recordings as methods to provide a critical reading on creative public spaces from the view of local users in these neighborhoods.

Reflecting on these emergent ways, this study aims at discussing the production process of tactile urbanism with the practices of locals and decision-making process with cases from İstanbul and Vienna. The comparison between their place-making strategies in tactical urbanism will give important insights for future developments.

Keywords: creative urbanism, public space, tactical, Istanbul

THE SIMPLIFIED COURTYARD AND ITS PUBLIC SPACE IN NORTH CHINA'S SMALL CITIES: SIGNIFICANCE, THREATS, AND OPPORTUNITIES (415)

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This study defined as 'Simplified Courtyard' a type of urban house widely built in the 1970s-1990s in small cities in North China. These houses were all uniformly constructed according to a standard model, with masonry structures, flat roofs, and little decoration, significantly simplified compared to the traditional courtyard houses. They had one single row of three or four principal rooms and one small courtyard. Together with their public and semi-public spaces, Simplified Courtyards constituted the urban landscape characteristic of the early socialist era in small cities.

In the rapid urban transformation of the past few decades, a large part of them was demolished and replaced in a *tabula rasa* approach (Pezzetti, 2019), regardless of their potential urban and historical significance.

Taking the *Taipingjie* community in *Zhengding* as an example, this study investigated the Simplified Courtyard in conjunction with its public space, analyzing their urban significance, threats, and opportunities for regeneration, with the aim of drawing adequate attention to this unique but long-neglected urban component and contributing to their sustainable subsistence in the future.

The urban fabric of Simplified Courtyards is of great typo-morphological significance in that it presents a modern variant of the traditional *hutong*. It continued the *hutongs'* osmotic relation among private spaces, semi-public and public spaces along the alleys (Collotti, 2019), preserving the *layered morphology* (Pezzetti, 2019) against the increasingly monotonous urban landscape in contemporary China (Liu and Pezzetti, 2022). Concerning social and cultural aspects, as opposed to the indifferent acquaintanceship in the now-prevalent gated communities, the Simplified Courtyards and their compact public spaces retained the cooperative and self-governing social structure of the community from the early socialist era. They embodied the collective memory and sustained a robust local identity of the residents.

Today, these unique and significant Simplified Courtyard communities are facing new threats. The ever-growing urban population imposed tremendous pressure on their low floor area ratio, pushing the residents to refurbish their houses and add extra floors. The rising volumes have deteriorated the alleys out of comfortable spatial proportions, adding to the conflict between the narrow public spaces of the alleys and modern lifestyles demanding some expansive outdoor spaces and vehicular traffic. Consequently, real estate developers attempt to replace Simplified Courtyards with profitable apartment buildings equipped with modern facilities.

Since such a rude replacement would be not only culturally disastrous but also unsustainable, the optimal choice should be the regeneration of the courtyards and their urban spaces, enhancing these communities' living conditions and environment while ensuring their sustainable coexistence and evolution in the modern city.

To this end, the study has identified several opportunities for such regenerations. The project of *Xiaoxihu* in *Nanjing* (Li *et al.*, 2022) offered references and inspiration. First, as the real estate industry in China is slowing down, real estate developers have to restrain their plans to replace the Simplified Courtyards, which constitutes an opportunity and premises for a slow and elaborate regeneration. Then, residents' social connection and collective identity make deep public participation possible, as was successfully done in *Xiaoxihu*. Finally yet importantly, the basic infrastructure (electricity, drainage, pavements, etc.) was substantially upgraded in recent decades, which laid a solid foundation for future regeneration.

Keywords: Simplified Courtyard, public space, urban regeneration

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URBAN COMMUNITY REGENERATION IN CHINA: PLANNING RESPONSE, ROLE RELATIONSHIP AND EXPERIENCE IN AN ERA OF CHANGE (453)

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Urban regeneration has been an enduring theme in globalization and urbanization, from the developing countries to the developed countries (Li, Hui, Chen, Lang,& Guo, 2019). At the new development stage, China's urban regeneration initiatives have fully entered the community level, which is closely related to people's lives. The community is the micro-context of the social system and the window to observe the relationship between the state and society. Community regeneration has thus become an important means for the state to participate in urban governance, reconcile social conflicts, and promote community development.

From the perspective of historical development, the background of urban community regeneration in China is very significantly different from that of Western countries. In Western countries, large-scale urban community regeneration occurred after the 1960s, mainly focusing on the decay of inner cities due to continuous sub-urbanization (Altshuler, & Luberooff, 2004; Loney, M.,1983; Banks, S., & Carpenter, M.,2017). And it was a holistic rejuvenation that included economic, social, and physical environment. In contrast, China's urban and rural planning system was born during the planned economy, and its historical evolution began as an extension of the socialist "economic plan"(Yang, Chen, 2020). This is due to the state's strict control of new construction land, the lure of high profits, and even the inducement to create a new image of the city, etc.

This paper adopts a literature review approach to comprehensively examine and analyze the spatial planning responses and their changing role relationships at different stages of urban community regeneration in China since 1949, from Danwei, neighborhood to community system. The study found that, in the context of different policies of the times: i) the regeneration planning theory has moved from a single physical determinism and functionalism, to a more humanistic and refined interdisciplinary theoretical integration and technical application; ii) The regeneration planning approach has moved from small-scale physical regeneration with the main objectives of residential single-unit renovation and infrastructure construction, to a multi-dimensional and multi-objective macro-comprehensive exploration of social management, economic industry, cultural preservation, low-carbon green, and policy mechanisms; iii) the regeneration planning concept has moved from demolition and reconstruction to micro-regeneration, conservation and socialization; iv) the relationship of regeneration roles has moved from absolute government domination to a new trend of multiple participation and joint governance by government, market and society.

Based on these findings, further empirical summaries will be presented, which will provide useful references for cities around the world, in making wiser regeneration planning and construction decisions.

Keywords: Community Regeneration; Planning Response; Role Relationship; Experience and Lessons; China

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A PRELIMINARY STUDY ON PLANNING GUIDELINES FOR THE TRANSFORMATION OF PUBLIC SPACE IN TRADITIONAL RESIDENTIAL AREAS IN THE COUNTY TOWN:THE EXAMPLE OF TYPICAL RESIDENTIAL AREAS IN PUCHENG COUNTY, CHINA (458)

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By the end of 2021, there were about 1,472 county towns in China, accounting for about 51 percent of all cities. And most county towns are several thousand years old, and the old city of the county town is an area historically enclosed by city walls, where people have long lived in independent courtyard houses, such as Siheyuan. For most ordinary county towns, the architectural texture and spatial pattern of these traditional residential areas are well preserved, but after long-term self-building and transformation by residents, most buildings with historic value no longer exist, and most traditional houses have been turned into modern flat-roofed townhouses occupying the land plots. With the development of the times, the lack of public space has become a major planning problem for these traditional communities, including the lack of public green spaces and squares and the difficulty of providing more open spaces, the scale of public services such as medical stations and libraries is insufficient, and the difficulty of providing more parking spaces to meet the needs of residents.

China's previous solution was mainly from the economic considerations, demolishing residential areas entirely and rebuilding them into low-density, high-plot gated communities. Under the new development needs, on the one hand, China pays more attention to maintaining the traditional architectural texture and spatial pattern, respecting residents' wishes, and advocating small-scale and gradual organic renewal and micro-transformation. On the other hand, as China begins to further promote urbanization in county towns, addressing the lack or inadequacy of public space becomes key to promoting high-quality development in county towns.

Pucheng County in Shaanxi Province has a history of more than 1,500 years, and the old city of the county town with a total land area of about 152.2 hectares. The total land area of the selected typical traditional residential area is about 7 hectares, there are 238 independent courtyard houses with scales of 8*20m, 8.5*30m, 9*25m, etc.. This area is largely residential, with no open spaces such as green spaces and squares, and a lack of public services and parking spaces. This paper attempts to reconcile the multiple interests of local residents, tenants, property managers, the government and developers to construct a set of planning guidelines that can transform some private residential spaces into public spaces without destroying the architectural texture and spatial pattern.

The guidelines cover three specific areas. The first is the guideline for land use regulation. By redeploying residents' income to build additional buildings in the more economically valuable areas of the residential area adjacent to urban roads, through replacing vacant dwellings with new additions along the street, to provide public spaces such as public green spaces, squares and parking lots. The second is the guideline for open roofs. By consulting residents' wishes and allocating profit-making proceeds, the individual small-scale flat roofs of partial townhouses in

the residential area are opened up and strung together into larger-scale public spaces, transformed into rooftop gardens, cafes, etc.. The third is the guideline for building replacement. Through the government and developers coordination to fund leases, buildings that do not meet the standards for residential daylight, idle and unwilling to be demolished are replaced with medical stations, libraries and other public services. Finally, the above planning guidelines are expressed in the form of diagrams and articles, and a planning mechanism is formed to coordinate the multi-interests among residents, the government and developers.

It is hoped that the exploration of this planning guideline will provide a new way of thinking about the development and transformation of residential land in the traditional residential areas of largely ordinary county towns in China.

Keywords: Public space; Micro-renewal; County towns; Traditional residential areas; Planning guidelines

Funding:

Supported by the General Program of National Natural Science Foundation of China (Grant No. 52178056) and the Innovation Capability Support Program of Shaanxi (Program No. 2021KJXX-33).

THE EFFECTS OF THE OLYMPIC AGENDA 2020 ON URBAN PLANNING FOR MEGA-EVENTS: ASSESSING CASE STUDIES OF FUTURE OLYMPIC GAMES AND OUTLINING NEW RECOMMENDATIONS (462)

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Cities resort to the Olympics to catalyse development through large urban regeneration projects that boost their international profiles. However, the Games are increasingly expensive events, with economic risks and social and environmental impacts that compromise sustainable development. For these reasons, strong opposition movements have risen against the Games, forcing the International Olympic Committee (IOC) to reformulate the way they are organised. Thus, Olympic Agenda 2020 was implemented to enhance the event's sustainability, credibility and youth appeal. Paris 2024 and Milan-Cortina 2026 will be the first Summer and Winter Olympics to fully benefit from it.

This research focuses on the implementation of Olympic Agenda 2020 regarding issues of urban planning. It is based on the hypothesis that, being ambitious and innovative, the urban-related measures introduced by Olympic Agenda 2020 are not easy to implement in practice and that, along the preparations for the Paris 2024 and Milan-Cortina 2026 Olympic Games, difficulties are emerging that can compromise the goals set by the IOC. The objective is to frame the preparations for these two editions within the IOC goals and identify any inefficiencies or gaps of the Agenda to develop new recommendations that address them, contributing to continue enhancing the urban sustainability of the event. It analyses the Agenda and subsequent IOC policies to build a comprehensive set of reforms that represent urban sustainability ambitions of the IOC as the owner of the Olympic Games: what are the urban-related objectives of the Agenda and how are they supposed to be implemented? Resorting to online data, field visits and interviews with core stakeholders, the next two editions of the event serve as case studies to identify glitches in such policies that are preventing future hosts to fully achieve the Agenda's goals: what situations occurring during the preparations for the Paris 2024 and Milan-Cortina 2026 Olympic Games are compromising the achievement of these objectives and why? A list of recommendations is developed to contribute to further mitigate these glitches, improve the Agenda's efficiency and the urban sustainability of future Games: how can these situations be addressed and mitigated to prevent that they happen again in future editions of the Games? To answer these questions, this research follows a policy making approach positioned in the point of view of the IOC as the owner of the Olympic Games, exploring possible courses of action that are within the organisation's reach.

Keywords: Paris 2024, Milan-Cortina 2026, sustainability, public opposition, mega-event planning, Mega-events, urban planning, Olympic Agenda 2020, Olympic Games

PLACES AND SPACES OF FASHION IN THE HISTORIC CITY CENTRES OF MAJOR POLISH CITIES (469)

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In recent years many (traditional) clothing retail establishments and services have disappeared from the historic, inner city areas of major Polish cities as their customers switched attention to large shopping centres and big fashion chains while pressure of tourist-oriented retail and new, non-retail functions (e.g. catering) speeded up this process. This does not mean however that establishments linked with fashion have completely disappeared from city centres. As follows, the paper aims to explore the relatively recent phenomenon linked with the survival and (re)emergence of downtown independent fashion establishments focused on the sale and/or production of sustainable, ethical and ecological fashion as an alternative to fast, mass produced clothing and apparel. The historic city centres of two major Polish cities, i.e. Krakow and Poznań will serve as an illustration of the issue. Basing our analysis on field work (mapping) and interviews with independent fashion designers and owners of fashion shops, independent fashion brands and other spaces linked with fashion design and production which function in the inner city of Krakow conducted in 2021-2022, we will inquire into their creative and business motivations, location factors and networks of cooperation such firms are involved in. By doing so we intend to show various dimensions of impact such businesses may exert, apart from economic considerations contributing to the sense of place of particular quarters and creation of interesting third spaces of social encounters.

Keywords: historic quarters, city centres, fashion, Poland, Krakow, Poznan

USING SPACE SYNTAX ANALYSIS TO EVALUATE THE ACCESSIBILITY OF OPEN SPACES IN NEIGHBORHOODS: THE CASE OF NEW CITIES IN SEOUL METROPOLITAN AREA (474)

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The importance of urban facilities within neighborhoods has been highlighted due to social distancing measures from the COVID-19 pandemic. Demand for open spaces (green spaces such as parks, forests, and waterfronts, as well as commercial spaces such as shopping centers and arcades) has increased, and the location and accessibility of these facilities have become major concerns. In addition, the importance of Paris's 15-minute city plan and sustainable urban development has increased, and discussions have been underway on how to appropriately locate the necessary open spaces within neighborhoods to establish pedestrian-friendly neighborhoods. Many new cities in the Seoul metropolitan area have been constructed to reflect these urban trends. Hence, this study aims to investigate whether open spaces are appropriately located within neighborhoods in these Korean new cities.

To evaluate the appropriateness of open space locations and examine the consequent urban structure within neighborhoods, this study focuses on several target areas, including the first, second, and third-phase new cities in the Seoul metropolitan area. Subject areas of the research include couple of cities from each phase and three different districts in Seoul. The analysis begins with a reconstruction of each subject area into neighborhoods based on neighborhood classification criteria. Open space data for each neighborhood is then collected and categorized by type. The study further examines various socioeconomic indicators, such as residential and population density, and urban-geographic factors like the location of transit stations and slope gradients. Most importantly, space syntax analysis is used to analyze the road structure in each neighborhood, which is conducted respectively on car roads and pedestrian paths. An additional space syntax indicator for open space units derived from structural features of adjacent roads is introduced to evaluate the accessibility of the open space units. Finally, regression analysis between the space syntax indices and the other factors is conducted to evaluate the appropriateness of open space placement within each neighborhood.

This study predicts the appropriate location of open spaces within neighborhoods from the perspective of urban structure by applying space syntax analysis on Korean new cities. From the examination of urban structure transformation over time in Seoul metropolitan area, the results provide insight into the open space placement at a fine-grained level. As the demand for neighborhood facilities increases, this study will serve as an important foundation for urban design process in designing new cities and vitalising urban neighborhoods.

Keywords: Open Space, Neighborhood, Spatial Accessibility, Space Syntax, Korean New City

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TOWARDS HIGHER-DENSITY COMMUNITIES: A DISRUPTIVE TRANSITION? (THE CASE OF NANHUAN NEW RESIDENTIAL COMMUNITY IN SUZHOU, CHINA (478)

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The recent development guidelines issued by the Chinese National Government require an efficient use of resources for a sustainable development beyond mere growth. These guidelines promote also the transformation of the “old” residential communities, the ones built cheap and fast before 2000, which often are obsolete and do not offer what can be considered a decent house in an increasing middle-class society. The indication of the National Government opens up a huge regeneration task in terms of built stock quantities, involving social, ecological and economic aspects.

The spatial and environmental qualities the regeneration should achieve are not specified by the national guidelines, but according to our research one element is being changed: high-density urban forms are increasingly supported by some local governments (Su, Wei, Zhao 2017). In addition to this radical change some forms of participation of residents are also introduced into the decision-making process in spatial planning.

The research studied a residential community in Suzhou, a 12 million people city in the Yangtze River Delta area, NanHuan new community, that was a pilot action of regeneration and densification that in 2010 demolished one part of a resettlement village and tripled its FAR. This new urban environment – new morphology and building types: no super-blocks, mixed uses, underground parking, high-rises and linear commercial structures – was built as an upgrading of the pre-existing conditions, which were themselves an upgrading of the pre-existing conditions in the old town in the early '80s (Wu, 2019).

Despite improvements in housing, public space and welfare provision, the last version of NanHuan is criticized both by its inhabitants and the city officials who promoted it, was labeled as a failure and – differently from the original intentions –was not repeated in its public-led process elsewhere in the city, even though private real estate companies are replicating similar transformations (Webster, 2021).

This critique and its multiple reasons have been explored with both quantitative (sensor data, mapping and space syntax) and qualitative methods (surveys, in-depth interviews, questionnaires and meetings), focusing on the planning process, the money spent and the social sustainability of the process.

The NanHuan case shows that the radical transition is perceived as disruptive in relation to the advantages obtained from the transformation and that socially sustainable practices must be improved. The case shows as well that a debate about the urban spatial qualities a moderate prosperous society - which is one of the main targets of the Chinese Communist Party - should have is needed.

The NanHuan case shows also how adaptivity is not an option if durability – in every sense: living standards, structural capacity, socio-political demands – is not conceived when the buildings are designed, but in a fast-changing society as China is the idea of durability does not seem to hold.

Keywords: High-density, transition, socially sustainable development, durability, China

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INTEGRATING NARRATIVITY IN THE COGNITION OF URBAN MORPHOLOGY: THE MENDONG AREA IN NANJING (494)

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The city, like all urban artefacts, can only be defined by precise reference to space and time (Rossi, 1982) which record and transcribe in spatial narrativity the transformations induced by various agents and stakeholders. Historic towns and urban areas are therefore spatial structures that express the evolution of a society and of its cultural identity (Valletta Principle, 2011). It is necessary to read the past of the city to establish the cognition of its transformation as “continuing to write” on a layered text (Pezzetti, 2020). The first issue is to start regarding also the Chinese city in its urban strata, or as a *palimpsest* (Corboz, 1983) which has been continuously overwritten by human actions adding and scratching layers. Besides, the spatial configuration is itself the “ravelling, in time, of a story” (Semerani, 1995) expressing the history and memory of the site as signified (Pezzetti, 2020). Considering this dual attribute of the city referring to both space and time, narrativity provides the ability to read and cognise transformations if integrated with the morphological analysis, establishing a relationship between the city form and the forces working on it.

This paper takes the Mendong area in Nanjing as an example.

The present urban layout of Nanjing is inherited from the Ming Dynasty (A.D. 1368) and is characterized by the traditional urban morphology and cultural elements of the Mendong area. Besides, while the relation between the Mendong area and the historical urban structure maintained continuity in the historical subrogation since the Song Dynasty (A.D. 1129), the valued traditional urban tissue changed significantly and even disappeared during the urban development process.

The current state of the Mendong area can be clarified if read as a system of overlapped layers, that is a palimpsest of ancient and recent fabrics, absences and existences, traces and memories (Pezzetti, 2019), that we need to entangle to understand the historic superposition of planning and design acts.

Thus, the pre-condition for establishing a full understanding of the historical urban space in China should be the clarification and cognition of the forces and events acting on the urban morphology.

The notion of “*chronotope*” (Bakhtin, 1981), expressing the interplay between space and time in the novel, was used by the authors to correlate spatial configurations with the related concepts of time in the urban discourse. Besides, *Layering morphology* (Pezzetti, 2019) is a conceptual device providing a set of reading tools delving into the dialects between permanence and change, where permanence expresses a concept of duration that is not reduced to inertia but rather implies the resilience belonging to manmade places. Focussing on the urban development of Nanjing, the paper selects some representative sections from three historic periods: emerging (A.D.1368-1949), development (the 1970s-1990s) and renovation (after 2000). Through historic

documents and maps, the site is discussed from the combined perspective of morphology and narrativity.

This comprehensive perspective aims to provide some sounding basis for a full understanding of the urban space in the Mendong area. Besides, considering the vulnerability of physical space in traditional Chinese contexts, this paper also tries to map the valued but vanished historical spaces while proposing a criticism from the perspective of historical value and meaning.

Keywords: Urban morphology, Historical city, Evolution and transformation, Narrativity, Mendong Nanjing

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ON THE ROAD THROUGH CINEMATIC LANDSCAPES : THE IMAGINATION OF URBANIZED MOTORWAY LANDSCAPES IN THE CONTEMPORARY FICTION FILMS STEVE+SKY AND AMERICAN HONEY (552)

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This paper explores how cinematic perceptions can contribute to the understanding of everyday life and lived spaces of contemporary motorway landscapes. As public spaces, these environments are often subjected to persistent negative framing by spatial professionals. The urban activities, such as residential, commercial and recreational functions, emerging along these roads as motels, bars, parking lots, brothels, etc., reflect an urban culture that has been displaced to the margins of society. Nevertheless, as is true of the rest of the world, these (sub)cultures are increasingly filled with, and determined by, audiovisual moving images. These images, including (fiction) film images, contribute to the understanding, interpretation and modification of our environment, especially regarding these neglected spaces. Framed within the close interconnection of cinema and urban landscapes, this research focusses on two fiction films that pay special attention to the everyday life of these motorway landscapes as a case study. *Steve+Sky* (Felix Van Groeningen, 2004) and *American Honey* (Andrea Arnold, 2016) are spatially analyzed in detail (using video annotation software) to uncover the morphological and sociological aspects of the cinematic imagination of the Flemish and American motorway landscapes. The results of this comparative analysis reveal how the narrative and visual imaginations of these films provide insight regarding the intrinsic characteristics, experience value and emotional attachments of these spaces. In particular, the poetic representation of outlaw youths within such marginal urbanized settings both encourages appreciation and invites symbolic interpretation of these maligned spaces. The conclusion highlights the capacity of film and its analysis to accelerate a deeper understanding of motorway landscapes in particular, and lived spaces in general. Furthermore, for spatial planners, this deeper understanding contributes to an enriched appreciation for the significance of these motorway spaces as public space, thereby encouraging a more nuanced planning culture.

Keywords: film, culture, motorway landscape, imagination

THE NATIONAL VILLAGE AND THE NATIONALITIES IN VILLAGE: THE NATIONAL IDENTITY OF HUI AND EVOLUTION OF PUBLIC SPACE AND DWELLINGS IN XIZHOU OLD TOWN, YUNNAN PROVINCE (561)

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Multinational mixed residence is one of the characteristics of southwest China. Yunnan Province, which inhabited by 26 nationalities, is the representative of the southwest China. Therefore, people outside the province always recognize specific regions, towns and even villages inside Yunnan Province from the national identity of the residents. This cognitive way not only continuously affects the identity of local residents, but also affects their building activities and concept of public space and dwellings. As the dynamic factor of cultural convergence, national identity is constantly playing an important role and is repeatedly modified and strengthened in the development of tourism.

Xizhou Old Town is listed in the *Chinese Famous Towns in History and Culture*, which is located between Cang Mountain and Erhai Lake in Yunnan Province, the core area of Dali culture. Based on the work of national identification from 1949 to 1954 in China, most of the people living in Xizhou Old Town were identified as Bai nationality. Since then, Xizhou Old Town is regarded as a traditional and typical town of Bai nationality and the long history of Dali has deepened this realization. The dwellings, customs and clothing here are all recognized as Bai. However, people of Hui nationality who account for about 10% of the total population of Xizhou Old Town lived on the north side. They have participated in the most social and economic activities of Xizhou especially the transportation of teas since the late of the Qing Dynasty and played an important role among them. Under the condition of long-term coexistence with the Bai nationality, the Hui people on the one hand, have maintained their own social and cultural characteristics, including beliefs, clothing, religious activities, etc., but on the other hand, they have changed imperceptibly, such as family concepts, foods and ways of collective activities. The aspects of changes and persistence, for one side, reflect the hesitation and vacillation mentality of Hui people in their own identity and the related lifestyle between their history and present socio-economic conditions, and for another side the national identity is closely bound with their lives in public space and dwellings.

This paper attempts to use the methods of oral history and morphological analysis to sort out the development of residents of Hui nationality in Xizhou Old Town since the late of the Qing Dynasty and explore the evolution process of public space and dwellings of Hui people. Then to summarize the relationship between national identity and the spatial form of daily life through the combination of the two aspects. Taking the lives of the Bai and Hui people in Xizhou under the background of tourism as a slice, this paper also makes considerations and critique on the impact of the cognitive way based on national identity on the conservation and regeneration of traditional towns and villages in Yunnan.

Keywords: national identify, public space, dwellings, traditional town

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EXPLORING THE CONTEXTUAL LINKS BETWEEN TRANSNATIONAL ARCHITECTS AND LOCAL CULTURAL FLAGSHIPS THROUGH 5 SANAA PROJECTS (580)

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In recent decades, cultural flagships have become a way to put cities under the spotlight on a global stage. Resorting to internationally famous designers, opening opportunities for international investors, and attracting global attention and tourism have become common strategies circulating cities around the world (Grodach, 2008). Cultural flagships and their connected places are expected to play a key role in the physical transformation of one area or even improve the image of an entire city. Given their “exceptional nature,” cultural flagships are expected to require specialized designers perceived as being more capable of delivering projects in different countries and cities. The most often cited example is the above-mentioned Guggenheim Bilbao Museum and the much promoted, discussed and debated “Bilbao Effect” (González, 2011). The highly circulated thinking was that transnational project + star architecture = significant urban regeneration and global recognition. Substantial research work has been discussed individual projects or in comparing projects and their urban effects to examine how similar design approaches land in differing contexts (Ponzini, 2020). However, less attention has been focused on the specific link between the transnational trajectories of designers and the local contexts where they operate.

Drawing on secondary data, this paper explores this link by selecting and following the transnational firm SANAA, using five example cases of cultural flagships to further unpack the specific mechanisms of this link: the 21st Century Museum of Contemporary Art in Kanazawa, Japan; the Rolex Learning Center in Lausanne, Switzerland; the Louvre Lens Museum in Louvre, France; the Tsuruoka Cultural Center in Tsuruoka, Japan; the Bocconi University New Campus in Milan, Italy. SANAA has been selected for being a firm with a consistent architectural style and language across their projects while yet claiming to maintain a site sensitivity within their work. The intention is to examine the similarities and differences between these projects in terms of how they relate and interact with their local contexts or else exist independently of them. We pay particular attention to the mobilities of the firm, the design solutions, technologies used, and the importance of contextual factors in the success of projects as well as of urban transformations attached to them. We intend to call attention to the transnational decision making and design process in order to see both the design firm and the projects in relation to place. This exercise intends to test a methodology to be expanded and built upon in the future by considering different firms and the ways in which they operate in different contexts.

Keywords: transnational architecture, cultural flagships, context, star architects

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EXPLORING FEMINISMS AND COMMONING WITHIN CONSTRUCTING URBAN PEACE PROCESSES (604)

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The turbulence the world is going through is reinforcing the idea that peace-building is a central issue in ensuring better urban futures. Discourses and practices of tolerance towards differences highlight or, on the contrary, hide the tensions immanent in the encounters and exchanges between different urban cultures that make vibrant territories. Levels of quality of urban life also depend on these dynamics and how they are implemented in public spaces.

This contribution discusses what it means in the urban context to address the issue of peace building in everyday life and places, what are the risks of building peace processes in urban contexts, as well as how much the impact differs depending on people, spaces and resources. Specifically, the contribution aims to reflect on the real and/or potential role played by women in such processes and does so by focusing on the binomial feminisms-commoning, through which it is possible to observe and work with women in experiences of mutualism that nurture forms of collective life and paths of re-appropriation of spaces, practices and rights in urban scenarios.

The paper explores, by examining literature and EU policies, the relationships among feminist practices and urban commons and aims to contribute to the debate by setting the framework for developing renewed interpretative categories as expression of social, cultural, and political theorisation of everyday life. The emerging categories will be tested through listening campaigns and civic engagement approaches within the vibrant political landscape concerning urban commons and feminisms in the city of Naples.

Keywords: constructing peace, everyday life, feminist practices, urban commons, engaged researchers

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THE RISE OF SOCIAL-MEDIA-POPULAR-PLACES IN CHINA: THE TRANSFORMATION OF PLACE IDENTITY AND PUBLIC SPACES IN THE NEW MEDIA ERA (613)

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In the new media era, social media plays an important role, as its impact not only affects people, but also places (Peng, Strijker & Wu, 2020). This paper analyzes the phenomenon of the rise of social-media-popular-places in China, studies social media's impact on place identity and public spaces of eight social-media-popular-places cases—Wukang Road, Tianzifang, South Luogu Lane, Yongqingfang, Nantou old city, Great Tang mall, Shiba old city, Wuzhen—, investigates both the benefits and conflicts in the process of social media's impact, and explores the significance of such impact to urban planners in placemaking and urban regeneration. With much exposure to social media in the era of information explosion, some social-media-popular-places and their public spaces have already experienced unexpected changes and transitions in both social and physical aspects. Although some social-media-popular-places gained good exposure and reputation through social media networks which attracts many people to visit and increase the local economy and vitality, some social-media-popular-places also faced conflicts and problems, such as the conflicts between locals and outsiders, losing authenticity, the copycat effect, gentrification, over-marketing and cultural commercialization. Furthermore, social media could affect the urban design and urban generation of public spaces, which brought some tensions such as “place making or place marketing” and “form follows function or form follows Instagram”.

At the same time, as social media is a real-time sensor of people's activity and conversation, it enables and establishes a dialogue between various stakeholders and diverse urban cultures. With the development of different media types, more citizens' and the public's voices could be heard through social media apps on smartphones, rather than only the official government's opinion published in traditional paper media in the past. The literature review shows that it is easier and more convenient to collect citizen's perceptions of place identity in public spaces through social media's online posts and reviews than through traditional surveys and questionnaires (Abdul-Rahman, 2021). Through the study of the eight cases of social-media-popular-places in China, this paper analyzes the conflicts and problems those cases are facing now, the popularity types, the process of becoming popular through the stimulation of important events and activities exposure on social media. It investigates this gap in measuring public place identity through online reviews on Weibo (one of the most popular Chinese social media platforms, similar to Twitter), and it explores the potential of using such social media data for evaluating the transformation of place identity and public spaces through three aspects: meaning, activity, and form (Punter, 1991). Finally, this paper proposes future research questions and states the significance of the findings in the fields of urban design and planning, emphasizing social media as a public participation and co-create platform to guide the construction of more livable and sustainable social-media-popular places.



@Figure1. Eight social-media-popular-places cases (Wukang Road, Tianzifang, South Luogu Lane, Yongqingfang, Nantou old city, Great Tang mall, Shiba old city, Wuzhen): the places with social media's impact (Photo sources: <https://m.weibo.cn/>)

Keywords: social-media-popular-places, place identity, placemaking, Weibo

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ECOMUSEUM AND COMMUNITY MUSEUMS AS PLANNING DEVICES FOR LANDSCAPES' CARE? LESSONS FROM SOUTHERN EUROPE (615)

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Moving from the assumption that public spaces are reservoirs of territorial heritage (Magnaghi, 2020), and that they constitute the tissue of everyday landscapes (Pizziolo et al., 2003), as the living environment for humans and non-humans beings (Haraway, 2015; Tsing, 2015), this contribution questions if and how experimental, community-based planning practices can contribute to the care of such spaces, pursuing inclusion and ecological justice as horizons of action.

The contribution will explore a particular set of practices i.e., ecomuseums and community museums, that have long been considered opportunities for valuing the tangible and intangible signs of the past to foster processes of local development and emancipation for the most distressed groups, through a Freirean approach to education (de Varine, 2017).

Born in France in the 70s, and spread worldwide within the field of museology and its reconfiguration toward social justice (Chagas, 2010; Moutinho & Primo, 2021), in some cases ecomuseums and community museums have become devices aimed at linking institutionalized planning processes with insurgent practices focused on a reconceptualization of memories, identities, heritage, and landscapes, as means for reimagining present and future territorial assets (Dal Santo et al., 2017).

However, despite a growing enthusiasm around ecomuseums and community museums, there is evidence of several pitfalls that permeate such experiences, even in the most paradigmatic cases (Hauenschild, 1988).

In this framework, the author digs into tensions, frictions, conflicts, and dynamics of power hidden beyond such practices, moving from her direct engagement in a long-term action-research process conducted in southern Italy, and a set of case-study research conducted between Spain and Portugal.

Blending both the urban planning and museology standpoints – as well as academic knowledge with engagement praxes –, the inquiry has followed a transdisciplinary approach (Roque-Hernández, 2022).

Findings will provide some reflections concerned with the possibilities of displaying, understanding, and addressing various forms of struggles through the lens of ecomuseums and community museums, discussing their processes of creation, development in the long run, challenges, and perspectives.

Conclusions will open some windows of opportunities on how such devices can be practiced as a way for taking care of and reconstructing the broken social-ecological and democratic relations in everyday landscapes, under specific conditions, and their possible nexus with institutional planning and policies.

Keywords: Community engagement, Justice, Heritage

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ANALYTICAL STUDY OF HOSPITALITY CULTURE AND URBAN IDENTITY IN RED SEA COASTAL PORT CITIES: CASE STUDY OF JEDDAH SAUDI ARABIA (616)

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Jeddah, 'the Bride of the Red Sea' is the oldest and most famous coastal port city in Saudi Arabia. Around 3000 years old it, has hosted pilgrims and visitors and developed, spatial and cultural approaches to welcome visitors.

The Kingdom of Saudi Arabia is currently developing actions in relation to its Vision 2030 policy, introduced in March 2017, that aims to reshape the Saudi economy away from extractive industries. A critical part of this policy is developing tourism as a major aspect of future activity (Vision, 2017).

Among the most important of the programs within Vision 2030, is the Quality-of-Life Program to develop the tourism sector and mass tourism. The Port of Jeddah will go through significant development to accommodate cruise liners and their passengers as an outcome of this. Currently tourist number are each year with reaching 3,500 in February 2022 with ambitions set out to increase this by million by 2025 and 6,029 of pilgrims performing Hajj reached in 2022 primarily through sea (Statistics, 2022).

This research positions this growth strategy within the cultural heritage traditions and spatial, cultural, and social identity of hospitality in Jeddah and Saudi Arabia. It seeks to define an understanding of the culture and spatiality of Saudi hospitality coastal in port cities historically, currently and in the future.

This study presents findings based on a literature review that charts the evolution and development of hospitality in Jeddah, identifying developments and changes to spaces of hospitality over time with a particular focus on the forms of building and urban space that have been created during this process. The work will enable future developments to be positioned effectively within the context of Vision 2030 in addition to the significant changes to hospitality, arrival infrastructure and passenger demographics that will arise in future.

The result is a critique and dialogue between past rituals, culture and future aspirations, thus improving the quality of tourists' experiences during their visit to the Kingdom.

Keywords: Mass tourism, Port citie, Culture and hospitality of Jeddah

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ANALYSIS OF ACCESS TO RETAIL FACILITIES AMONG GENTRIFICATION AND TOURISTIFICATION IN LISBON CITY CENTRE (621)

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While transformation is inherent to the urban, the characteristics of such processes are significantly different over the years. The ongoing transformation resulting from the transition to post-industrial cities (Jayne, 2006) has been compounded by the growing importance of the tourism sector. The urban landscape, especially of their main and oldest historic centres, makes up for some of the functional decline with the increased demand from tourists who travel to these urban centres in search of leisure and authenticity (Guimarães, 2022).

This is the situation currently occurring in Lisbon, with a particular development over the last decade. Driven by the aftermath of the global financial crisis, processes of residential gentrification have been detected in different central neighbourhoods of Lisbon (Barata-Salgueiro et al., 2017). Although with some uncertainty as to the effective share of responsibility, it is assumed that the dissemination of local accommodation for tourists, as well as foreign investment, has led to an increase in the price of permanent housing in Lisbon. This has harmed local population that is facing difficulty in renting and purchasing housing at prices consistent with the generality of national wages. However, besides the impacts on the residential sector, the change in the urban environment is also reflected in other elements of daily life (Santamaria & Filis, 2019). One of the elements that has been gaining prominence, both in academia (Hubbard, 2017) and in civil society, is the way in which the commercial fabric has been adapting in the areas most harshly pressured by tourism.

Several recent studies have focused on the analysis of commercial gentrification in Lisbon (Guimarães, 2022), following the growing interest in the subject. These studies have, however, focused on the supply side, trying to understand how the commercial landscape adjusts to tourism. In this paper we look at the demand side, trying to understand how the local population of some tourist neighbourhoods are affected by this change in the commercial fabric. Having as area of analysis the Alfama neighbourhood, in the centre of Lisbon, we circumscribe our study to the elderly population, considered as vulnerable to changes in commerce, especially in the economic and mobility dimensions. Furthermore, we also mobilize the concept of access, in the several dimensions defined by Levesque (2013) in studies focused on health, because we consider that the possibility of accessing the commercial fabric should be interpreted in a broader way than the mere binomial 'presence vs absence' of commercial establishments.

In this paper we present the results of 50 interviews conducted to this set of population, between June and August 2022. Preliminary conclusions (existing at the time of submission of this abstract) point to the existence of limitations in the access to commercial fabric resulting from the recent change in commerce. It remains to be confirmed what is the responsibility of the process of touristification in this evolution of retail, given that an evolutionary path is considered to be 'natural' in this sector. Conclusively, the analysis of the interviews also suggests that there is a relative resilience of the elderly population, partially able to adapt to some of the changes.

Keywords: Lisbon; Retail gentrification; Access; Touristification

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THE INNOVATIVE FRAMEWORK AND IMPLEMENTATION STRATEGY OF INTEGRATED PLANNING (623)

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Integrated planning relies on a balance of social, environmental, and economic development. These three pillars, however, fail to properly recognize the underlying value association between local culture and the environment, as well as the persistent connection that ensues. Culture plays a critical role in the comprehensive development of cities and communities by instilling enduring values and ethical systems, embedding emotional and spiritual assets, and strengthening spatial connections. However, the positive role of culture is not presented as a 'cornerstone' in the current planning strategy. The dislocation of cultural factors may easily lead to a lack of momentum, poor quality, and unbalanced development of the city and community as a whole in terms of sustainable development. As a programmatic and integrated plan, there is a need to consider how to strengthen the fundamental role of culture in the planning system and to develop a model of co-development of society, environment, and economy with culture as the core driver, rather than forming a parallel relationship with the three. The key to solving the problem lies in identifying the vehicles for cultural expression and activity, thereby strengthening spatial and emotional connections and ultimately achieving a high degree of unity and inherent synergy between economic, social, and environmental development. Many studies have shown that green infrastructure (GI), as an important component of urban space, can provide physical spatial support in terms of improving the urban environment, creating opportunities for social interaction, providing cultural displays and experiences, and increasing economic income. GI can make a key contribution to urban ecology, and accommodate multiple functions of urban space, such as tourism, eco-dwelling, and urban agriculture as well. Therefore, this study first systematically analyses the traditional planning model in which social, economic, and environmental factors develop in parallel with culture, which brought urban problems resulting from the lack of the fundamental position of culture. Secondly, It focuses on the role of green infrastructure (wetlands, parks, etc.) as a multi-functional green space, and condenses the use of green infrastructure as a carrier through a literature survey and case comparison. Finally, The study establishes an innovative theoretical model that uses cultural factors (including values, identity, and community cohesion) as the cornerstone and the planning, design, and management of green infrastructure as the medium to drive environmental, social, and economic development. Specifically, environmental protection emphasizes the usage and management of green infrastructure; social equity focuses on the accessibility of green infrastructure; economic vitality highlights the contribution of green infrastructure to local employment and community-based business incubation. The theoretical model will be applied in a community named Setu Babaka in Jakarta, Indonesia. An in-depth policy recommendation will be proposed with the challenges that remain for implementation. The conclusion will reflect on the possibility of Setu Babakan acting as a feasible reference for other projects, in Indonesia and abroad.

Keywords: innovative model, culture-based, green infrastructure, Setu Babakan

SEMIFORMAL DESIGN: INTERPLAY OF DESIGN AND APPROPRIATION IN THE LIVING LAB “JOIN-IN-BOX” (664)

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Public spaces are spaces of communication and encounter, where social negotiation processes and appropriation play central roles. They provide opportunities for learning processes which can contribute to the development of democracy (Deinet and Reutlinger, 2004; Frey, 2004). To exploit this potential, planning needs to become more agile and participative.

How can a corresponding approach, consisting of an interplay between appropriation and design be successfully arranged?

Open Planning already offers strategies aiming to combine openness to unknown development with stability and continuity in the spatial, aesthetic as well as structural sense (Urban Catalyst and Fezer, 2014). Most of the actor-oriented approaches therein focus on a responsive governance (Willinger, 2014).

The researcher proposes a new, more proactive methodology: Semiformal Design. It strives for a productive relationship between the formal and informal. While operating within the framework of legal and formal guidelines, it creates spaces of possibility for experimentation and appropriation of space. Accordingly, it is partly goal-oriented and partly open-ended. Informal actors are supported and empowered in the appropriation in order to (co-)design space. Semiformal Design can take up existing projects, as well as seek out new, not yet organized actors on an ad hoc basis and create experimental spaces in which actors and ideas can find each other. This requires a curation that acts in a mediating, empowering, enabling and, as far as necessary, formalizing way.

To test this approach the researcher conducted the living lab “Mitmach-Box” (Join-In-Box): Two shipping containers were set up on a repurposed parking lot – open for use and DIY-design by anybody during a three-month pilot phase. The occasion for the project in Deggendorf, a rather rural, medium sized city in Germany, was the city’s forthcoming planning of a new cultural venue for young people.



Alternative flea market organized by volunteers at the “Mitmach-Box”, July 2022

The experimental setup followed the iterative logic of an open design process and adapted to the needs and developments on site. The researcher continuously accompanied and empowered young people in the development of a gathering place for subculture while constantly reflecting on the process with the city council. Focusing on the practical implementation of ideas and the creative experiment the principle of “Do-ocracy”(Willinger et al., 2020) was applied. Thus, encouraging appropriation and self-efficacy, a hard-to-reach target group in need of a place where their creativity could thrive was empowered to act: Having found like-minded people and given the opportunity and guidance, they tried out events like open stages, built furniture and developed a vision for the place. By gaining useful skills e.g. regarding communication with the city council the basis for a forthcoming co-creative planning process was set. Thus, the group was even empowered to found an association to continue running the place.

Using the example of the “Mitmach-Box”, this paper explores the concept of Semiformal Design by demonstrating a successful semiformal process, analyzing the interdependencies of formal settings, design impulses and informal appropriations. The article presents the primarily positive effects of the experiment: empowering and making visible of a new actor group, strengthening diversity and fostering (sub-)culture as well as cultural exchange. Thus, the article shows the possibility of developing public space as a learning hub for democracy, which is crucial to maintain and construct peace. Furthermore, it reflects on the researcher’s role as the curator of Semiformal Design – a new planner’s role in a more participative and resilient planning.

Keywords: appropriation of space | participation and co-creation | (sub-) culture | learning hub for democracy

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FROM COPING, ADAPTATION TO TRANSFORMATION: NEW IDEAS FOR RURAL REVITALIZATION IN IMPORTANT AGRICULTURAL HERITAGE SYSTEM SITES (669)

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The Important Agricultural Cultural Heritage System (IHAS) is a living heritage with a traditional agricultural ecosystem as the core. From 1978 to 2020, China unconventionally completed the process of industrialization, and social and institutional modernization rapidly. It has had an impact on the traditional and sustainable agricultural production model. However, some villages in China-NIAHS show adaptability in the face of that interference. Take Baiying Mountain village in Pu'er Traditional Tea Agrosystem, Yunnan Province, China. I found that tree gardens where rare ancient tea tree resources were grown, having lived for thousands of years, could adapt to the change of globalization, and attract tea traders worldwide. Furthermore, local nested markets were prompted. Stakeholders carefully protected local tea trees, to seek common development. Compared with villages with ordinary tea resources, those with rare tea resources could be better adapted to the process of rapid urbanization. What is more, some villages go into decay. Take Mulberry-dyke & Fish-pond System as an example, it used to be the sustainable model in China. Since the modern freshwater aquaculture industry developed rapidly, more peasants chose to raise fish. As a result, the recycled base pond system developed into a simple freshwater fish pond system. The resilience of the ecological environment was impacted and the fish pond was polluted. It is important to focus on what promotes rural adaptation. The research aims to establish a theoretical framework for the rural adaptation mechanism in Agricultural Heritage System Sites. We selected 56 papers from about 2500 papers, taking "agricultural cultural heritage", "rural adaptation", "rural resilience", "rural transition" as the search terms. Based on the literature review, the current theoretical framework has four conclusions. Firstly, rural development can be divided into three stages: coping, adaptation, and transformation (Wilson et al., 2013, Speelman et al., 2014). Secondly, identity, feedbacks, structure and function are four important dimensions to identify different development stages. Thirdly, farmers' livelihood adaptability and the integration of resources from multiple spatial scales, such as social networks, are fundamental to rural adaptation. Fourthly, heritage resources are major contributors to rural social cohesion and civic engagement. It hopes to provide new ideas for rural revitalization by focusing on rural adaptability.

Keywords: adaptation, transformation, rural revitalization, Important Agricultural Heritage System

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MAPPING THE MELLAH OF ESSAOUIRA, MOROCCO (672)

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The Jewish Quarter or "Mellah" of Essaouira, Morocco, was once a bustling port town known as Mogador, then the heart of a large Sephardic community. While it remains a pilgrimage site for many descendants of Moroccan Jews, its built heritage remains under threat of demolition due to both neglect and the increasing demands of its tourism industry. Following its inclusion on the 2018 World Monuments Watch and the conclusion of all corresponding heritage documentation work in 2020, this presentation seeks to describe and reflect upon this interpretive experience at World Monuments Fund, with emphasis on how to navigate the process of uncovering key themes through the oral histories recorded during site visits. Translation of these oral histories of this historically marginalized part of the Jewish diaspora into a comprehensive yet digestible story was a team effort, and the final results of the research, including web slideshows and an interactive web map, allow for the wider dissemination of these significant personal histories. Their realization also alludes to the tension between the values of different levels of government in Morocco, while demonstrating the importance of providing new ways that diasporic stories can be accessed and encountered. Today these sites within the Mellah remain as a testament to the history and future possibility of peaceful coexistence between religions in Morocco.

Project available online:

<https://www.wmf.org/untold-stories-jewish-quarter-essaouira>

<https://diarna.org/exhibits/mapping-the-mellah-of-essaouira/>

EMERGING AGENCIES WITHIN ARTISTIC METHODS OF CO-CREATION THAT INFORM PLACE NARRATIVES (716)

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This paper explores the ways in which sensorial understandings of the urban generated by act of artistic creation can provide a framing for urban design and planning approaches concerned with participatory and interdisciplinary methodologies. Act of creation is not a sole human property but as the emergent product of situated activity. Thus, it always extends beyond a specific human activity. Act of creation includes the ways of participating in an environment and of engaging to other matters. Other non-human and human things of environment in turn suggest pathways of formal development of creation. This mode of creation often gives creative access to concepts of sociality and the ways in which everyday life might be utilized as a part of a creative affect. At its core, by act of creation not only individual subject but also other entangled subjects explore new grounds for bodily sensing difference, constituting, negotiating and mobilizing differences as part of social practices and cultural processes at places of everyday life. Critically, participation in this context of “act of embodying” can be considered as a situated activity both human and non-human forms of agents are involved. Viewed from the perspective of nuanced understanding of agency, this paper’s focus is emergent agencies with act of artistic creation and their reflections on expanding the understandings/readings of urban.

In doing so, this paper evaluates the offerings and learnings from the recently organized and conducted workshop series through which each participant is encouraged to experience the city center of Kayseri at existentially-sensing level and narrate their experience with emotions and feelings and to experiment with artistic methods of co-creation a collaboratively produced urban narrative. Specifically, this paper asks for an emergence of agency within artistic ways of co-creation and its offerings for re-reading and re-understanding of urban environment. It further asks if urban planning and design practice benefit from artistic methods of co-creation in which sensorial practice of participation can be activated. Tapping into the rich knowledge within the participation by the practices of artistic creation, the paper conceptualizes emergent agency of each participant’s existentially grounded experience of walking in the city as processes offering collective ways of improvising and inventing in everyday life which tend to fall outside the realm of conventional discursive and visual representations of urban.

Keywords: co-creation, embodied participation, artistic methods, affects and city-making

A STUDY ON THE DERIVATION AND APPLICATION OF TOWN MANAGEMENT COMPONENTS FOR THE REVITALIZATION OF ALLEY BUSINESS DISTRICT (718)

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Urban regeneration projects require a Bottom-up planning method led by residents from the existing Top-down planning method, and Town Management techniques are being actively discussed as a new planning model for urban management. In addition, the self-reliance activation of alley commercial districts within the region is attracting attention as a core task of the urban regeneration project, but the fact that the alley commercial districts supporting the local economy are in difficulty due to the decrease in the vitality of the current commercial district.

Town management is an institutional means for various stakeholders, such as residents, merchants, real estate owners, and the government, to cooperate with each other with responsibility for their respective roles in relation to problems occurring in urban space. Unlike the in-person method, it is proposed as a solution to the limitations of the domestic urban regeneration project as an urban management method that is operated through consultation with the public by the steering committee composed of local residents and merchants.

Therefore, this study recognizes the need for town management, which is a resident-led regional management system, as sustainable city management becomes more important. The application direction was analyzed. First, 16 elements of town management were derived through the analysis of previous studies and overseas advanced cases, and the hierarchy was divided into upper and detailed elements. Afterwards, using the derived town management components, the importance analysis was conducted on the 'Haeridan-gil Regional Council' group, which is a representative alley business district of Busan, and the 'experts' group performing tasks related to urban regeneration and urban design. Through comparative analysis by synthesizing the analysis results, the systematic application direction of town management components for revitalizing alleyways was proposed.

As a result of the analysis, in the application of town management components, the steering committee showing the highest relative importance needs to be established first. Thereafter, it is necessary to prepare an institutional device to pursue public values and legitimacy for the town management activities of the Steering Committee, and to develop a continuous and systematic financial plan for the operation and management of this system. In addition, local activities are a key element in the operation of town management, and it is analyzed that if strategic phased activities are operated through consultation among local residents, it will be possible to achieve resident-led sustainable revitalization of alleyways.

If this study is used in the introduction of town management for post- management of urban regeneration projects, it is expected that it can serve as a basic data for the systematic application direction for revitalization of alley commercial districts.

Keywords: Town-Management, Revitalization, urban regeneration

URBAN REGENERATION AS A TACTICAL: PROMOTIVE PLANNING TOOL: A FAILED ATTEMPT OF URBAN TRANSFORMATION, THE CASE OF SAMSUN (722)

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Planning, as a political and professional practice provides a legitimate capacity to reproduce urban space is often challenged by the neoliberal agenda. The interiorized neoliberal programs target the urban space as institutional laboratory practicing place-marketing strategies, urban development corporations, redevelopment projects as a state apparatus (Brenner and Theodore 2002). The planning approach in Turkey, especially post-1980 period, means of integration into the global economy, labour market conditions, policies regarding social cohesion, and urban land development and real estate regulations have had a consequential effect on cities; urban planning was perceived as a “comfortable, changeable structure ... in response to specific and individual demands” (Eraydın, 2008; Öncü, 1988).

The aggressive neoliberal approaches came after 2000s based on construction were manifested in the urban space, while planning became a tool in the decision-making process of the market with the goal of entrepreneurial and economic growth (Keyder ve Öncü, 1994; Ünlü, 2019). In such a process, the concept of urban transformation has paved the most suitable way for the urbanization of this type of capital, and has strengthened its position on a legitimate basis with laws enacted one after another. This eventuated the commodification of the built environment further and urban regeneration projects has become the most powerful development tools were used to generate a better commodity in which to invest more. Moreover, regardless of their success or failure, some of the urban transformation projects have resulted in insecure places that were failed to transformed due to institutional bottlenecks, lack of representation, disempowering the planning actors and leaving public alone with market forces. In this research, the local experience of the concept of urban transformation, which has evolved into a facilitating element of planning and planning as a legitimate tool in the production of urban space; the representation capacities and competencies of the actors of the process are traced regarding to the dichotomy of the empowered and disempowered planning actors triggered by the conflict environment; and the traces of the "de- transformation" process will be examined through Samsun Çarşamba district.

Keywords: Urban Transformation, Planning Actors, De-Transformation, Planning Law

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HERİTAGE AS A REFLECTION OF VOİCELESSNESS: THE TRİPARTİTE PERSPECTİVE ON THE URBAN EXPERİENCE OF ROMANİ WOMEN (768)

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In multi-layered and multi-cultural urban environments, the identity represented by the cultural heritage, which functions as a tool to transmit who the society is to the future, is shaped depending on hegemonic relations. The tangible or intangible assets produced in the flow of everyday life become a "cultural heritage" only when the identity defined as "absolute" by the power maintains the activities associated with it. Therefore, the absolute urbanised identity, which has always had a gendered structure over masculinity, also passes through a filter towards ethnic origin depending on the hegemonic relations of each society. Thus, cultural heritage, which can only transmit absolute urbanised identity in the hands of power, becomes an ideological tool rather than a social product. Concordantly, when it comes to the cultural heritage's duty to work as a catalysator for a resilient future, the lack of representation of non-absolute identity might create an obstacle to securing every stakeholder's requirements to be voiced.

This study aimed to explore the structure of cultural heritage that cannot be separated from the concepts of gender and ethnicity depending on the social hierarchy and to discuss this trilogy in the scope of Romani women. In order to analyse the Trilogy, a cultural heritage reading was constructed through the daily life experiences of Romani women, whose incompatibility with absolute identity starts with their gender at home and continues with their ethnic identity in urban space. In this context, this study is a phenomenological study with its interpretation of cultural heritage by highlighting the discrimination experienced by Romani women. The audio-recorded interview was analysed through inductive thematic analysis to obtain answers to the questions. The findings are categorised under four headings that interpret the trilogy: the socio-demographic profile, changes in everyday life reproduction, material and heritage. The result of this study demonstrated that when cultural heritage becomes an ideological tool in the hands of power, it might lead to the development of a discriminative perception of gender and ethnicity rather than a catalyst for the all-embracing urban spaces.

Keywords: Romani women, everyday life, gender, cultural heritage, identity

THE SIGNIFICANCE AND PRACTICE OF ECOLOGICAL AGRICULTURAL COMPLEX CONSTRUCTION IN THE PROTECTION OF TRADITIONAL VILLAGES AND CULTURAL INHERITANCE (770)

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The development of China's ancient agricultural civilization formed traditional villages and unique agricultural culture. Traditional villages carry China's long history and extensive regional culture. With the development of China's economy and cultural level, the protection of traditional villages and the inheritance of agricultural culture have been increasingly valued by society, and various regions are exploring traditional village protection practices based on the reality of traditional villages. Due to the complexity of the geographic environment, ethnic diversity, and cultural fusion and evolution, traditional villages in Yunnan Province, China have distinct regional and ethnic characteristics, forming world cultural heritage sites such as the Yuanyang Hani Rice Terraces and the Jianshui Ancient City. The protection of traditional villages in Yunnan should be based on the actual development needs of traditional villages, comprehensively considering the restoration and development of traditional village agricultural ecological environments, relying on innovative planning ideas and advanced technological support, in order to effectively protect traditional village spaces and inherit agricultural culture.

First of all, an eco-agricultural complex can revive the agricultural ecological environment by combining traditional agricultural practices with modern technology, enhance the level of the agricultural industry, help revitalize the rural economy, create new job opportunities, retain rural populations, and thereby ensure the complete protection and inheritance of local cultural heritage and traditions. Secondly, by combining agricultural production with cultural tourism and carrying out various activities such as ethnic festival celebrations, traditional skills workshop experiences, and so on, an eco-agricultural complex can build a platform for cultural exchange and educational innovation, enhance the local residents' and tourists' understanding and appreciation of rural historical and cultural heritage, thereby enhancing the influence and social value of traditional agricultural culture and realizing its inheritance and development. In addition, the construction of supporting facilities for eco-agricultural complexes and related derivative industries, such as the construction of village cultural museums, cultural activity centers, and commercial service facilities for public services and activities, can improve the living environment quality in rural areas from the hardware infrastructure level, enhance the living standards of rural residents, help to improve the overall quality of the original rural population, and benefit the protection and inheritance of rural historical and cultural heritage.

In conclusion, the ecological agricultural complex can not only improve the rural ecological environment, expand the path of rural industrial development, and enhance the level of rural economy and industrial development but also help to improve the overall social and cultural level of rural areas, enhance the cohesion and attractiveness of rural society, and thus achieve the effective protection of traditional villages and the continuation and inheritance of distinctive agricultural culture.

Keywords: ecological agricultural complex; traditional villages; cultural heritage Planning practice

RESEARCH ON THE EFFECTIVENESS EVALUATION OF HEALTH SERVICE OF RURAL PUBLIC CULTURE AND SPORTS SPACE IN NORTHERN SHAANXI PROVINCE, CHINA (773)

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Rural public cultural and sports space is an important part of rural public space and the main carrier of villagers' public activities. The research found that the public space in rural areas of northern Shaanxi is limited, and the cultural and sports spaces carry a variety of activities in one, and the government-led "top-down" mode of supplying villagers' participation is low, resulting in a single mechanical allocation of resources, while neglecting health services, environment creation and activity organization, resulting in low effectiveness. Establishing an effectiveness evaluation system for health services in rural public cultural and sports spaces in northern Shaanxi is an effective way to improve the level of equalization of basic public services and realize China's "rural revitalization" strategy.

This study conducted research and interviews in 13 villages in 5 towns in northern Shaanxi, understood the actual needs of villagers, explored the factors affecting the effectiveness of health services in rural cultural and sports spaces, established a factor database in five aspects: supply adequacy, integration of sports and medicine, demand matching, environmental health and service efficiency, determined the index items through the Delphi method, assigned weights to the indexes at all levels using the Precedence Chart method, and finally the evaluation index system of 65 index items at 3 levels was established, the scoring criteria of each index were determined, the evaluation model was built, the research cases were evaluated, and optimization suggestions were made. The results of this study can expand the knowledge of designers, users, builders and managers of rural public cultural and sports spaces, and provide help to achieve high-quality development of rural public cultural and sports services.

Keywords: rural public space; cultural and sports activities; health services; effectiveness evaluation

Funding:

This work is supported by the National Key R&D Program of China (Grant No. 2019YFD1100700).

WELL-BEING SCORE (WBS) AS A COMPOSITE PHYSIOLOGICAL, PSYCHOLOGICAL AND SPATIAL APPROACH TO EVALUATING THE QUALITY OF PUBLIC SPACES (780)

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The quality of the urban environment is an important factor influencing perceived mental and physical health of urban dwellers. Areas with high levels of air and noise pollution, as well as with poor vegetation and maintenance are proven causes of environmental stress (Lederbogen et al., 2011), whereas vegetation rich natural areas and heritage rich built areas are thought to foster mental restoration (Scopelliti et al., 2019). To enhance the well-being of citizens it is essential to understand the characteristics of the urban environment with restorative capacities and transform the urban space accordingly.

As the well-being is a complex and multifaceted phenomenon, it should be addressed through interdisciplinary human-centred research, which combines physiological and psychological aspects, positioned within the spatial context. The current study adapts an experimental interdisciplinary approach, which integrates the aforementioned components into a composite Well-being index. Unlike the previous studies, which focused on the district or street level (Xiang et al 2020, Poom, 2021) and different modes of mobility (Millar, 2021), the current study focuses on the public spaces and, specifically, on the courtyards of large-scale housing estates. The study was piloted in the shrinking city of Narva, which is located in the North-East of Estonia. The study ran in two stages, the small-scale with 4 locations and 28 participants, and the large-scale study with 6 locations and 40 participants.

The physiological analysis was based on detection of subjects' stress level at different urban environments. The aim of the small scale study was to define the physiological parameters that show the statistically significant difference between two extreme urban environment cases: obviously stress relieving environment (such as green area), obviously stress causing environment (such as ugly suburb houses). The reference environment was the neutral indoor room.

The psychological survey was carried out for assessing emotions and stress, place attachment and restoration in distinct yet similar urban places. The questionnaire was developed based on existing psychological instruments. Data was analysed to see, if the questionnaire helps to differentiate places with the reasonable degree of statistical power. In the first stage roughly two thirds of the nearly 100 initial statements were excluded from the questionnaire and corrections were made to the remaining statements. In the second stage the shortened and corrected version was used.

The spatial analysis is based on the analysis of data from the open and closed registries – population by building, land uses, road and building footprint data, Aero Laser Scanning (ALS), as well as on pedestrian counts in selected locations using mobile cameras and AI tracking algorithm.

From physiological, psychological and spatial data the total of 19 indicators for each location were derived, which were grouped into 7 thematic groups, namely, natural environment, built environment, activities, emotions, place attachment, restoration and physiological stress. At the moment the data integration and analysis is still in progress, and we expect to have results in the end of February 2023. However, it is already possible to conclude, that there are correlations between the psychological and physiological data, and the spatial characteristics. The further research will focus on scaling up the study, and validating in other cities in Estonia.

Keywords: Human-centred spaces, City of Narva, Environmental stress, Open Data, Well-being

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CO-DESIGNING THE NIGHT CITY: THE RISE OF THE NIGHT-TIME ECONOMY IN TURIN AND THE CHALLENGES FOR THE URBAN SPATIAL GOVERNANCE (787)

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The development of entertainment and night districts is typical in the urban spatial and economic restructuring processes of many cities in Europe (Hollands & Chatterton 2003; Crivello 2011; Nofre et al. 2019; Zasina 2020) and is considered a crucial pull factor from cities aspiring to become mobility hubs for the high skilled, wealthy and creative class (Rowe & Lynch 2012). Moreover, a transient student population has been recognised as a key component of town centres and public space transformations at night (Roberts 2006; Malet Calvo, Nofre & Gerales 2016).

Notwithstanding the radical changes in several urban spaces in their use from day to night time, which make night city planning an issue concerning urban planning in the broadest sense, night-time planning is still an emerging field (Seijas & Gelders 2021) and the night city seldom falls in the urban planning practices, especially in some European context as southern Europe.

Turin is one of the cities encompassing a long process of urban redevelopment, a post-industrial city with a twenty years strategy of economic reconversion, looking at the knowledge sector as a core area and to the attraction of young and highly skilled workforce. Despite being a shrinking and aging city, Turin and its universities succeed in attracting a transient student population, which supports the city investments in policies oriented to promote the leisure economy (Cenere et al. forthcoming).

Three districts of Turin (San Salvario, Vanchiglia, Aurora) and particularly three small squares in each district (largo Saluzzo, piazza Santa Giulia, esedra di Borgo Rossini) became in the last decade hotspots where a significant number of people get together during the night. Among the causes of the crowd are unprecedented bar concentration due to deregulation and market-led expansion of night-time consumption activities, and a growing university student and mobile population. This also led to conflictual relations, which for years kept a micro-level dimension of disputes among bar clients and local residents because of the noise pollution and public spaces degradation. The situation became a policy issue in 2022 with the municipality sentenced to pay substantial compensation to residents. Nonetheless, this is also a case where conflict became an opportunity to reimagine and govern a critical urban phenomenon.

On the one hand, we address the substantive question of how the city is experiencing the increasing intensity of the night activity and growing economy and with what consequences. On the other hand, the paper focuses on a City Lab process by which co-designed coordination of night-time cultural offerings is being proactively addressed.

The City Lab, as a closing action of the H2020 project SMARTDEST, put together local policy, professional and social stakeholders in order to identify smart and inclusive solutions in cities where mobile and transient population behaviours produce social exclusion.

The co-design process we have set up aims to change the perspective in which night time phenomena are perceived and represented in Turin, but also to propose a different approach to its governance, in collaboration with and listening to the 40 stakeholders involved. While the operational part of the project is ongoing, the challenge, in the long run, is about supporting the changing approach of the municipality and effectively innovating the decision-making on the use and design of nocturnal urban spaces through a co-design process.

Keywords: night time economy; co-design; young population; Turin

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HERITAGE AND DEVELOPMENT PLANNING OF YUANMINGYUAN CULTURAL AND CREATIVE PRODUCTS FROM THE PERSPECTIVE OF CULTURAL CONSUMPTION (798)

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Cultural and creative products are a modern extension of traditional culture and closely related to tourism planning, but there is a paucity of research. Taking tourism planning of Yuanmingyuan as an example, this thesis analyzes the tourist groups at the micro-level from the perspective of cultural consumption, and investigates the new mode of cultural and creative product design. Different from the traditional product design with single mode, this thesis proposes a comprehensive design framework of genetic algorithm and experience transfer method. This thesis encodes the images of Yuanmingyuan into a tree structure coding through genetic algorithm. The quality, price, innovation and experience of Yuanmingyuan cultural and creative products are investigated through questionnaire. Combining with the experience transfer method, this thesis grafts the operation and function of cultural symbols into the carrier of cultural and creative products, and analyzes the value and application of cultural and creative products in tourism planning. The study finds that the quality and price of cultural and creative products can impress visitors in the process of cultural consumption and deepen their memories of Yuanmingyuan in the future. Innovation and experience of cultural and creative products can foster a sense of participation and identity among visitors to the Yuanmingyuan scenic area. This thesis provides new planning guidelines for the shaping of historical memory of important cultural sites and modern creative development.

Keywords: Cultural consumption, cultural and creative products, genetic algorithm, experience transfer method, planning

RESEARCH ON THE REGENERATION OF CULTURAL STRATEGIES IN TOURIST SCENIC AREA :AN EXAMPLE OF CHONGWU ANCIENT TOWN IN HUIAN COUNTY, FUJIAN PROVINCE (812)

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The unveiling and moulding of local cultural attributes are essential in amplifying the appeal of a tourist destination and broadening its market reach. The unique cultural characteristics of a tourist destination are the core of competition in tourism development, and its full utilization helps to form exclusive cultural products and enhance the attractiveness of the destination. Scenic areas provide a material basis for tourism and represent a key platform for the dissemination and development of non-material cultural activities. However, current tourism planning often fails to sufficiently explore local culture, has limited or disorganized cultural representation, lacks systematic planning and design, and has a weak connection between cultural activities and material space. Tourism planning is an essential guide for the development and conservation of tourism areas, aiming to ensure the rational use of spatial, economic and social resources, and to promote the formation and dissemination of regional culture. Therefore, it is essential to investigate how local cultural elements can be fully incorporated into the development planning of tourist attractions in a comprehensive manner.

Previous studies have demonstrated that nature-based approaches, such as empathetic design, visual metaphors and narrative space design, can be used to facilitate cultural spatial integration. Based on existing research findings and the characteristics of tourism planning, this paper proposes a cultural regeneration model of "discovering elements-building database-translating expression-spatial integration" for the planning research and practice of tourist scenic spots. Initially, local cultural materials are thoroughly explored, with the focus being on identifying the distinctive features of cultural elements. Subsequently, a multi-level and multi-category cultural database is created by collecting and accumulating cultural elements. Then, potential representations of cultural elements are proposed in terms of material space design, facility element design, and activity organization. Finally, the translated cultural language is incorporated into the spatial planning and design of the tourism area, thereby guiding the cultural regeneration of the tourism area, and increasing its appeal and market competitiveness.

This study examines the applicability of the "Cultural Regeneration" model in tourism planning, taking the Chongwu Ancient Town Scenic Spot in Hui'an County, Fujian Province as a case study. On the one hand, we find that the model provides a diversified approach to excavating local culture, and offers an effective system for classifying and constructing cultural data. On the other hand, the methods of translating material and non-material cultural elements, and integrating them into space have been successfully applied in Chongwu Ancient Town.

In general, this paper presents a planning paradigm for the integration of culture into space (i.e. the 'cultural regeneration' model) applicable to tourist landscape areas and tests it through the practical application of the Chongwu Ancient Town tourist landscape area. Local wisdom in China is expected to be provided by the results of relevant research and practice.

Keywords: Cultural regeneration, Tourism planning, Spatial integration, Planning practice

EXPLORING SPATIO-TEMPORAL PATTERNS OF THE CULTURAL TOURISM SPACE THROUGH THE LENS OF GENDER INCLUSION: A CASE OF PANJIAYUAN ANTIQUE MARKET IN BEIJING, CHINA (813)

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Public spaces with a cultural attribute (e.g., iconic buildings, historic buildings and districts, and cultural facilities such as museums) can increase the competitiveness of the cities in which they are located (Gemar et al., 2022; Mandeli, 2019). But existing studies focus on formal cultural tourism spaces (e.g., the Old Summer Palace), ignoring the fact that plenty of informal vending tourism spaces also have cultural attributes (e.g., second-hand bookstores, and flea markets). Meanwhile, studies have demonstrated that data on tourists' activities and spatio-temporal behaviours are important information for destination management (Gossling et al., 2018). For instance, tourists' behaviour (e.g., length of stay) has a direct impact with tourism revenue (Wang et al., 2018). Therefore, it is also valuable to obtain the data on people's spatio-temporal behavior in informal cultural tourism spaces. This study aims to provide guidance for policy makers of cultural destinations regarding the influencing factors of tourists' behaviour characteristics, as well as for a better urban planning for Culture and Tourism.

This study takes an example of the Panjiayuan antiques art market, which is a carrier of regional culture. Panjiayuan is a tourist market with cultural attributes. It is famous for its rich trade in folk antiques and artworks, which attracts a great number of tourists from home and abroad. Panjiayuan antique art market is located on the Southeast Third Ring Road in Chaoyang District, Beijing, and has a history of over thirty years. Unlike formal cultural heritage tourist attractions such as the Old Summer Palace, Panjiayuan is a cultural tourism vending space formed spontaneously by folk. The market is physically divided into three types of business areas: shops, ground stalls, and sheds. It covers an area of nearly 50,000 m² and involves over 4000 shop owners and nearly 10000 vendors (Kong, 2008). Due to the lack of public activity spaces (e.g., parks and landscapes) in its vicinity, Panjiayuan also plays the function of a public activity space for the neighboring residents. Thus, Panjiayuan has plenty of vendors and pedestrian activities and is a very dynamic antique art market. Meanwhile, the uniqueness of goods categories (e.g., porcelains and bronze wares) sold in Panjiayuan has led to gender differences within the market. As such, the gender spatio-temporal behavior patterns in the Panjiayuan market need to be studied.

Using field observation and Spatial-Temporal Behaviour Mapping (STBM), we analyse the data on vending and walking behaviours in four different types of sites, four time periods, and four age groups in the antiques and art market (All data from July 2021). This method developed Behaviour Mapping in order to study high-mobility areas (Sun et al., 2020). STBM comprised four phases: a pilot study, data collection, Geographic Information System (GIS) database assembly and data analysis. Our results show that the gender differences between males and females increase with age; significantly more males and fewer females on weekends compared to weekdays; and females are more likely to be found in open spaces or spaces with higher foot traffic. That is, there

are significant gender differences in vendor and walking behaviours across time periods, age groups, and spatial environments. We summarise subtle relationships between gender spatio-temporal behaviour patterns and three factors of spatial characteristics, physical activities and social division of labour in the Chinese context.

This study expands the research of cultural tourism spaces from gender spatio-temporal patterns, especially regarding spontaneously formed cultural spaces. We also provide gender spatio-temporal data support for planners and urban designers in the Chinese context to improve the inclusiveness and humanization of such spaces and to seek urban public spatial justice.

Keywords: Gender differences; antiques art market; walking behaviour; space and time; Panjiayuan

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RESEARCH ON LIVE PROTECTION OF JIANSUI DRAGON KILN HISTORICAL AND CULTURAL LANDSCAPE BASED ON "LANDSCAPE-CULTURE" SYNERGISTIC EVOLUTION (820)

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Jianshui County is located in the south of Yunnan Province, China. After thousands of years, it is an important node of the ancient Southern Silk Road. It is a national historical and cultural city and a key scenic spot. It has a long history and rich cultural tourism resources. Jianshui purple pottery is famous for its unique craftsmanship. With the continuous development of modern society and the continuous acceleration of the urbanization process, topographical constraints and imperfect facilities limit the development of the city, the ecological environment is fragile and soil erosion is serious, the traditional Jianshui purple pottery products are single, and there is a lack of urban portals and necessary public facilities. Problems such as service facilities continue to emerge. Therefore, how to coordinate the cultural protection of the ancient city with the extension of functions, deepen industrial development, express the historical context in a modern form, and create an ecological area that integrates purple pottery resources is an urgent problem that Jianshui needs to solve at present.

This paper takes Jianshui Dragon Kiln Eco-city as an example, based on the concept of living protection, through the analysis of the relationship between the landscape representation and cultural connotation of Jianshui ancient city, it is proposed to sort out the natural landscape and create an open space; dig deep into the purple pottery industry to enrich the industrial structure; Refining cultural elements, interpreting layered space; facing the different needs of local residents and foreign tourists, the implementation strategy of creating a livable and tourist-friendly living space. Explore the sustainable development and effective protection and management of cultural landscape heritage in historical ancient cities.

Keywords: historic city; cultural landscape; ecology; living protection

THE TRADITIONAL FLOATING HOUSE OF THE BRAZILIAN AMAZON, MANAUS: POSSIBLE FOUNDATIONS FOR ITS IDENTITY SUSTAINABILITY (823)

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Identity, according to Ruskin, is the magnitude of a building that results from its age, its deep revelation, the affinity, and symbolic mysteries that surround the space, the feeling that its image conveys, the value that cannot be measured, where memories and feelings through the years are established as the Identity of a people. Faced with this Theorem, the Legal Amazon (most of the International Amazon) and the Floating (riverside dwelling, part of the Amazon ecosystem and historical evidence of the northern region of Brazil). The Floating House for its importance for the Amazon is the object of inspiration for this research, (Ruskin,1910).

The riverside people, in the 1920s, started a floating city in front of one of the main cities in the North region of Brazil. Manaus, which was passing through the end of a great economic cycle (rubber cycle), where the new arrivals, due to lack of housing, built their houses on top of floating logs, covered with straw in front of the city. Daily life showed some social and environmental problems, which contributed to his withdrawal (1967). Meanwhile, the floating culture remains alive in the immensity of the Amazon, (Andrade, 1984).

The objective of this work is to demonstrate to the reader and interested parties, the constructive techniques, materials, and typologies existing in Manaus with the initial landmark in the floating city, for establishing symbology that point to the identity of its people, but that in the last decades has suffered with the devaluation by the phenomenon of modernity. After identification, sustainability parameters are exposed, based on the document 'our common future', for 'appreciation of cultural identity and sustainable development' of the floating house of Manaus on the Tatumã river, (Brundtland, 1987).

The adopted method consists of valuing the characteristics of the previous techniques, materials and typologies used in the Floating House, being able to add new values that contribute to its recognition. For this, a documentary, bibliographical and field survey is carried out. Then, with the information collected and the objectives defined, a group of specialists is selected to analyze, evaluate, and obtain the results of the strengths and weaknesses of the morpho-typology, evidenced for the Architectural Enhancement of the Floating House of the Amazon.

Keywords: Materials; Constructive techniques; Typologies; Sustainability and Identity

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https://edisciplinas.usp.br/pluginfile.php/4245128/mod_resource/content/3/Nosso%20Futuro%20Comum.pdf

FROM THE CENTRE TO THE PERIPHERY: THE TRANSFORMATION OF A STREET SPACE (826)

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A social transformation may usually affect the production of urban space (Lefebvre, 1991). In the last century, China has experienced several social reforms, for instance, the establishment of the socialist system in the early 1950s and the economic reform of the late 1970s, both of which had a significant impact on urban space. This paper takes the No.1 Road Street of Minhang Satellite Town in Shanghai as the case study, firstly, analysis the impacts of the Great Leap Forward Movement (1957-1960) to the creation of the space of No.1 Road Street. And then, with the archives, historical photographs, oral histories and mapping data, the paper studies the causes and impacts of the spatial changes of the street, for instance, the changes of the road pattern and greenery caused by the preferences of politics; the addition of storeys to buildings and the addition of shops along the street after the economic reform; the demolition of the traditional town nearby within the fast urban construction, and so on. A historical comparative analysis reveals that, for this case, the impact of successive social transformations on the street space (either directly or indirectly) has not been progressive, reflecting to some extent the risk of failure of regional planning in social change when both land and housings are publicly owned.

Keywords: social transformation, urban space, public and private

CULTURAL HERITAGE OF SOCIALIST MODERNISM: UNWANTED LEGACY, OR LOCAL DEVELOPMENT FACTOR? (828)

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Cultural heritage is a term widely recognized and represented in the literature. (Panzera 2022; Kobyliński 2011). This concept has a complex and multithreaded morphology. Thus, trying to define its boundaries as simply as possible, we can say that it is divided into tangible and intangible heritage (UNESCO 1972; Murzyn-Kupisz & Hołuj & Działek 2022, Nilson & Thorell 2018). In order to determine a specific boundary of the analyzed resource, it seems necessary to divide the resources into "recognised" and "unrecognised". A "recognised" resource, i.e. one that does not raise general objections due to its unambiguous categorization as valuable (for example, elements of a collection or those under care at the national level (Pilarz 2019, Marsden & Spearritt 2021). On the other hand, the category of "unrecognised" resource will refer to objects which, due to various factors, raise doubts in their unquestionable recognition as a fully valuable resource and thus worth appropriate protection and care (Jadwiszczok-Molencka & Molencki, 2017). An illustration of this type of resource can be the resources of socialist modernist architecture, which are the subject of this analysis.

This resource has specific characteristics. It is young, because the time frame of the occurrence of socialist modernism dates the period between 1956 and 1989 (Wiśniewski 2014/2015), limited in terms of territory (occurring in the countries of the so-called former Eastern Bloc), and undoubtedly burdened aesthetically, culturally and historically (Levine 2018, Light 2000). Thus, it can undoubtedly be regarded as an example of a dissonant heritage, i.e. one that is burdened by specters of the past (usually unwanted, repressed and poorly remembered)(Banaszkiewicz & Semik 2019, *Dissonant Heritages and Memories in Contemporary Europe* 2019). While the impact, direction and effects of the "recognised" heritage are well researched, the resources of the so-called dissonant heritage, especially those that are examples of socialist modernism architecture, not necessarily.

The aim of the paper is therefore to answer the question whether such young cultural heritage resources, burdened historically, culturally, socially and aesthetically, can be regarded as the local development factors. The main motivation for conducting research in this area results from the noticeable technical and functional wear of the resource, as well as problems with estimating the size of the most interesting and valuable resource.

Keywords: Socialist modernism, dissonant heritage, local development

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SMALL PUBLIC SPACES FOR RECREATION AND PLAY: STAKEHOLDERS' ROLES IN PROVIDING INCLUSIVE PLAYGROUNDS AS CATALYSTS OF SOCIAL TENSIONS (834)

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Well-designed and inclusive public spaces reduce urban stress and have a beneficial effect on social cohesion (Aelbrecht and Stevens, 2019). They are places where differences are not only tolerated but also cherished. Different models were proposed to conceptualize the complex relationship between public space and decreased social tensions in society (Wan et al, 2021). Such conceptualisations are an important endeavour in decreasing potential conflicts and have an emphasized role in the turbulent times of socio-economic and political instabilities. However, these qualities of public spaces do not appear by themselves, they must be planned and made possible by thoughtful urban governance where different stakeholders are involved and have different roles and responsibilities (Kearns and Forrest, 2000).

One type of such a public space with considerable potential are urban playgrounds. Traditionally their primary function was to provide facilities for open-air play for the young generation, but their functions are expanding with the rising urban complexities (Gill, 2021) – they are becoming socialising and recreational places for people from different walks of life, not limited to the younger generation any more.

This research addressed the contemporary production of inclusive urban playgrounds that have social transformative power in the sense that they are the places where any kind of differences (in age groups, social backgrounds etc.) thrive and co-exist in peace. The main aim of the research was to understand how different stakeholders contribute (or not) to the construction of such playgrounds. The conceptual framework was set up in order to theoretically define the main stakeholder groups (public authorities, designers, end users). A selection of seven case studies in the Eastern European context was done to thoroughly analyse the process of production of playgrounds. The case studies were selected so that they reflect different cooperation models between the stakeholders in order to understand the influence of their role on the final product – the playground layout and design.

The research shows that different stakeholders pay attention to different values, partly due to their responsibilities and roles in the design process. Therefore, inclusive and well-designed public spaces are the result of cooperation between a designer, a conscious investor and an engaged community. The combination of values that they bring to the process allows for the creation of spaces with a wide range of uses, embedded in the local context and a wider system of public spaces, and at the same time addresses the needs of the users. The research also shows that within the current economic context, inclusive and more sustainable places can be implemented with a conscious approach to the economic constraints too. The participation of the community in the process of creating these small public spaces is often a source of pride for residents who, at a later stage, take care of and manage the implemented interventions - the participation stages are a crucial step in maximising the social cohesion potential of playgrounds that allows them to

become truly community-oriented places where differences that exist within the community get visible and welcomed. The research also reveals the important role of designers in the process. Thanks to their presence the final projects take into account the values related to the identity of the place and culture, as well as nature and climate protection – which are both necessary in contemporary design solutions.

Keywords: public space, playground, design, decision-making, social cohesion, participation

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TEL AVIV'S WHITE CITY: CHANGE, CONSERVATION, CONFLICTS, AND EVERYTHING IN BETWEEN (836)

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In a city, change is inevitable. Dynamism and the capacity to adapt and construct attractive spaces are two of the city's distinguishing traits. A city with a historical center faces many challenges due to pressures resulting from population growth, urbanization processes, and changes in lifestyles. While built-heritage policies and practices hold many benefits, they may also spark debates and conflicts. Some conflicts are rooted in inter-group cultural or socio-political differences, others are the result of financial interests, aesthetic preferences, or divergent values. Furthermore, conflicts over heritage properties can occur owing to the needs of different stakeholders, including inhabitants, tourists, and users. They can also arise as a result of contradictory policies, values, and interests vying for domination.

One of the primary causes of contention is that built heritage can be seen as both public and private goods. On one hand, they are individuals' private property, belonging to an owner who often wishes to derive unfettered enjoyment of his\her property (Pickard 2002; Sax 2002). On the other hand, heritage properties may be regarded as a public good, (Mason 1999, 2005) subject to public policies and regulation. Thus, owners may face limitations placed on their buildings in the name of heritage protection. This duality opens the hatchet to many contestations between 'private' and 'public' interests (Mualam and Alterman, 2018).

Built heritage policies attempt to address these issues, but they may also contribute to their escalation. National or supra-national interventions in local heritage affairs, such as the designation of WH, can add another 'layer' of conflict and animosity. While international involvement through directives and UNESCO World Heritage nominations have contributed immensely to the economy and reputation of cities and states, it has also been a source of discontent among stakeholders. For instance, it may impose supra-national norms such as outstanding universal values and HUL (Historic Urban Landscapes) that may not always align with local needs, traditions, and policies. Likewise, cities that adopt UNESCO's prescriptions might find themselves clashing with property owners, developers, residents, and urban denizens.

Conflicts are frequently regarded as risks that must be avoided. However, we believe that the conflicts are neither good nor bad in and of themselves, and addressing them is part of urban planning practice. Furthermore, in a democratic society characterized by variety, various interests, and demands, the importance of conflicts must be acknowledged. They may highlight existing tensions or present an opportunity for transformation.

In 2003, the center city of Tel Aviv (known as the white city) was designated a World Heritage site. As part of this process, the city approved a large conservation plan that provided heritage protection to 1,100 buildings.

This paper focuses on the conservation plan's objection process; a delicate process by which individuals can communicate their discontent with the deposited plan. The paper examines the relationship between conservation policy, the challenges and conflicts arising from it, and the

possibility of change as a result of public participation. The conflicts are cataloged and analyzed according to different qualities as conflict factors and involved stakeholders. Furthermore, the paper provides an additional layer by mapping the conflicts, visualizing and analyzing their spatial characteristics.

A closer examination of the conflict reveals the diverse values and norms that generate disputes, as well as the various interests and stakeholders involved. In addition, it illustrates how heritage protection may cause animosity between stakeholders. This may compel local governments to modify their policies, resulting in a shift to the built environment.

Keywords: built heritage, conservation, conflict, policy

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PUBLIC SPACE: A NEW POLITICAL AGENDA OF THE LIBERAL ECONOMY IN KOSOVO (840)

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This paper explores the changes in the public space after 2000 in Kosovo. It takes into consideration two periods 1999-2008 and from 2008 to date. The nature of public spaces after socialism has significantly altered primarily in terms of the functional and social dimensions. The new socio-economic system brought different social relations, replacing the empty ideological function of the public space of the socialist system with a new energy of private initiative reflected in the urban fabric and public space in particular, although in some cases commercialization of the public spaces prevailed the public interest.

The author investigates the shift in the political agenda of the local governments in regard to public space, which became a tool for the political gains of the local election campaigns. How the political parties got the idea of public space's importance in terms of increasing the quality of life in the cities, its social, economic, and environmental dimensions. Fighting for new and reclaiming back 'legally' occupied public spaces, became a promising slogan of every election campaign since 2007, as most of the public interest was visually manifested in the public space. In the other side, the pressure from civil society regarding the public interest rose permanently.

The research combines interpretative historical and the case study method and strategy, comparing with cases of similar context in the region. Since the research is spread through a period of different political, economic, and social contexts, it was necessary to use the combined strategy at different levels. The cases were carefully chosen mainly in the cities also comparing the enrichment of public life and design improvement through the period from 2003.

Keywords: Public Space, Politics, Democracy, Spatial planning system, Urban management

CORRELATION ANALYSIS BETWEEN SOCIAL NETWORKS AND LOCATION FACTORS OF DESIGN INDUSTRY CLUSTER IN NANJING'S MAIN CITY (859)

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Cultural creative industry is an increasingly important economic engine for post-industrial cities. Since the beginning in the 2000s, the discourse of cultural creative industry (CCI) has travelled to China. City government has also paid great attentions to the potentiality of CCI for urban development. Different CCI promotion policies have been released in many Chinese cities.

This article focuses on the interrelationship between social and spatial dimensions of design industry cluster in Nanjing's main city. As one of leading cities in design industries in China, design industry has developed itself in last 50 years. In last decades, with the development of tertiary sector and rapid urbanization process, the main city in Nanjing has experienced dramatic changes in social, economic and spatial aspects. Correspondingly, the design enterprises have also adapted themselves in location preferences. This inversely also leads to the transformation of cooperation pattern among design industry enterprises.

With the perspective of value chain relationship, a research group has been established to carry out the empirical study in order to identify the existing situation and challenges for the design industry cluster in Nanjing's main city, especially on the cooperation pattern among the different enterprises. Based on the correlation analysis between social networks and location factors, the existing situation of design industry cluster and the challenges from the urban extension would be identified.

As a corresponding measurement, instruments e.g. social network analysis and space syntax would be utilized for the empirical investigation and analysis. After that, a correlation analysis has been utilized to give the profile of the existing interrelationship between social and spatial dimensions of design industry cluster. Besides, suggestions for urban regeneration strategy are also proposed to release the potentiality of existing urban space for the development of design industry cluster.

Keywords: design industry cluster, correlation analysis, social networks

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SPATIAL CHANGES OF HISTORIC CITY CENTRES AFTER WORLD WAR II. EXAMPLES FROM NORTHERN AND WESTERN POLAND (865)

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Many Polish historic centres faced enormous morphological and functional changes after the warfare of World War II and the post-war devastation. Those dramatic transformations concerned the destruction of original buildings, spatial layout, urban landscape, and the loss of cultural continuity (Musiaka et al., 2021). In Poland, post-war reconstruction was one of the elements of building a socialist city. This process was carried out in a planned, controlled way, as opposed to the spontaneous processes initiated with the political and socio-economic transformation in the 1990s, under conditions of a free market economy. These phenomena were particularly evident in the cities of the so-called Recovered Territories, which experienced large-scale destruction and later reconstruction. After the war urgent need to rebuild the cities in a new political and economic realities of communism era occurred. The reconstruction of the largest cities of great importance, was undertaken in the first place. Interestingly some of the city centres are still under reconstruction (Elbląg). In this context, the answer to the question of how these processes looked like and what impact do they have on the contemporary situation, cultural heritage and urban planning, seems crucial. The time scope of the study covers the years 1945-2023, and the analysis will focus on the 11 chosen cities of the area (100,000 inhabitants>250,000 inhabitants). The main objective of the study is to present typo-morphological results of comparative analysis of observed changes in the functional and spatial structure of the studied cities and to analyse the impact of the observed processes on the shaping of the current urban spatial policy in the context of revitalisation.

Analyses were carried out to quantify changes in the build-up area, distinguishing the city centres with almost completely preserved initial spatial layouts with minimal, orthomorphological transformations; partially preserved layouts with considerable semi-metamorphological scale of spatial reorganisation; and totally destroyed and transformed spatial layouts of metamorphological transformation level. A qualitative analysis of urban tissue was also carried out based on the directions of post-war transformations of the urban fabric by Szmygin (2000), identifying centres rebuilt by retroversion, historical or modernist reconstruction. An important research issue is also the question of the next stage of the future of the qualitative and quantitative transformation of the build-up area of historic centres in the Polish and international context (Altrock 2023).

The proposed concept of changes of the city centres is based on mixing Conzenian approach to urban morphology (1960) with Cannigian way of typo-morphological research (1979).

Keywords: urban morphology, urban planning, post-war landscape, urban regeneration, historic city centre

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CULTURE, INDUSTRIAL HERITAGE AND TERRITORIAL INNOVATION (923)

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Culture is an important driver of innovation in heritage management and spatial development. Cities and fringes are often characterized by a neglected heritage that affects the perception of the quality of life of the territories. In recent years, much attention has been given to the creative regeneration of marginalised heritage, such as productive heritage (Areces, 2005; Scaffidi, 2021). Many scholars have analysed this phenomenon to understand the effects on the territory (Dodd, 2020), the resource and the community (Clark & Wise, 2018; Tricarico et Al., 2020). Some studies suggest that the regeneration of neglected heritage fosters a better feeling of belonging to a place, creates new socio-cultural offer and increases ground rent.

Innovative management models have been promoted to reactivate this heritage and create socio-cultural benefits and new socio-economic development (Scaffidi, 2019).

This paper aims to examine industrial heritage regeneration and their impacts on the development of innovation in urban areas and fringes. This study provides new insights in the field of urban planning and design and, highlights how social innovation in industrial heritage regeneration drives to territorial innovation.

The research showcases 100 examples of good practices in Europe located equally in cities and fringes. Qualitative and quantitative research methodologies have been carried out with semi-structured interviews, data analysis and comparison.

The results show a classification of industrial heritage regeneration with social innovation by defining 3 models. The study corroborates that social innovation plays an important role in the innovation development of cities and fringes. It further argues that the greater the social innovation, the higher the level of territorial innovation. Furthermore, this study confirms that innovation depends on location and the regeneration model.

These results contribute to the body of knowledge and open new research opportunities both in theories and practice for territorial innovation and urban regeneration of industrial heritage with social innovation.

Keywords: culture, neglected heritage, industrial heritage, regeneration, territorial innovation

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CO-CREATING URBAN KNOWLEDGE IN DIVERSE NEIGHBOURHOOD PUBLIC SPACES: COMMUNITY-ENGAGED PEDAGOGIES (932)

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Central public spaces in cities have always played an important role in urban experience, and continue to have a city-wide significance, often described as the meeting spaces of cultures, politics, social and individual trajectories. Peripheral and/or neighbourhood public spaces, where the everyday life of citizens unfolds, rarely enjoy any of this significance and may not receive the attention needed from the main stakeholders involved. Many researchers have highlighted the significance of these public spaces in cities, pointing out that the patterns of everyday life in residential neighbourhoods are the essential material of society and may well have integrative social functions, of an individual or collective initiative. The potential for interaction and meetings between diverse people in the public space of their neighbourhood, is shown to be a crucial prerequisite for shaping encounters within and between the different ethnic and social groups during their everyday life, encouraging tolerance and a feeling of belonging. Neighbourhood public space is suggested to be an important and necessary platform for the groups' socialization through social and economic 'exchanges', building of group identity and negotiations of relations among the groups themselves as well as between them (Madanipour 2013).

The importance of bringing together diverse people who share common goals, through engaging them in the shaping of the public spaces in their neighbourhood, lies at the heart of this paper. The paper explores the ways in which community-engagement contributes to promote a sense of community and to ensure an inclusive and sustainable development, highlighting the need for the adoption of new roles by citizens and professionals (Lorne 2017). The role and ability of urban designers, architects, and public planning institutions in responding to the rising need for a community-engaged design approach, is often challenged. Furthermore, the necessity to train future graduates to have the skills and capacity to respond to this challenge within a transdisciplinary framework, reveals the need to revisit existing pedagogical approaches.

This paper reflects on a community-engaged studio approach at the Department of Architecture, University of Cyprus, in the design and development of a public space in a diverse residential neighbourhood in Nicosia. Drawing from the tools and methods of live studios (Harriss et al 2014) and Urban Living Labs (Menny et al 2018), the studio aims at: fostering links between academia, practice, and society through a participatory, co-creation process; creating the conditions for an integrated, shared framework of achieving sustainable urban governance; and at embracing diversity and tolerance towards differences through a transdisciplinary process.

Reflecting on the outcomes, the paper discusses the potential of a community-engaged design methodology to empower the citizens as decision makers who have a sense of responsibility for their shared public spaces, to encourage a sense of community and a tolerance towards difference, and to train the future architects within real world contingencies and interaction with different and diverse stakeholders.

Keywords: community-engaged pedagogy, neighbourhood public space, participatory processes, co-creation, urban commons

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TRADITIONAL VILLAGE EVOLUTION MECHANISM AND PLANNING OPTIMIZATION STRATEGY BASED ON CULTURAL-ECOLOGICAL PERSPECTIVE: THE CASE OF QIONGKUSHITAI VILLAGE IN XINJIANG, CHINA (936)

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Traditional villages are living testimony of history and important cultural heritage. Meanwhile traditional villages in Xinjiang, China are unique because of the cultural integration in the context of long-term multi-ethnic settlement. Among them, the traditional Kazakh villages are located in the mountains and grasslands. The adaptation and integration between the natural environment and production and life style drive the evolution of the villages, which dynamically recorded the production and life scenes of Kazakh residents. And they are an important witness to the changes in the production and life style of nomadic people. Cultural ecology believes that culture and natural environment are interdependent systems, and culture is a process of constant adaptation to the environment and evolution, which is better to explain the evolution of traditional villages in the natural, social and cultural environment. Therefore, this paper takes Qiongkushitai Village in Xinjiang Province as an example, which is the only historical and cultural village dominated by Kazakh and constructs a 'natural-social-economic-residential' framework for the study of the evolution of traditional villages based on the cultural ecology perspective, and analyzes the characteristics and mechanisms of village evolution based on it. The study found that since the 19th century, under the influence of many factors, Qiongkushitai village has gone through five stages of formation, expansion, stability, deterioration and regeneration, such as natural environment, residents' choice, social development and policy drive. At present, the impact of urbanization and the development of tourism have put the villages in a difficult situation of coordinating development and cultural preservation. Thus, this paper focuses on the outstanding conflicts between cultural protection and tourism development, and proposes protection and optimization strategies based on natural environment, cultural landscape and industrial structure in order to break the problem of bottlenecks in the development of Kazakh traditional villages. Finally, this paper hope to achieve the sustainable development of traditional villages. In the meantime, the protection and revitalization of cultural values is also an important purpose in this paper.

Keywords: Traditional Kazakh village; cultural ecosystem; evolutionary mechanism; Qiongkushitai village in Xinjiang,China

RIVERS IN SHAPING THE URBAN FORM: THE CASES OF POZNAN AND DHARAVI (940)

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Rivers, as one of the most important elements, have played a strategic role not only in the early appearance of urban settlements, but also in the structure and urban morphologies of those settlements. In this paper, we examine the effect of rivers on the morphology of coastal urban settlements, as well as discuss how a settlement's physical space interacts with a river flowing within or in close proximity. Poznan on the *Warta* River in west-central Poland and Dharavi in Mumbai, India along the *Mithi* River present holistic findings of formal and informal urban territories. To this purpose, changes in the built environment, particularly its profound interaction with changing water, are assessed using geospatial analysis to extract the physical form properties of the settlements. The methodology is exploratory and investigative in character. This paper is also interested in comparing the states of presence and effect of rivers on the morphology of areas in different territories.

The primary finding indicates that, while a river is not comparable to a settlement or its size, it has a significant effect on the form of an urban settlement in both formal and informal properties. As a result, river as an element of urban composition is realised in both cases.

Keywords: Urban morphology, territories, built form, river

MOBILITY IN THE HISTORIC CITY. DISCOVERING AND MOVING THROUGH INFORMAL SOCIAL SETTINGS (943)

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The presentation is based on empirical fieldwork and observations of informal public social life, focusing on the movement and social interactions among urban dwellers in the public spaces to be found in the Phaneromeni parish of the historic city of Nicosia in Cyprus

An overall argument will be made that these spaces and the spatial conditions that describe them constitute a distinctive set of informal social settings, that are often described as “fourth places” in the literature and that find their place alongside the other three realms of social life – home, work and “third places”

If paths offer spatial, behavioral and sensorial variation, in terms of enclosure and width, types of encounter and vistas, then looking at informal corridors of mobility may enhance the utilization of urban space in the historic city and enrich the experience of engaging in everyday public life by the urban dweller.

The approach is one of a heritage-led urban regeneration paradigm. Such an approach benefits from participatory planning. Conservation and rehabilitation in this manner has become a strategy to achieve a balance between urban growth and quality of life on a sustainable basis. Improved and experientially enriched formal and informal mobility may contribute to community integration.

A system-thinking approach may potentially unveil the dynamic and complex interactions at work linked to community development. In this way, hidden events and patterns and mental models may be revealed and the interconnectedness of socio-spatial structures and elements may be observed and better understood. This in itself constitutes a useful tool for mapping, modelling and simulating the change of a spatial system’s parameters over time and helps improve the townscape and be synergistic to aspects of everyday urban living as formal and informal mobility.

In support of a growing belief of coming to terms with difference demands a regularity of encounter between strangers and that public spaces play an important role in achieving it. A focus on strategies such as temporary uses and events that can enliven public spaces and may contribute to building social bonds.

Greater understanding of traditional public spaces such as streets and squares to ‘third places’ should be paid and fresh attention should be given to the existence of another category of informal social settings alongside the three realms of social life – home, work and ‘third places’. While in ‘third places’ conversation is the primary activity, in ‘fourth places’ it is all activities in-between necessary activities: ‘people-watching’, walking, waiting and ‘killing time’. The study delves into the micro-design of characteristics that might encourage or constrain their social interactions.



Figure: Mapping potential corridors of informal mobility (by authors)

Keywords: Informal public social life; movement and social interactions; social settings; third places; fourth places; heritage-led urban regeneration

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UNDERSTANDING THE RELATIONSHIP OF URBAN IDENTITY, PUBLIC PLACES, AND COGNITIVE CONSONANCE IN CITIES OF THE GLOBAL SOUTH: A CASE OF VARANASI, INDIA (952)

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Cities around the world are like talismans of human ingenuity, be it the Global North or South, each expressing its own story of human ambition. Contemporary as well as traditional cities can be articulated as a reflection of the aspirations and needs of their inhabitants. The historical values, rituals, culture, and traditions are intertwined and amalgamated with the current functional and grounded necessities, directing the traditional city's overall urban development process. A quintessential traditional city is marked by its unique urban fabric, which is interspersed with vibrant public places. These public places bestow a unique urban identity to the traditional cities and contribute to their magnetic pull. But, the association of urban identity and public places is much more than just a physical façade of architectural or urban design layer. It ranges from apparent physical levels to deeper social and cognitive levels. This raises the question that does a city with better public places leads to socially harmonious societies. If yes, can social harmony eventually percolate to the individual cognitive consonance?

With this motivation, the present study investigates the different layers of a traditional city to understand the variations of urban identity and cognitive consonance in relation to public places perceived by the inhabitants. The study looks into cases of traditional cities situated in the Global South as they show certain peculiar spatial similarities. The specific case of Varanasi, India, is taken as the final case study. Varanasi, in itself, is a city of many layers. The enigma of *ghats* (stepped embankments), the layer of spirituality, and the euphoric urbanism are synonymous with Varanasi. It is an amalgamation of cognitive and perceived realities. It is a combination of a multi-dimensional phenomenon with social, cultural, physical, economic, ecological, and religious layers. It becomes an important aspect to study and objectively understand the aforementioned layers as they are the major contributors to the identity of what is called Varanasi. But there is more to Varanasi, a fourth, fifth, and numerous more layers of internal infrastructure pressure created in the city. As one moves on from the layers farther away from the *ghats*, which are simply the land-water interface, and also the oldest layer of settlements, the forces of dissociation of urban identity come into the foreground. Thus, it becomes essential to investigate how the urban identity is getting diluted as one moves from the city core to the newer areas due to the diminishing character of public places.

The research uses semi-structured interviews and spatial analysis techniques of space syntax theory as the tool for developing the requisite understanding. The preliminary results show that public places that cater to more human scale lead to better cognitive consonance in the indwelling communities and also a strong sense of urban identity and cultural association. Cognitive consonance also emerges as the marker of peace at an individual level which can be extrapolated to the larger social level. In a nutshell, the study focuses on the understanding that urban identity and public places can contribute towards cognitive consonance under certain spatial-social-

cultural conditions. Based on this understanding, design and policy-level recommendations are formulated for the newer parts of traditional cities as well as for contemporary cities.

Keywords: Public Place; Urban Identity; Cognitive Consonance; Traditional Cities, Global South

RESEARCH ON THE TYPES AND SPATIAL-TEMPORAL CHARACTERISTICS OF POPULATION RETURN IN TRADITIONAL AGRICULTURAL AREAS: A CASE STUDY OF SHOU COUNTY, CHINA (954)

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Population return has become an important phenomenon that positively impacts the development of traditional agricultural areas in China. This study investigates the types and spatial-temporal characteristics of population return in Shou County. The study found that the return migrants are relatively disadvantaged in many aspects compared to non-returnees, consistent with the symbol of "losers" in previous studies. Return population is classified into six types, and significant differences in the dominant types of emigration are found across different periods. Spatially, the development of population return exhibits a trend from dispersion to concentration, with early returnees mainly returning to their hometowns in rural areas, and recent returnees showing a significant trend of returning to other urbanization areas, especially to county seats and industry-developed towns, driven mainly by education and employment policies. Finally, this study suggests that local governments need to make more efforts in employment and living space improvements to maintain the current trend of return emigration and ensure the stable settlement of returnees.

Keywords: Population return, urban-rural development, spatial characteristics, traditional agricultural areas

URBAN HERITAGE: PLANNING AND DESIGN CHALLENGES TO PREPARE BUILDINGS AND PUBLIC SPACES FOR A MORE SUSTAINABLE FUTURE (970)

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Although the attention towards heritage is increasing worldwide, financial, and human resources to create the proper regeneration of urban spaces is still a challenge in many European regions. Demographic decrease, abandonment of historic settlements, and lack of effective policy and planning tools are leading many historic villages to dereliction, decadence, and destruction. On one hand, there is the recognition of the historic value of these settlements, but on the other hand policy tools are driving these territories to tourism and other temporary uses such as outdoor activities and secondary housing.

Following a request to prepare a guide on good practices to intervene in buildings and public spaces of the network *Aldeias Históricas de Portugal* (Portuguese Historic Villages), the reflection soon embedded broader topics rather than the initial ones, on how to combine energy transition, proper construction isolation, historic protection criteria and new economic activities (in this case tourism related)? All this, with the expect to achieve in the coming years the villages' classification as national monuments and UNESCO world heritage, and after decades of trying to attract new activities, implement best practices in preserving built heritage and improving public space quality.

The network *Aldeias Históricas de Portugal* is composed by 12 villages in the north center of Portugal, close to the border with Spain. They all are affected by demographic decrease in an even higher pace than the 10 municipalities where they are located. For over two decades, regional agencies have invested in tourism related activities with some success. The number of tourists is increasing, as well as the diversity of activities and accommodation. However, population do not cease to decrease, the territory depends from a single activity and the loss of immaterial heritage, such as the know-how related with traditional construction techniques is affecting built heritage.

Critical contexts as the above, can be also an opportunity to question different aspects of urban regeneration, from thermal comfort standards in times of energy transition and climate change to the adaptation of uses to pre-existing spaces (instead of pre-existing spaces to uses). In this context, some pilot-projects are starting to take place to test new approaches. The outcome of this applied research is combined with a strategy to revive the use of traditional construction materials and techniques in an innovative way while promoting the engagement of different local actors: from local governments, to practitioners, entrepreneurs, investors, permanent and temporary residents.

This presentation will explain the state of the art, the main challenges, and the expected results of the ongoing process. More than to achieve short-term results, the expectation is to set long-term conditions for a sustainable regeneration of these historical villages and its replication in other places, in the same municipalities, in other municipalities in the region, and in regions in both sides of the Portuguese and Spanish border.

Keywords: urban heritage, energy poverty, climate transition, demographic loss, boarder regions

PUBLIC SPACE, CLIMATE ACTION AND SUSTAINABLE TRANSFORMATION AT UNIVERSITY CAMPUSES (977)

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Research, policy and public debates have recognised climate change as an urgent issue to tackle through a systematic action plan. High education institutions may significantly impact climate resilience as they accommodate various educated and skilled communities that are well organised through research and administrative bodies, student organisations, and workers' unions, among others. University campuses can act as testing grounds for methodologies and actions for sustainable transformation in the built environment, which can be adopted elsewhere including, neighbourhoods and cities.

Public space may potentially play a crucial role in community capacity building and mobilisation. Public space is understood as a concrete physical space that is accessible to everyone in real space and time, such as streets, squares, parks; as well as a virtual space including, online platforms and social media. Capacity building can be characterised as the approach to community development that raises people's knowledge, awareness, and skills to use their own capacity and to resolve the underlying cases of a common problem (Crisp et al, 2000). Public space may provide platforms for bringing people together, making ideas to be told and heard, as well as they are sites of visibility, which is central for capacity building and community mobilization.

This paper presents theoretical and analytical framework of a research project on the role of the built environment, specifically public spaces for climate action and sustainable transformation at university campuses. It reviews public space, climate action and sustainable transformation at university campus key theories illustrated with cases from European universities.

Keywords: public space, climate action, campus, sustainable urban planning, community-led planning

REPURPOSING CULTURAL HERITAGE: THE CASE STUDY OF MONTEMOR-O-NOVO (980)

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Many urban centres have used former industrial and religious heritage sites for cultural and creative activities as part of the local strategy. By adapting these heritage buildings for new uses, such as cultural centres, art galleries, museums, and creative workspaces, communities can preserve their cultural heritage while creating new opportunities for cultural, social, economic and environmentally sustainable development.

In this framework, creative tourism has been the subject of increasing interest, proposing the development of cultural and creative experiences that involve visitors in the creative processes of local communities and in supporting local artisans and creative professionals.

Here, we propose to analyze Montemor-o-Novo, a small town in the Alentejo region of Portugal, as a case study. The local strategy included using and repurposing historical and cultural heritage, material and immaterial, with the help of local associations and artists. As a result, in recent decades, the city has become a recognized cultural centre, attracting new residents, creatives and visitors from all over the world.

A key example is the repurposing the former convent of “Nossa Senhora da Saudação”, which now houses the “Espaço do Tempo” cultural centre. The centre hosts a variety of workshops, residencies, and performances in dance, theatre, music, and visual arts, among other fields, bringing artists from different backgrounds and disciplines to collaborate on innovative projects and experiment with new forms of artistic expression. In addition, they are also involved in community outreach activities, offering workshops and educational programs for local schools and community groups. The centre also hosts regular events and festivals, such as the “Festival Escrita na Paisagem”, with new and experimental works of performance and installation art. Consequently, “Espaço do Tempo” has become a key player in the contemporary art scene in Portugal.

Another example is the transfer of the “Convento de São Francisco” by the municipality to “Oficinas do Convento”, a cultural and artistic association that started its activity in a former convent and developed several workshops, events and exhibitions which promote local cultural traditions and involve the community. “Oficinas do Convento” also operates an artist-in-residence program. The program supports emerging and established artists and encourages cultural exchange and collaboration between artists from different countries and backgrounds and local community. They inaugurated another pole, the Earth and Ceramics Workshops, carried out in three complementary spaces: the “Telheiro da Encosta do Castelo” (an old tile factory transformed into a workshop and exhibition space for ceramics), the Earth Laboratory and the Ceramic Research Center (former public laundry wash spaces). The workshops provide a unique opportunity for visitors and residents to learn about the traditional techniques and materials used in local ceramics production while also supporting the work of local artisans and creative professionals.

This ongoing study aims to contribute to a greater understanding of how the replacement of heritage and public spaces for cultural and creative activities can contribute to sustainable development, but also to the challenges that these strategies impose.

Keywords: cultural and creative activities; heritage repurposed; sustainable development; material and immaterial heritage

URBAN GOVERNANCE FOR INCLUSIVE TOURISM: EVIDENCE FROM KINTAMPO NORTH MUNICIPALITY OF GHANA (1001)

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The 2002 UN-Habitat concept paper, dubbed “The Global Campaign on Good Governance”, drew the world’s attention to the importance of inclusiveness in managing urban affairs. And tourism is one of the key sectors that embraces inclusive practices. The paper argues that tourism development in the absence of good urban governance practices, risks being exclusive and unsustainable. The paper explores the extent to which tourism can become more inclusive through good urban governance practices. It draws on the UN-Habitat’s good urban governance indicators – subsidiarity, sustainability, equity, efficiency, transparency, accountability, civic engagement, citizenship and security – to examine the extent to which these indicators played out in two tourism sites in the Kintampo Municipality in Ghana. It finds that despite the practice of subsidiarity, other indicators of good urban governance in the governance of tourism in the Municipality are not met. It concludes that full implementation of good urban governance indicators should be a primary concern in measuring inclusiveness of tourism.

Keywords: Urban Governance

ART AS A WAY OF RELIEVING SOCIAL TENSIONS IN URBAN TIME-SPACE: THE CONTRIBUTION OF MUSICAL DANCE FILMS TO CULTURAL PLANNING (1002)

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The role of art in urban planning has been established for many years, especially in the form of artworks in public spaces. What has not been elaborated, to the extent that it could, is the significance of specific art forms in cultural planning, especially in its social dimension. The aim of this paper is to examine the relevant contribution of the combination of music (which constitutes a temporal art) and cinema (which constitutes a temporal-spatial art). This combination could take various forms, e.g. the significance of sound in the city. Still, this paper emphasises the city's representation in musical dance films, which constitute a particular type of film that combines cinema and music in the city.

Several films are examined: *West Side Story*, *Cabaret*, *Saturday Night Fever*, *Dirty Dancing*, films involving battles of dance groups (e.g. hip-hop films such as *Beat Street*, various relevant franchises such as *Street Dance* and *Step Up*), the two prominent films in which Lin-Manuel Miranda was involved (*In the Heights*, *Hamilton*), as well as exceptional cases such as selected TV series (e.g. *The Get Down*) and Bollywood musicals.

The central hypothesis to be tested refers to the potentially positive role art can play in relieving social tensions, which could evolve into conflicts and turbulences, and incorporate this role into cultural planning. A few additional and related hypotheses are the following: a) how can social tensions be theoretically interpreted in the context of culture, space and time interrelationship (e.g. oppositions in space, time and culture, relation to Lefebvre's routinisation of everyday life in urban time-space), and what is the connection of social tensions to the past (a rewriting of history, return to the past, differentiation from heritage) and to the future (Kevin Lynch's definition of sustainable development as the preservation of the future)? b) what is the opposite social condition of tensions and conflicts, are the tensions and conflicts of social groups in cities mainly about space or time, and how are these oppositions musically and cinematically expressed? c) how are the various social tensions represented in musical dance films, and also what are the main attributes of historical and political connotations? d) what is the interpretation of the emphasis on specific urban cultures (e.g. Latin American), as well as the emphasis on specific cities (e.g. New City), and what is their apparent link to multiculturalism, creativity collective joy, and identity? e) how art can be the starting point of cultural regeneration and, in turn, how cultural regeneration is interconnected with urban regeneration?

Keywords: cultural planning, art, social tensions, oppositions in urban time-space, musical dance films

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REFLECTIONS ON TIRANA'S URBAN IDENTITY (1005)

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This article examines the concept of identity related to public places. In post socialist cities, the rush of urban development signed the loss of peculiar characters of places and of what Pierre Nora called *lieux de mémoire*. The Albanian concept and perception of urban public space have undergone through radical transformations which have affected the identity of the place – neglecting and sometimes canceling it – and the process of place-making. The paper discusses the effect that recent projects have had on the memory and the tradition of public places. The aim is to look at a local level for various forms and manifestations of elements of urban identities. In this perspective, the paper tries to rebuild the evolution of public places of Tirana – using an interdisciplinary approach - to understand the past transformation phenomena and the ones in progress, identifying the specific features of places such as morphological identity, uses and culture. It argues that development of amnesia in the urban space was intentional and proposes guidelines for future developments.

Keywords: memory, place, amnesia, identity, tradition

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A STUDY ON THE IDENTITY AND TOURISM DIRECTION OF BUSAN (1016)

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As globalization and localization have recently accelerated, The appearance of cities is becoming standardized. Accordingly, Each city around the world is paying attention to discovering urban identity to create competitiveness in the city. Since the city's identity is intuitively perceived as the city's charm, identifying and developing the city's identity can positively affect the city's tourism industry. Therefore, In this study, Busan is selected from among Korean cities and various techniques of text mining analysis are applied to identify the urban identity and present directions for improving urban tourism quality in the future.

Keywords: Urban Identity, Urban Tourism, Busan, Tourism Direction, Text Mining

PLACEMAKING TOOLKIT FOR WALES: CO-PRODUCING KNOWLEDGE WITH FOUR LOCAL AUTHORITIES (1017)

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In 2020 Welsh Government and the Design Commission for Wales published the highly ambitious *Placemaking Wales Charter*, aiming to holistically improve the quality of the built environment in Wales, U.K. COVID-19 has exposed the relevance and urgency to implement these principles to make Welsh communities more resilient. Limited urban design knowledge and skills in Local Authorities (LAs), however, jeopardise its swift implementation through local government's daily practices across relevant departments (e.g., planning, regeneration, highways). To respond to this call, a multidisciplinary team of academics and practitioners came together to co-produce with four distinct Welsh LAs a *Public Space Toolkit for Wales* to support their work in designing and delivering the public realm in town centres.

This paper reports on the development of this toolkit, the process of co-production, and the opportunities and challenges involved. It identifies new methods and techniques to make co-production effective and meaningful, and its contribution to create successful design guidance and toolkits along with the potential for knowledge sharing, mentoring, and upskilling amongst LAs, paving the way for new knowledge in co-production with LAs.

Keywords: co-production, local authorities, public space, toolkits, knowledge sharing

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THE POTENTIAL OF PARK FRINGES (1019)

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Many parks in Dutch cities do not have any built edges. This is a missed opportunity for both the park and the city. A building that is adjacent to a park is more valuable than the same building three blocks away that is not adjacent to a park. Conversely, the presence of homes, office buildings or urban facilities around a park makes the park socially safer. We calculated that 43% of park edges in the Netherlands do not border homes or facilities, but rather industrial estates or undeveloped land. This offering a potential for upgrading the park of for inner city densification.

When you think of a city park, you quickly think of classic city parks such as Central Park in New York, parc cinquantenaire in Brussels, or Sarphatipark in Amsterdam. Inner-city, grass, trees, plants, sometimes a pond, kiosk, and surrounded by urban buildings. The edge of the park is important because the park and its surroundings have a symbiotic relationship. From the surrounding buildings, there is a view of the park, which increases the social safety in the park, and thanks to the park, the buildings bordering the park are relatively more attractive. In addition, local residents can use the park as a garden.

However, not all parks in the Netherlands are like Sarphatipark, completely surrounded by urban buildings. There are parks that border meadows, industrial estates, allotment gardens, heavy infrastructure, or greenhouses, sports fields, and hardware stores. These are missed opportunities to exploit the potential of the parks at their edges. Furthermore, parks serve, among other things, recreational purposes, cooling, or as water storage. All these goals are better achieved if the park is in the midst of the urban fabric because the cooling function, water storage function, and green recreational function often fall short in the urban fabric.

Jane Jacobs raised this issue more than sixty years ago in her book, "The Death and Life of Great American Cities": parks that are not well integrated into the urban fabric are doomed to fail. And conversely, a city district without an adjacent park is less attractive than a city district with an adjacent park. Many weakly embedded parks have not only been identified in the United States but in the Netherlands as well, as Arjan Harbers noted in 2015. Based on Floris van Neer's master's thesis, the PBL has now calculated which part of the parks in the Netherlands borders buildings that can benefit from a park, as part of the NWO research Inclusive Waste Wise Cities.

Keywords: GIS, Urban Densities, Urban research, Parks, Design research

TRACK 09: PLANNING FOR INCLUSIVE, MULTICULTURAL AND JUST CITIES

REGIONAL ENVIRONMENTAL JUSTICE IN THE RUHR METROPOLIS (75)

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The concept of environmental justice combines the consideration of negative environmental pressures (e.g. heat, noise, flooding) with access to environmental resources (esp. open space-related green infrastructure such as parks and forests) and relates these to the social situation of individuals. (Fuchs, 2021) Research and practice show that socioeconomically disadvantaged households often live in urban neighborhoods characterized by high, multiple environmental pressures and few or poorly accessible environmental resources. However, since these households often also have limited financial resources for mobility, they cannot travel longer distances to green recreation sites, which is why they are particularly dependent on green infrastructure in the residential environment: for recreation, exercise, and overall health promotion. (UBA, 2015; Köckler et al., 2014; Hornberg et al., 2011)

In the Ruhr Metropolis, there is a particular need to promote environmental justice. First, with 5.1 million people, the Ruhr Metropolis is the most densely populated metropolitan area in Europe. Second, the industrial past and decades of structural change still shape the social structure of the region, which has one of the highest unemployment rates in Germany. At the same time, however, the transformation processes have already shown major successes: there is no other metropolitan city of region in Germany, which offers quicker access to large-scale green infrastructure and the countryside. (RVR, 2021)

In order to expand environmental justice systematically and throughout the region, it was recently politically declared a key element of the green transformation of the Ruhr Metropolis. In the Green Infrastructure Charter (RVR, 2022), environmental justice, combined with climate protection and climate neutrality, is one of five guiding themes for the sustainable, livable development of the region. Despite the goals agreed upon in the Green Infrastructure Charter, the Ruhr Regional Association (RVR) has set out to conduct an analysis of environmental justice at the regional level for the first time. For this purpose, geodata-based analysis maps are being created for the entire area of the Ruhr Association (53 cities and municipalities) in order to gain a spatial overview of the distribution of environmental burdens, environmental resources and the social situation.

This presentation offers insight into the challenge of regional environmental justice analysis. The focus of the presentation is the content-related and methodological definition of regional environmental justice. Additionally, the data and analysis steps used for the regional environmental justice analysis for the Ruhr Metropolis are presented. Furthermore, an outlook on the strategic and practical implementation will be given.

Keywords: environmental justice, geodata analysis, Green Infrastructure, regional planning

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MS FACTORS THAT INFLUENCE PLACE-BASED SOCIAL WELLBEING FOR THE ELDERLY (104)

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Objectives: a wide range of resources have been developed to identify health-related problems in the older ages with the aim of improving their quality of life. Despite the significance of the elderly's wellbeing in urban studies, it seems that there is still a great need for revisiting the definition and conceptualization of social wellbeing. This paper aims to bridge the gap in the literature by examining the influential factors at the neighbourhood scale that affect elderly's social wellbeing in the context of neighbourhood in developing countries focusing on the perspective of the elderly. Based on our findings, we also develop a new conceptualization and definition for this phenomenon.

Method: Semi-structured interviews were conducted with 32 elderly residents aged 65 and more in 6 neighbourhoods in Isfahan/Iran. Using thematic analyses, we found some shared patterns and themes regarding the influential factors of social wellbeing of the elderly.

Results: This study found seven categories of factors affecting the wellbeing of elderly population including sense of mattering, sense of belonging, social interaction, sense of safety, and participation, sense of mastery and sense of reminisce. These findings resulted in developing a new definition for the elderly's social wellbeing in the context of neighbourhood in developing countries.

Conclusions: This study highlights the elderly's social wellbeing definition and factors, which are needed to be adapted and planned in the context of each neighbourhood. We found seven influencing factors, five of which were in line with the previous studies. Two new factors that emerged from the interviews include sense of mastery and sense of reminisce which contributes to our understanding of elderly's perceived sense of social wellbeing. The outcome of this resulted in proposing a more comprehensive definition of social wellbeing for the elderly. The outcome of this study should pave the way for new lines of research including new measurement model for the elderly's social wellbeing.

Keywords: Social wellbeing, the elderly, Neighbourhood, Developing country, Isfahan

THE IMPORTANCE OF LEGALIZATION POLICY IN SPATIAL DEVELOPMENT, PLANNING, AND GOVERNANCE: INSIGHT FROM SERBIA (108)

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The paper examines one of the unique urban and spatial challenges of the intensive development of illegally constructed buildings (ICBs), and a key issues of the legalization policies in Serbia during the socialist and post-socialist periods. According to official data, there are 2.1 million ICBs or 43.4% of the total number of buildings in Serbia. Similarly, it is estimated that almost 50% of the buildings in South-Eastern Europe were built illegally. This shows that a significant part of the buildings does not have a legal validity. Since the 1950s, various contextual factors, especially the restrictive spatial and urban planning (or lack of plans), urban land policy and the inability of the socialist framework to provide affordable housing, have implied the emergence of ICBs as a way of meeting housing needs. Therefore, the ex-post legalization of ICBs is one of the ways to ensure the legal validity of ICBs in Serbia.

It seems that the exogenous adoption of legalization policies, based on the neoclassical approach and 'mainstream' neoliberal approach, without the endogenous decision-making on the emergence of ICBs, as well as reduction of the importance of planning policy, did not contribute to achieving acceptable results. Therefore, in this paper would introduce the framework of 'credibility thesis' of specific institutional forms (e.g. ICBs) as an antipode to the neoclassical approach (Ho, 2014). The institutional credibility includes the credibility of property rights within the Formal, Actual and Targeted (FAT) framework. It includes formal rights, actual property rights and targeted property rights, i.e. legal status *de jure*, *de facto* and *optatus*. Depending on the established goals (FAT framework) and legalization policy measures, several types of state interventions could be diversified according to the Credibility Scale and Intervention (CSI) Checklist. The credibility of legalization policy measures and success of the legalization policy in both analyzed contexts would be assessed.

Regulating legalization in the systemic sense means a special case of dynamic systems characterized by complexity, stochastic behaviour and relative autonomy of behaviour, singularity of behaviour or reactions. Since the 1990, several laws on legalisation were passed in Serbia. Their contribution was very poor given that a very small percentage of property was legalised, the interventions produced insignificant results, and every law postponed the deadline for legalisation. According to the Law on special conditions for registering property rights on buildings constructed without a building permit, the registration of property rights enables legal security in the real estate trade. Law on the legalization of illegal buildings, Law on property legalisation and the rules of procedure book on the criteria for legalisation prescribes the payment of legalization fees and development fees, which are 99% less than regular value for legal construction defined by local decisions. This indicates the limiting of the municipal authorities because the national government prescribes the reduction of taxes for building land development; the discrimination of owners who legally constructed buildings and paid the mandatory taxes; and the reduction of the city/local budgets. Preliminary assessments of the

effects of property legalization (ICBs) in Serbia in accordance with the legislation would refer to economic efficiency, fiscal effects, public local finances and possible public risks.

Finally, it is assumed that the implications of ICBs arise from their juxtaposition and status of 'lock-in', i.e. relations in property rights, planning and laws, and their formal 'opening'. The issues of legitimacy and legal certainty of ICBs could reflect in the policy of legalization and the possible long-term survival of illegality and un-codified property rights as a parallel unofficial system, with unpredictable and uncertain consequences for urban development, planning and governance.

Keywords: property rights legalization policy illegally constructed buildings credibility thesis informal institutions

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WOMEN AS SUBJECTS OF EQUALITY (151)

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For women being included in any aspect of urban life is not yet a given. Their Inclusion is a process which requires continuous commitment. Through the partition of space, the city has reproduced and keeps reproducing cultural models characterizing a patriarchal society indifferent to gender or in which women are still relegated to play certain specific roles. Against this, women struggling for their emancipation, have challenged both existing ideas of cities and urban planning to include them as active subjects of planning and listen to their voices. In some cases, planning has attuned its approaches to a gender perspective and offered some solutions to tailor the city to women's needs and desires. However, in practice and despite relevant achievements towards women's inclusion and equality in the city and urban transformations, women's requirements are still considered part of a generic participative approach that is intended to listen to the voice of vulnerable or other excluded and marginal group of people. Recently, for example, studies have stressed how the *gender data gap* is a crucial missing aspect in thinking and designing public spaces, neighbourhoods, cities for women. Such a debate raises again issues concerning the inadequacy of information and knowledge that we use as a base for more equal and just planning. Besides recognizing the persistence of what we could define as the gender gap in the planning and design of cities, our research has focused on how to fill the cultural gap embedded in models and theories of planning. An excursus of women's contributions to making planning cultures more sensitive to gender opens our paper, which is followed by a discussion on the knowledge that we use and take as a given in practice. After that, the paper moves on a more troubled terrain which is represented by the search for knowledge and clues for changing planning cultural models and actions.

Our research, which has been developed in Bari a medium-sized city in Apulia-Italy has adopted a qualitative approach to planning in which we mix surveys, which are intended to detect cultural changes in women's everyday life and interviews with expert women working as planners, managers or volunteers. Specifically, the interviews are used to highlight the inadequacy of frames currently used to conceive urban transformations and their associated planning models even in the case of inclusive and equality-oriented approaches. Although we are aware of the limits of research based on a single case of study, the obtained results can open up a useful debate in planning. Inclusion appears as surely a crucial first step towards recognizing women as subjects of planning, but we have also to recognize that the world of women, at least in Europe, is increasingly differentiated, polarized and characterized by different aspirations and desires. The critical gaze which is given back by interviews has also highlighted crucial cultural and cognitive pitfalls as well as possible changes to be promoted in planning that could help not only to change certain urban spaces but above all to change the usual but not equal idea of a city and the ways in which we design it.

Keywords: Gender equality, planning theory, knowldges

LONGING FOR GREEN IN THE GLITZY CITY: MEASURING ACCESS TO GREEN INFRASTRUCTURE WITHIN THE CITY OF DUBAI (152)

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The importance of green space and Green Infrastructure (GI) within urban areas has increased tremendously in a post-Covid-19 world (Mell & Whitten, 2021). As millions globally were confined within the walls of their apartments, the need to rethink the configuration of cities became more apparent. And while the link between public health and city planning is as old as the profession of planning itself (Corburn, 2007), the pandemic has re-focused this discussion and pushed this issue high on the agenda of city officials – and citizens alike. Furthermore, the link between urban health and access to greenspaces was further highlighted, and concepts such as '15 min neighborhoods' have found their way into mainstream planning efforts (Pozoukidou & Chatziyiannaki, 2021).

The situation in cities of the Arabian Gulf is especially 'grim' when it comes to access to GI and other outdoor spaces. Historically, due to extreme heat and harsh climatic conditions within the region, most cities were designed with the automobile in mind and with little consideration for pedestrians (Khalaf, 2006). This was especially true in the post-oil era, where rapid development took place, and suburban automobile-dependent developments attempted to address the housing needs of citizens - represented by most government housing schemes in the region.

Dubai, arguably the most famous GCC city, has limited access to green infrastructure and outdoor spaces. The city also has issues relating to the equitable distribution of GI, where older, denser areas have limited access to these amenities. Early on, the city followed a similar development trajectory to other cities in the region and adopted an automobile-centric development vision, with little attention to public spaces and green infrastructure. Dubai also has issues relating to equitable GI access, which was highlighted clearly during the early pandemic. This lack of green spaces and the impact of COVID-19 resulted in the new proposed plan -2040 for Dubai (RTA, 2021), which puts greening the city neighborhoods as a core tenant.

In this paper, we take a closer link at green Infrastructure within Dubai and the overall coverage of these spaces. Through a case study approach and GIS mapping, we examine several neighborhoods in the city and attempt to quantify this access to green as a potential indicator of neighborhood desirability and health. We also aim to benchmark different areas across the city relative to their access to green and explore issues of equity in GI delivery. The paper hopes to contribute to the literature relating to gulf urbanism and livability indicators within the region's cities.

Keywords: Gulf Urbanism, Green Infrastructure, Dubai, Urban Design, Urban Health

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CASINOS AS A PUBLIC HEALTH HAZARD REINFORCING SEGREGATION IN A MARGINALIZED BULGARIAN NEIGHBOURHOOD (164)

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This paper focuses on the impact of gambling venues on public health in the segregated community of Nadejda in Sliven, Bulgaria. It considers urban casinos as a phenomenon at once emerging from, and reinforcing urban segregation. I collect evidence from the experience of the organisation Doctors of the world, present in Nadejda since 2004, and from interviews with the inhabitants and other urban projects about the area.

The city of Sliven concentrates multiple problems: poverty, high unemployment rate and infant mortality, water shortages) including a high percentage of segregated populations. Having emerged as the industrial powerhouse of Bulgaria in the 19th century, Sliven today has few signs of its former economic glory and has faced severe financial problems in the recent past.

The neighbourhood of Nadejda, separated to the rest of the city by a concrete wall and the railway tracks, is stigmatized as a “gypsy ghetto” and as an unsafe place. Having emerged in the 1950s, this area quickly deteriorated after 1989 with the fall of communism and the general impoverishment of its inhabitants, many of whom remained without any income. The transition to a market economy saw a rapid and chaotic construction of informal dwellings, the massive privatisation of public space and the deterioration of basic infrastructure such as canalisation and roads. Nadejda is home to 9550 people or 11% of the city’s population, yet there is no green space or a children’s playground. If before that the neighbourhood boasted an emergency ward and other vital public services, today those have been limited to the police and the post office and since 2018 a kindergarten.

In the absence of sufficient public authorities and services, the void of offering social support is filled by protestant churches from abroad numbering more than 40. The only other quasi-public alternative available is the casino which appeared in the wake of the privatisation of the local community center in 2017. Today, the casino is the main source of adult entertainment and bankruptcy.

Three main questions emerge:

- Understanding the segregation of Nadejda from the rest of the city

In what way is Nadejda an extremity and an exception compared to other urban areas in Sliven and what is its place in the general development of the city in the past few decades?

- What are the effects of urban casinos on urban health and how do they further segregation?

The casino business is one of the fastest growing industries in the world yet its impact on urban health is understudied. (Prentice and Zeng, 2018) Some research suggests that the accessibility and availability of casinos create gambling-related problems such as economic distress, mental disorders and addiction (Conway, 2015; Tolchard, 2015; Tong and Chim, 2013). Other researchers have noted that poor and disadvantaged lower socio-economic communities have more gambling

outlets than economically advantaged areas (Barnes et al.,2013; Welte et al.,2016a). It is vital to understand how urban casinos create poverty, drive isolation and impact health.

- How can these effects be counteracted?

How do the social relations of public space shape society as a whole? In the context of a very limited public space, what alternatives can be put in place by the inhabitants, the institutions and NGOs to counter the negative effects of the casino on urban health?

Keywords: casino, urban health, segregation

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NEW BUILDS AND NEWCOMERS NEAR CAMPUS: STUDENTIFICATION, YOUTHIFICATION, GENTRIFICATION, ALL AT ONCE? (168)

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Much has already been said about urban change resulting from the rise of the knowledge economy. Its vivid expression is the growth of higher education and the consequent inflow of youth to university cities (Moos et al., 2019; Zasina et al., 2023). However, the growth in student populations in such cities has usually not been met with adequate growth of public accommodation at their disposal. Consequently, student demand for housing sprawled off campuses, paving the way for the studentification of adjacent neighbourhoods and establishing new patterns of social segregation in urban space (Smith, 2005, 2019). More recent voices suggest, however, that studentified neighbourhoods might be popular also among other young adults (e.g., recent graduates; Revington, 2022), which raises questions about the links between studentification and youthification. Research on these two processes remains also inconclusive for their assessment as gentrification subsets (Smith, 2005; Lees et al., 2008; Grabkowska & Frankowski, 2015). Therefore, our study follows the current line of research from North America (Moos et al., 2019; Revington et al., 2023), which aims to understand the interrelationships between studentification, youthification and gentrification. However, it sets this discussion in the unexplored context of East-Central Europe by looking at Lodz – the formerly industry-dominated city now one of Poland's most prominent university centres (Zasina et al., 2023). In doing this, our study focuses on the residential new-builds massively expanding on industrial brownfields near the campus of Technical University of Lodz. It employs the three analytical groups – 'studentifiers', 'youthifiers', and 'others' – to examine their residents. This way, it identifies the demographic and socio-economic composition of these near-campus new-builds and provides insights into housing behaviour and experiences of its residents. Our study suggests labelling the urban change in this area of Lodz as new-build studentification and youthification, but it also gives clues to call it 'gentrification-like'. Consequently, our study nuances the current debate on segregation patterns and forms in university cities.

Keywords: Studentification, Youthification Gentrification, University city, Urban change

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SUBALTERN DIGITAL URBAN ACTIVISM: EVERYDAY LIFE NEGOTIATION AND THE STRUGGLE FOR STRUCTURAL SOCIO-POLITICAL CHANGE (198)

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This interdisciplinary research is situated at the intersection of critical urban studies - southern urban critique (Brenner et al., 2010a; Lawhon & Truelove, 2020; Robinson, 2016; Roy, 2011); and science and technology studies (STS) - sociotechnical imaginaries, shared ideas of a utopian society that enliven technoscientific policies and practices (Jasanoff, 2015). Acknowledging the historical dominance of the Global North and questioning the hegemony of western thinking - decolonial approach (Quijano, 2000; Spivak, 1994), contributes to epistemologies of the South (Santos, 2015) and reappropriates technological modernization to build a new episteme (Hui, 2020).

Following advances in critical research on the Capitulo-/Anthropo-/Tecno-/Urbano-cene, subaltern urbanism, southern epistemologies and Lefebvre's notion of the right to the city, therefore comprising globalization, neoliberalization, urbanization and financialization (Brenner et al., 2010b; Brenner & Schmid, 2014; Harvey, 1978, 2001, 2017) under the concepts of surveillance capitalism (Zuboff, 2015), technological solutionism (Morozov, 2013), corporate urban hegemonies (Sadowski, 2020b), which follow thinkers such as Foucault, Deleuze and Gramsci. Moreover, responding to calls to provincialize urban studies, expanding theorizing beyond the Global North, contesting mainstream global urbanism and searching for a new locus of enunciation (Miller et al., 2021; Odendaal, 2021; Robinson, 2016).

Urban hacking is acknowledged as an enduring practice and a transfiguring answer to systematic problems, therefore letting systems remain functioning without unavoidably changing them. Understanding the city as a system translated from computational logic, glitches, technological tenacity and infrastructural liabilities leaves the city open to hacking. As the hack arises in reaction to a current flaw, it is a potentially forceful instrument. Furthermore, hacking the city can both expand neoliberalization, via entrepreneurial approaches to urban management and promoting digital economy and platform capitalism (Sadowski, 2020a); and show disruptive alternative futures, challenging neoliberalization over repurposing corporate and technocratic regimes (Maalsen, 2022).

Following this theoretical framework, the research concentrates on digital urban activism and its socio-political implications regarding people historically marginalized due to race, sexuality and class, advancing towards empowerment and emancipation in the peripheries. Amidst digital urban activism in Brazil, the study regards the enlightening of new arrangements of politicization for subaltern rights, characterized by transnational youth networks adopting ICT as a mobilization device to blend material, political and identity-based demands, that is, the "new new" social movement (Accornero & Ramos Pinto, 2014); cosmopolitanisms from below that originates from daily negotiations of differences (Gilroy, 2004, 2013), the Foucauldian notion of *milieu* as the spatial manifestation of biopolitics, that is, what is needed to account for action at a distance of one body on another (Foucault, 2007).

Questioning how groups of urban data activists contribute to social justice, the case study investigates subaltern sociotechnical arrangements in Rio de Janeiro favelas, represented in NGOs and other civil society organizations. Rio materializes a two-way colonial history, on the one hand, burdened with cultural diversity due to ethnic and religious mixture, on the other hand, inequality and injustices imposed by the force of European expansion persist, as well as expanding inequalities, political uncertainty and extreme social tensions and polarizations. By studying the activities and interactions of participants from an actor-network perspective (Latour, 1996), the digital activist ecosystem in the city was mapped and the levels of political participation and social inclusion assessed, such as the examination of projects, actions and initiatives regarding digital education, access to information, community communication, digital rights, digital urban culture, creation and dissemination of data about the territory and people. Prioritizing actions, projects and initiatives conceived, promoted and implemented by people from favelas and for people from favelas.

Keywords: Urban hacking, digital activism, conviviality, inequality, decoloniality

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THE PRICE PAID FOR CHEAP HOUSING - AFFORDABLE HOUSING WITH FEW SERVICES MAY BE TOO COSTLY IN THE END (205)

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In large cities residents often move to the urban fringe and new growth areas in search of more affordable homes, as land prices are generally lower. However, particularly transport costs mean that overall living costs are not necessarily more affordable than in other areas (Dodson & Sipe 2008, Smith et al. 2021). One reason for high transport costs are a lack of jobs, infrastructure and services in these newly established areas, making it necessary to travel further than in other areas. Reasons for this lack are the scarcity of existing destinations, infrastructure and services, and the high costs of providing new infrastructure and services. Yet simultaneously, the distance to destinations and lack of infrastructure and services are a reason for land prices being cheaper.

Some commentators argue that there is a need to build this way, i.e. to keep building on the urban fringe and to only provide essential infrastructure as higher quality infrastructure would lead to higher land prices, and cheap land prices are necessary so that more people can afford to own a house or dwelling (Edmunds 2016). However, this leads to spatially segregated cities, and entails further costs, such as building on peri-urban land which leads to the destruction of farmland and increase in impervious surfaces; the social costs of a lack of social and community infrastructure (such as the higher potential for family violence, social isolation and mental health issues) and low opportunities for social and economic participation, and also increased congestion (Buxton & Butt 2020, Davern et al. 2017). Also, in contrast it could be argued that when infrastructure and service quality is similar over the whole city area, the existence of these infrastructure and services would not impact land prices (or at least not strongly).

Drawing on 30 interviews with stakeholders in growth area planning in Melbourne, Australia, 30 interviews with residents of two Melbourne growth suburbs and a document analysis of government strategies and plans, this paper analyses the awareness and assessment of the lack of infrastructure and services by residents and planners, what this means for new development on the urban fringe, and how the development of new suburbs could be improved to avoid the infrastructure lag. The paper also comments on how housing affordability needs to be viewed differently and could be achieved other than by providing cheap land on the outskirts of the city.

Keywords: affordable housing, affordable living, growth areas, infrastructure lag, Melbourne

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THE IMPACT OF SOCIAL INFRASTRUCTURE ON INDIVIDUAL SOCIAL ISOLATION USING MULTILEVEL LOGISTIC MODEL (207)

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The number of single-person households and people who are in "social isolation" due to situations such as COVID-19 is increasing, and resolving this social isolation is recognized as an important issue. Social isolation is a state in which close personal relationships are absent (Eckhard, 2018), and social connectivity is deprived (Zavaleta et al., 2017). This social isolation affects not only the individual's situation but also the local environment in which they live. The purpose of this study is to examine how social infrastructure affects social isolation. The scope of the study was 44 counties classified within five metropolitan cities in Korea, and an analysis was conducted on 64,314 people. The multilevel logistic model used 'Is there anyone who can get help in times of need' as a dependent variable, and variables included gender, educational background, age, social activity, and the ratio of the number of single-person households

As a result of the analysis, it was found that gender, educational background, life satisfaction, and social activity were significant among the first-level individual factors. First of all, in the case of gender, it was found that men were more likely to be socially isolated. The higher the educational background, the less social isolation was found. Third, the higher the life satisfaction, the lower the possibility of social isolation. Finally, it was found that in the case of social activities, the possibility of social isolation decreased. In the two-level regional factors, the variables of public transportation and walking arrival time in traditional markets were found to be significant. On the other hand, other regional-level variables did not show any significant effect.

Based on the analysis results, the following meanings can be expressed in urban planning. First of all, it is to strengthen the function of traditional markets in Korea. In Korea, traditional markets have been effective in promoting people's exchanges and preventing social isolation as a social infrastructure. In Korea, the traditional market has recently declined, and various policies are being promoted to revitalize it. In establishing such policies, it is necessary to recognize traditional markets as social infrastructure and create them as effective community spaces to prevent social isolation of various classes. Finally, there is an improvement in the design and installation direction of the park. In general, parks are considered to be an effective social infrastructure for promoting social exchanges, but they were not significant in Korea. This means that the park does not function as a space for social exchange, so there will be a need to create a park in the direction of promoting exchanges with others when designing the park in the future.

Keywords: Social Isolation, Social Infrastructure, Community

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Funding:

This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2020S1A3A2A01095064).

CHANGES OF TRIPLE SEGMENTATION PATTERNS OF THE LABOR MARKET AND HETEROGENEITY OF GAP IN KOREA: A LABYRINTH OF IN-WORK POVERTY (209)

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Several global economic crises have caused the expansion and acceleration of the working poor. One of the factors is the segmentation of the labor market, which is reported to cause inequality in the employment structure. The purpose of this study is to grasp the labor market structure of each region in Korea and empirically identify that there are hierarchy and restrictions on mobility. Through Latent Class Analysis (LCA), we identified the structure of the labor market for each region and the income trajectory of individual wage workers in each labor market was estimated with the Latent Curve Model (LCM). Based on data from the 12th to 23rd years (2009 to 2020) of the Korea Labor and Income Panel Study (KLIPS), in the case of Korea, multi-layered segmentation of the labor market (three stage) is observed in each region, and the share varies from region by region. Moreover, there is a strong possibility that there are restrictions on the movement between hierarchies and ranks in the labor market structure. The wage gap between individual wage workers in the weakest labor market, which has strong externality and those in the top internal labor market is gradually deepening. Outsiders were determined by applying each household's characteristics to personal income as a Multi-Level Model and comprehensively considering variables such as age, gender, education, and industry etc., and their proportion is gradually increasing within the minimum labor market. In addition, clear restrictions are identified on their entry into the next higher class. Restrictively, there is a transfer to the middle class from the lowest class by the wage premium phenomenon, depending on whether they live in a large city, but the high cost (housing cost, etc.) living in a large city offset this. It can be seen as encouraging that the movement of the middle from the lowermost layers can be flexible, but considering the actual spending capacity, such as disposable income etc., it is due to the downward movement of the entry of the middle layer. Furthermore, in the case of provinces, the exclusive status of the top internal labor market class seems to be solid. In a heterogeneous labor market segmentation structure with an increasingly widening and "coagulating" gap between the middle and top classes and an increasingly narrowing and "melting" barrier between the middle and lower classes, outsiders are circling over a "labyrinth of in-work poverty".

Keywords: Working Poor, Segmentation of Labor Market, Income Trajectory, Wage Premium

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Funding:

This work was supported by Korea Environment Industry & Technology Institute (KEITI) through "Climate Change R&D Project for New Climate Regime", funded by Korea Ministry of Environment (MOE) (2022003570002).

LOW-INCOME CLASS'S RESIDENTIAL SEGREGATION AND URBAN REDEVELOPMENT PROJECT BETWEEN 2011 AND 2020 (210)

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In the wake of the economic crisis in late 1990, the gap between low-income and non-low-income groups began to widen, and recently, as the combined earned income of Seoul, Gyeonggi, and Incheon exceeded 60% of Korea's total earned income, polarization between regions has also emerged. Therefore, a detailed analysis of the residential segregation index between the low-income and non-low-income groups is needed from the perspective that easing the residential segregation of the low-income class can alleviate socio-economic polarization beyond income polarization.

This study aims to analyze the time series of changes in the segregation of residences for the low-income class within seven large cities where the past has changed significantly. The analysis range is between 2011 and 2020, and the target areas are Seoul, Busan, Daejeon, Daegu, Gwangju, Incheon, and Ulsan, which are the seven major metropolitan cities representing Korea. The national basic living recipient sat as an alternative index for the low-income class. Residential segregation is measured by four indicators: the index of dissimilarity, the index of isolation, the location quotient, and local Moran's I. In addition, using the Propensity Score matching Method is intended to investigate the causality of redevelopment projects affecting the segregation of residences for low-income families.

As a result of the analysis, it confirms that the segregation of residences of the low-income class has steadily intensified for ten years in all seven cities, which are case areas. In particular, the dissimilarity index of Seoul is higher than other cities, confirming that the separation of residences for the low-income class is the most severe in Seoul. Among them, it also confirmed that Gangnam-gu and Seocho-gu in Seoul, where the isolation index was high, were concentrated and lived. As there are few areas with a location quotient higher than 1, there were few places in large cities where low-income families were severely concentrated. However, through the local Moran's I analysis, it was confirmed that there are regions with a relatively high proportion of the low-income class in clusters through regions with positive values. Finally, the PSM analysis method confirms that the redevelopment project further intensified the segregation of residences for low-income families.

This study is meaningful in that the spatial structure of poverty, which is difficult to find in residential segregation studies, is identified over ten years by using various indicators such as the index of dissimilarity, the index of isolation, the location quotient, and local Moran's I. In addition, using the PSM analysis method, it is revealed that the steadily progressing redevelopment projects for urban beautification deepen the segregation of residences, leaving implications for the future direction of urban development projects.

Keywords: low-income class, residential segregation, inequality

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Funding:

This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education (No.2020R1I1A3056561)

EFFECT OF EQUITY IN LIVING AREA PARKS ON INDIVIDUAL LIFE SATISFACTION BASED ON THE GINI INDEX AND MULTILEVEL ANALYSIS (221)

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Research on the equity of green spaces in cities is continuously being conducted. Additionally, the effect of urban green spaces on life satisfaction, which is subjective, has been theoretically and empirically analyzed. Therefore, this study examined the equity of living area parks closely related to actual use. It also analyzed the effect of equity based on area and accessibility to the population of living area parks on residents' life satisfaction.

First, the Gini Index was calculated to confirm whether the living area parks in Busan, Korea, are currently distributed spatially and equitably. Additionally, multilevel analysis was used to examine whether the living area parks affect residents' life satisfaction. The following were the research questions: Is the living area park in Busan currently distributed fairly? Will the area of the living area parks affect the satisfaction of Busan's residents? Will the accessibility of the living area parks affect the satisfaction of Busan's residents?

The Gini Index of the Busan living area park was calculated to address the first research question. The Gini Index per 1,000 people was 0.5 or more in all areas, confirming that the degree of distribution was very unbalanced. In the case of accessibility, there was equity compared to the population, but more than half of the areas scored 0.4 or more, indicating an imbalance in terms of accessibility. In other words, the equity of the living area park in Busan is low relative to the population and so is the accessibility. As the equity of the area of the living area park is relatively low, it is necessary to consider the equity of distribution to the living area park.

To address the second research question, the effect of living area parks on life satisfaction was examined. Sociodemographic characteristics (gender, age, and marital status) and socioeconomic attributes (subjective class perception, housing type, income, and educational background) were considered as personal factors affecting life satisfaction. The multilayered model analysis revealed that both the area of the living area park per 1,000 people and the accessibility of the park were below 0.001, which statistically had a positive effect on the life satisfaction of Busan's citizens. Busan's living area parks currently lack equity in terms of quantity and accessibility, but it is necessary to expand the same considering the distributional equity in living area parks, as this actually affects citizens' life satisfaction. This study is significant in that it highlights that living area parks are crucial to individual life satisfaction. The results of this study bear implications for urban policies aimed at resolving inequality in green facilities, such as living area parks.

Keywords: Individual Life Satisfaction, Equity, Gini-index, Multilevel Analysis

CONDUCTING AN EXPERIMENT TO PREVENT AND COMBAT SEXUAL AND GENDER-BASED VIOLENCE IN TRANSPORT: THE CASE OF LINE 13 ON THE RATP ILE-DE-FRANCE NETWORK (244)

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In the domain of urban planning and policies, experimentation has a certain prestige, referring to its empirical scientific origin and to the idea of an experiment which presupposes the control of a certain number of parameters. Experimentation implies attempts, an openness to uncertainty and a right to fail, which may be in conflict with the expectations of the commissioners in terms of innovation, reproducibility and standardisation. As part of the action plan against sexual and gender-based violence of the RATP, a transport operator in the Paris region, this PhD work proposes experiments on the metro network. These experiments not only examine the work of RATP field staff and their role in the fight against sexual violence, but also capture users' experiences of mobility. One of the aspects of this experimental approach is built around the collaboration and participation of three groups of students using public transport every day and the RATP teams, in order to take account of the continuum of violence experienced in the spaces crossed. Several types of workshops will be set up with these two groups of people to discuss their daily mobility experiences: collective workshops, mini-interviews, "sensitive" walks. This experiment will take place on line 13 of the Paris metro, which has many particularities: Line 13 is the longest in the Paris metro network, crossing ten cities and having three suburban terminals. It is the fifth most frequented line and serves various hubs including two railway stations. An initial survey by questionnaire and semi-directive interviews showed that female students who use this line daily to go to the University of Saint-Denis are particularly targeted by sexual assaults. The case study conducted on this line is based on two hypotheses: transport congestion and the interior configuration of the metro trains create situations of opportunity for the aggressors; female students are particularly affected because they are a more vulnerable group of young isolated women, often in precarious situations, who use transport to get to class during rush hour. Thus, the initial experiments conceived in the RATP's plan to fight violence intersect with those carried out by the researcher and have the aim of highlighting the corporeality of experiences, crossing audiences and questioning the porosities in the interface between the professional world and the world of users. In addition, they make it possible to move away from a territorial vision of violence, which a more standardised and supervised system does not allow. In this context, the researcher plays the dual role of mediator and observer. The aim of the research is to draw up a monograph on what happens at the interface between the professional world of transport and that of users by breaking down the boundaries between the different audiences that come together on a daily basis on the network. These various workshops involving students and RATP staff will be followed by several months of immersion by the researcher in the different professions on line 13. The aim is to understand how the protocols for preventing and combating sexual violence are deployed in the daily routine of station agents and the operator's police teams.

Keywords: Experiments, violence, participation, collaboration, interface

PERCEPTIONS MATTER: A TEMPORAL ANALYSIS OF STAKEHOLDER OPINION OF NORTHERN IRELAND'S PLANNING SYSTEM (246)

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Planning systems throughout the UK, Europe and internationally appear to be in a constant state of flux as successive governments attempt to respond to competing demands from a diverse range of political, economic and socio-environmental interest groups with disparate views about how the planning system needs to change 'for the better'. To date, the effectiveness of the planning system and associated reform measures have almost exclusively been evaluated on the basis of performance-based indicators associated with service delivery (e.g. speed of decision making, approval rates, development completions etc). In doing so however, there has been widespread failure to analyse the efficacy of the system in other ways. Specifically, virtually no attempt has been made to understand how the planning system (and attempts to reform it) are viewed by key 'clients' of the system, namely politicians, developers, the public and planners themselves.

Our research seeks to address this gap by analysing the views of key stakeholders in Northern Ireland's planning system based on two surveys carried out before and after major reforms were introduced in 2015 which saw the majority of planning powers (over the regulation of development and forward planning policy) being devolved from central government to the region's local authorities. Whilst Northern Ireland thus presents itself as a useful empirical lens to explore the dynamics of stakeholder opinion about the effectiveness of these reforms, the survey data also offers a rare and unique opportunity to analyse the extent to which attitudes towards the performance of the planning system and priorities for reform have changed over a 10-year period (2011-2021). The research thus offers interesting insights into the dynamics of stakeholder opinion and planning reform whose relevance extends far beyond the shores of Northern Ireland. Specifically, the research signals the need for us to think differently about how we assess the performance of individual planning systems by encapsulating the views of a much wider cohort of stakeholders in order to carve out alternative (and more representative) reform agendas.

Keywords: Stakeholder opinion, planning reform, decentralisation

DESIGNING FOR GENDER EQUALITY: SPATIAL THRESHOLDS AS EMPOWERMENT DEVICES (254)

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“We define the space in which we appear, and that act of appearance then defines our roles in society.” (Betsky, 1995, p. XVII)

Designing for inclusion, justice and care means questioning how different bodies and voices are made visible in space and how architecture can be aware, encapsulate and translate their needs, aspirations, and identities. However, the built environment is a spatial palimpsest charged with cultural, political and environmental tenets, where the power relations that have shaped our cities are unveiled. Historically, the heard and visible voices were those correlated with the mainstream, the “space-makers”, usually Caucasian, abled-bodied males, who addressed design through the lens of a universal man, flattening the everyday experience and use of space with the idea of ‘one size fits all’.

Hence, in light of the New European Bauhaus Framework and the SDGs, which offer a theoretical impulse to the architectural and spatial discourse, the contribution addresses the topic of the design of inclusive, multicultural and just cities adopting a feminist critique. Designing through a feminist critique means questioning whose voice is represented, how bodies are “physically, socially, sexually, and discursively produced” (Grosz, 1995), and how this attitude can inform a different kind of engagement with people and the environment. Looking at the city and modifying its structure encompassing a feminist critique would not mean designing an only-woman city, but rather a city for everyone, a caring city, where the spatial character would reflect the social and cultural one. Indeed, there is a need to reframe the question of designing for gender equality and of feminist methodologies shifting from a “women-only issue,” to an “everyone issue.”

The idea of collaboration and co-design at different scales and stages that permeates this approach to architecture allows for blurring the lines between public and private, individual and collective, considering the thresholds between these dimensions as places where empowerment, justice and dignity arise. In this sense, the contribution proposes a reflection on the design of collective housing conceived as catalyzers of inclusive and democratic practices, able to foster gender equality through design. The main focus is on the transition spaces, between the domestic, collective and public domains. By working on the concatenation of spaces, on the spatial sequences, between inside and outside, the paper wants to tackle how gender can shape the morphology of our spaces, re-weaving the relationship between gender, body, and architecture.

By understanding how women use space over time, from walking to living, it is possible to rethink spaces and architectures as open to modification and adaptable to their needs and expectations, weaving together sociality, spatiality and temporality. In this sense, the empowerment of more marginalized groups through architecture is configured as an essential moment in framing the transition towards self-reliant communities (Shuman, 2000). A shift in perspective, parallel to the mainstream one, that engages traditionally excluded populations such as women through co-creative processes and builds local knowledge and a sense of caring, to build a space in which

communities, and specifically women, can participate as equals, introducing their knowledge, innovations and identities.

Keywords: Feminist Critique, Spatial Thresholds, Empowerment through Design, Collective Housing

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COASEAN PLANNING METHODS AND USE OF TACIT INFORMATION AND VALUE CAPTURE INSTRUMENTS (269)

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Even though the theory of R. Coase is the original source of Law & Economics (as the common ground of legal and economic studies), its importance for planning theory is enormous. In this article, I argue that the theory of R. Coase has a critical role in defining the key approaches of urban planning at its main stages: exploring urban structures, identifying planning goals and implementing development plans. The Coasean approach in planning can be defined by comparing Coasean and Pigouvian planning methods but such comparisons in urban and spatial development and planning are rare. This research contributes to the debate on the differences, advantages and disadvantages of Coasean and Pigouvian planning methods by considering them as alternatives only to a certain extent. In the paper, I emphasize that when collective forms of ownership prevail, the Coasean approach necessarily involves Pigouvian methods; the former thus should be seen not as a rejection of the latter, but as its improvement. The main contribution of the paper is that it identifies two important characteristics that distinguish the two approaches: the use of decentralized (dispersed, tacit) information and the use of market-based methods for implementing plans. The paper explores a case study – the planning of post-socialist Sofia, the capital of Bulgaria. Sofia is a suitable case study because post-socialist planners mostly use traditional Pigouvian planning methods and lack Coasean-type market-based instruments. To identify the advantages and disadvantages of the Pigouvian and Coasean planning approaches, this research analyzes the 2007 General Urban Plan (GUDP) of Sofia and focuses on the development of urban form and the city's green infrastructure.

Keywords: Coase's theory; Value capture; Coasean bargaining; Planning theory; Use of tacit information; Law & Economics

ANALYSIS OF THE SPATIAL CLUSTERING CHARACTERISTICS OF AIRBNB IN HONG KONG AND PLANNING AND GOVERNANCE STRATEGIES (272)

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The sharing economy has become a new engine of growth for many cities worldwide, significantly increasing cities' vitality, enriching business and consumption models, and creating economic opportunities and possibilities. Airbnb is widely popular as a new accommodation model connecting hosts and renters directly. It enables tourists to better experience local life while providing diverse travel accommodations.

However, the rapid expansion of Airbnb has also brought about a series of problems, such as disrupting the traditional local tourism accommodation and housing rental markets, and causing security and management problems in residential areas. Previous studies have shown that there are specific spatial distribution patterns and aggregation characteristics of Airbnb. For example, location and transportation conditions are closely related to the density of Airbnb; another example is that hotels and Airbnb have prominent proximity clustering characteristics in space, etc. But these findings have different conclusions in different cities' empirical analyses.

Hong Kong was a popular tourist destination worldwide, with more than 10,000 Airbnb listings in early 2020. Conducting spatial aggregation feature analysis of Airbnb helps to uncover spatial distribution patterns and provides clues for the development of planning interventions or guidance strategies to support the healthy development of shared B&Bs. In this paper, multi-dimensional spatial clustering analysis is conducted from two perspectives: Airbnb listing and TPU-based aggregation, providing a reference for planning and regulation at different scales. The analysis methods include standard ellipse, kernel density, spatial autocorrelation index (global and local), and HDBSCAN clustering.

The study identifies distinct clustering characteristics of Airbnb in Hong Kong regarding spatial distribution. At the sample point level of the listings, both the standard ellipse and kernel density analysis results indicate that Airbnbs are mainly concentrated in the Kowloon Peninsula and the northern part of Hong Kong Island, forming a specific scale effect; the HDBSCAN method obtains similar results and identifies seven distinct spatial clusters. At the TPU level, the global Moran index shows spatial self-correlation features. Meanwhile, the LISA index shows that the local clustering is dominated by "H-H" and "L-L" characteristics; the hot spots are mainly distributed in developed areas of Kowloon, while the low-value regions are primarily concentrated in the northern New Territories. Combined with the city's main functional areas, the distribution of Airbnb has formed various characteristic clusters, including tourism services, leisure and vacation, business services, education and culture, and comprehensive services.

Finally, the study proposes urban planning and governance strategies to highlight the shaping of distinctive shared B&B areas, promote the orderly development of large-scale agglomerations, and ensure community peace and safety, to provide some reference for promoting better and healthier growth of shared B&B in Hong Kong.

Keywords: Sharing economy; Airbnb; Spatial clustering; Planning governance; Hong Kong

PARTICIPATORY PLANNING AND INCLUSIVE DESIGN THROUGH A STAKEHOLDER WORKSHOP: A HANDS-ON EXPERIENCE ON A MIDDLE-CLASS MASS HOUSING SITE IN ANKARA (277)

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Participatory planning, as an alternative to conventional urban planning and design, has a long tradition as a part of the democratisation of scientific research and decision-making and decentralisation of the design process (Golobic and Marusic, 2007). It was discussed in relation to community planning in the 1960s, advocacy planning, transactive planning, radical planning and communicative planning between the 1970s and the 1990s, the social capital approach in the 1990s, participatory governance and citizen science approaches from the mid-1990s and today (Hickey & Mohan, 2004). Inclusive design is a design methodology and a development process of a product, service or environment by including the end-users' views, aspirations and needs as part of the participatory planning process (IDRC, 2022). Both participatory planning and inclusive design aim to develop a process in which planning and design decisions in urban spaces are made with public consent. In many countries, participatory planning is recognised as a legal obligation of spatial planning and design, while it is symbolically implemented in planning and design schemes only to fulfil the legal requirement and official planning procedure. Also, in many countries, participatory planning practice can only stand at the basic level; and it is reduced to granting the process legitimacy or selling the predetermined plan proposal to the public (Golobic and Marusic, 2007).

Despite difficulties and challenges in practising participatory planning and inclusive design, the growing literature comprises new ways and methods of conducting these approaches and underlines their benefits and merits. Also, professionals have increasingly recognised participatory planning and inclusive design as essential inputs to spatial planning and design. Among several public participation methods in spatial planning and design, stakeholder workshop (SW) is favoured for active involvement and engagement of end-users (i.e., citizens such as homeowners and renters) in the problem definition and solution development together with professional experts such as architects, civil engineers, and planners. Besides, SW is widely recognised as a co-designing methodology to establish a constructive and continuous dialogue among stakeholders, empower citizens as active agents towards meaningful and purposive adaptation and change their everyday environments (Boyle and Harris, 2009). It can also provide a better understanding of users' tacit knowledge and co-producing more effective design solutions and help development of a collective learning process.

This research aims to describe a hands-on, bottom-up endeavour of an EU project titled 'Middle-Class Mass Housing in Europe' (MCMH-EU) on an example of a fifty-year-old mass housing site designed based on the Modern Movement principles. Stakeholder Workshop (Co)Designing for Quality of Life in MCMH was held in Ankara (Türkiye) in October 2022 on a cooperative housing site, which suffers from several problems. The workshop gathered a group of international researchers, designers, and residents of the housing site to improve quality of life and sustainability of local community. This paper explains the participatory planning and inclusive

design concepts, their types and merits; introduces the case study site, its problems and potentials, and the SW methodology, describes five projects and their outcomes and finally, discusses the potential and limitations of such a participatory and inclusive planning and design approach.

Keywords: participatory planning, inclusive design, stakeholder workshop, co-designing, co-creating

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PUBLIC SPACE WITH A GENDER PERSPECTIVE. INFONAVIT AMALUCAN HOUSING UNIT, PUEBLA-MEXICO (288)

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The United Nations Organization recognizes that gender violence is any violent act based on gender, which has or may result in physical, sexual or psychological harm against women, as well as threats of such acts coercion or arbitrary deprivation of liberty, whether they occur in private life or in public life (WHO, 2021).

Regarding the latter, the data shows that women perceive greater insecurity in public spaces such as public transport (75%) and on street (74.6%) (INEGI, 2019). According to data from the National Survey of Victimization and Perception of Public Safety in Mexico (ENVIPE), women suffer 91.8% of sexual harassment (groping, exhibitionism, and attempted rape) 82.5% could be victims of rape, both crimes could commit on street 42.7% or public transport 32.2% (INEGI, 2019). This situation has forced women to limit their mobility and/or being forced to change transportation routes, which affects their performance of work, educational, social, and entertainment activities.

From urbanism point of view, the relationship between public space and the women's insecure is studied due to conditions of public space and how these determine the dynamics of women. Likewise, how women propose individual and/or collective strategies as resistance to execute their right to the city, facilitate access to fundamental aspects of life such as housing, work, infrastructure. The case study of Infonavit Housing Unit was selected Amalucan at Puebla city, Mexico, to analyze physical and social violence against women in public spaces.

INFONAVIT Housing Unit Amalucan was built in the 1960s and 1970s, in a context in which the Mexican government proposed a public housing policy, this is how the "Instituto del Fondo Nacional de la Vivienda para los trabajadores" (INFONAVIT, by its Spanish acronym) was created to finance housing social, which proposed multi-family housing projects such as Housing Units that responded to a functionalist city design that benefited the economic activity of the country (INFONAVIT, 1974).

These houses were built on the outskirts of the city. However, from the gender perspective, the general design conception of this Housing Unit presents an androcentric design that currently does not satisfy the demands and needs for women, as well as does not promote the well-being of women in spaces, both private and public, due to because it focuses exclusively on the physical, psychological and social needs of a single user (Muxi, 2012), this is how the components of the architectural, urban and mobility urban space have contributed to exclusion, discrimination and violence against women, particularly. (Segovia, Snow, 2017)

The lack of women in urban planning processes creates a knowledge gap, resulting in public spaces that are not inclusive. Currently, urban planning and management processes lacking a gender perspective have contributed to generating transitional public spaces and not appropriation spaces (Alvarado, 2022).

The women who live in the INFONAVIT Housing Unit Amalucan avoid public space due to perception of insecurity and violence situations generated by the architectural urban environment and urban environment. The principles of planning with gender responsive have to emphasize helping to create places that are appreciated and used by people of any age stages, genders, socioeconomic classes. (Kneeshaw, 2018)

For this reason, the objective of this research is to encourage women to recognize the components of public space that discourage its use, through participatory processes with a gender perspective, which help to identify the physical and social conditions that generate violence. active as passive violence in the public space of this housing unit, which favor the coordination of interconnected urban spaces, livable and socially inclusive urban spaces.

To create cities that are inclusive and socially sustainable, gender inclusion is therefore essential.

Keywords: Gender, public space, passive violence, community participation

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BRIDGING INCLUSION AND INNOVATION THROUGH URBAN INNOVATION POLICY—THE CASE OF MELBOURNE INNOVATION DISTRICT (303)

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As Wagner et al. (2019, p. 27) write, the aim of the “*inclusive city*” [...] *is becoming more and more elusive. As a result, innovation districts are increasingly subject to heightened political and community scrutiny, requiring closer links between innovation and inclusion to be articulated, designed, financed, and delivered.*” This study aims to investigate the possibility of this connection between innovation and inclusion in terms of urban governance, planning, and policies, especially in the case of implementing an innovation district through urban innovation policy.

Innovation districts are relatively new phenomena in the innovation literature and in urban and spatial planning. An innovation district can be defined as a physically compact and technically wired geographic area where companies and other core institutions come together and connect with start-ups and business incubators while providing housing, retail, and office spaces (Katz & Wagner, 2014). In Finland, the Turku Science Park area has recently been studied as an innovation district aiming to boost the competitiveness of the entire Turku business region (Kalliomäki et al., 2018). In the case of Melbourne, the Melbourne Innovation District (MID) is a joint project of RMIT University, the University of Melbourne, and the City of Melbourne launched in 2017. The two universities are located close to each other in the central city, with relevant stakeholders nearby. This university precinct is being strategically developed into an innovation district through investments, infrastructure renovations, innovation activities, and projects (Melbourne Innovation Districts, 2023).

Innovation districts can help the cities in which they are located by creating new jobs, generating city tax revenue from successful companies, boosting economic growth, offering people a quality place to live, and providing opportunities for open innovation within the innovation ecosystem. However, innovation districts have also been critiqued for being non-participatory, undemocratic top-down initiatives, which may increase polarization and gentrification (Morisson & Bevilacqua, 2018), and the wider public can see them as elusive areas that mostly benefit knowledge workers. “*Innovation districts are places for the privileged few*” (Esmaeilpoorarabi et al., 2020a, p. 7). There is a need for research to investigate the role of innovation districts as inclusive and beneficial places for the whole of society in cities (Esmaeilpoorarabi et al., 2020a; 2020b). Therefore, the challenges and opportunities for this kind of innovation-based development are worth exploring to contribute to a more inclusive urban society in the framework of an innovation district. This research is a sub-study in a doctoral dissertation about inclusive innovation policies and urban development, and the purpose of this case is to explore the spatiality of inclusion as an urban innovation policy objective.

For this study, the research method is thematic walking interviews (e.g., Evans & Jones, 2011) (will be piloted in February 2023) with relevant governing actors and stakeholders at the MID. As the innovation district in central Melbourne is still quite young and concerns many different actors in the city, it is relevant to gain all-round knowledge of the topic via interviews. Exploring the district by walking with the interviewee allows this study to gain unique views of the perceived

inclusiveness of the district and provides a way to assess the spatiality of inclusive innovation and urban development practices. Expected results include more scrutinized knowledge of the spatiality of inclusion as an urban innovation policy objective, analysis of the practices of executing inclusive innovation policy objectives within innovation districts, and policy recommendations for more inclusive innovation districts and the implications for urban planning.

Keywords: Innovation districts, Inclusion, Inclusive, Urban innovation policy

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THE MAKING OF SPATIAL INJUSTICE: A CASE STUDY OF THE HONG KONG PLANNING STANDARDS AND GUIDELINES (312)

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The health settlement map (Barton and Grant, 2006, p.2) shows that human beings require certain basic qualities in the physical and socio-economic environments for a healthy life and this underlines a need for territorial social justice (Smith, 2000, p.1160). However, institutions embedded in different place-based socio-economic, spatial and political contexts have complicated the implementation of the health settlement principles. While planning plays a crucial role in providing a spatial environment for human flourishing, the production of space is often, unfortunately, 'the major systematic producers' of injustice (Dikec, 2001, p.1787).

This paper reviews the Hong Kong Planning Standards and Guidelines (HKPSG), a non-statutory document that plays an important role in developing plans at the strategic territorial as well as local statutory plan-making levels and examines how the embedded institutional mechanisms have led to spatial injustice in the city. The HKPSG has 12 chapters specifying various important dimensions for spatial planning. Yet, the largely population-threshold-driven standards do not differentiate people's gender, age, race and religious backgrounds and discriminate against low-density areas. The HKPSG stipulates broadly two dramatically different density regimes; and coupled with the almost uniform provision standards of various urban amenities, the document has produced divergent spatial qualities between the high-density urban areas (with 12% of land mass and over 90% population) vis-à-vis the low-density rural areas (with over 80% land mass and less than 10% population).

As Hong Kong is proud to be a market-driven society (that is, with nominal government intervention and a belief that the market is inherently just), the planning standards tend to be 'minimalist'. For instance, per capita neighbourhood open space in Hong Kong is just two m² per person and the hospital bed standard is 5.5 beds per 1,000 people. Moreover, the standards and guidelines are largely revised by the respective policy bureaux and their respective executive departments. Except for some professional bodies and elites, the lay public generally does not have an opportunity to review the HKPSG, let alone challenge their respective policy domains, underlying philosophy, rationale and provision standards.

It would not be an overstatement to argue that spatial injustice in Hong Kong is a product of institutional injustice (Moroni, 2019). To rectify the situation, there is an urgent need to recognise the importance of place-based knowledge—to plan according to the local spatial and geographical contexts, including the age, gender, racial and religious variations among the people and the importance of involving them in the planning and design processes, rather than simply following the HKPSG. Only then can we develop plans that are 'contextual, generatively, culturally encompassing and inclusive with goals, means and outcomes all committed to the ideal of the just city' (Lake, 2017, p.1206).

Keywords: spatial injustice, institutional injustice, planning standards, Hong Kong

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THE “SYLTIFICATION” OF THE GERMAN HOLIDAY ISLANDS: OUT-OF-CONTROL HOUSING MARKETS UNDERMINE THE FOUNDATIONS OF ISLAND LIFE (322)

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Many German as well as other European holiday islands are characterized by severely strained housing markets, making it increasingly difficult in particular for locals to find affordable permanent housing. In public, political and planning debates, these processes are often dealt with under headings like “rural”, “tourism” or “seasonal gentrification”. In our presentation, we argue that these concepts only partially capture the specifics of the housing market-induced problems on the holiday islands and their dramatic consequences for the local population. To shed light on the latter, we take up the idea of “island gentrification” (Clark et al. 2007, Clark/Kjellberg 2018) and further develop it into the concept of “sylvification”. “Sylvification” is about much more than the shortage and price increase of permanent housing and the resulting displacement of existing residents by temporary visitors such as second home owners and vacationers. The example of the North Sea island of Sylt vividly shows that the dynamics emanating from the housing market are in the process of undermining the economic, demographic, political, social and infrastructural foundations of island life as a whole.

To substantiate this claim, we first describe the paradoxical tension in which the North and Baltic Sea islands find themselves: On the one hand, they belong to rural-peripheral areas with considerable structural problems; on the other hand, their housing markets are characterized by an excess demand otherwise only known from booming big cities. We then use the example of Sylt to illustrate the extent and scope of the severe consequences caused by the tight housing market. Such a systematic overall picture of the direct and indirect outcomes of housing market development, which affect almost all areas of life there, has not yet been drawn. Finally, we argue that small-town governance and social structures are an essential element in understanding the said island developments. Local actors in politics, planning and administration are completely overwhelmed with the task of taming and regulating metropolitan housing market dynamics and the resulting problems.

Keywords: sylvification, island gentrification, small-town governance, tense housing markets

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PILOT EXPERIENCES IN TURIN (ITALY) OF COLLABORATIVE HOUSING: NETWORK AND SPECIFIC CASES (325)

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Housing policy has become a primarily matter of the municipal level in Europe, especially since the withdrawal of the states from housing policy has been a trend recognized internationally (Hodkinson et al., 2013; Scanlon et al., 2014). In Italy, the regional level amplifies territorial differences and placespecificities, having the duty to norm and control housing policy (Baldini & Poggio, 2014).

The city of Turin, in the North-West of Italy, has peculiar characters: a strong legacy of the 90s' urban regeneration practices and the application of the integrated approach in urban policies, a consistent third sector engaged in affordable and collaborative housing provision, but also high unemployment rates and low-level jobs (Caruso et al., 2019).

In Turin housing need is currently addressed by a broad network of public and private actors, (the city, the local third sector, associations, NGOs, bank foundations, etc.), which established a network of support. From the 2010s onwards, these stakeholders have developed and tested several forms of affordable and collaborative housing supply, targeting different demands and needs: temporary housing for city users, elderly, and single parents, supportive co-housing, forms of support in the private rental market, a public agency of intermediation for the private rental market, etc (Caruso, 2015, 2017). These experiences are generally coordinated or managed by the third sector, following municipal guidelines and financed by public or private (like bank foundations) funds.

This paper aims to discuss Turin's current housing scenario, considering the impacts of the Covid19 pandemic and the growth of socio-economic inequalities and housing distress, in relation to the supportive network's strengths and the opening of a new temporary housing. The case of Ma.Ri.

House, a new housing project (Bottero et al., 2022), will be presented and analysed focusing on its territorial dimension, the urban regeneration opportunities and the role of affordable housing projects in the city. The study of this case allows to highlight the changes in the local housing initiatives, such as a new role as triggers of urban regeneration, a stronger propulsive lead of funding actors, and at the same time, the need of a process of institutionalisation for these practices and actors.

Keywords: housing policy, urban regeneration, housing project, Italy

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PLANNING AND EVERYDAY MULTICULTURALISM: A MODEST AND OPEN PROPOSAL TO WORK WITH DIFFERENCES “IN THE FIELD” (327)

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In the last decade, many scholars have been very critical of the more established ways in which planning and urban policy deal with “diversity issues”, such as social mixing initiatives, or the creation of places of consumption such as the cultural and ethnic quarters (Fincher et al, 2014). Research has shown quite clearly how policies focused on places where visible differences related to immigration and deprivation have acted mainly by “moving away” (gentrification) or “diluting” (social mix) populations labeled as problematic through more or less sophisticated forms of displacement. And displacement is never simple, even when displaced people have some form of compensation for it. If planning is a form of social control and care of people and places through space control (Mazza, 2012), the “care” part is seldom missed. Actually, these are situations in which planning seems far to be a progressive discipline, and shows its “dark side” (Yiftachel, 1998).

The paper takes stock of the current critical views and accepts their invitation to “suspend” a general regulative and design tension, by proposing a more reflexive position aimed at understanding how to capture the potentialities of places where forms of everyday multiculturalism (Wise & Velayutham, 2009) and coexistence among strangers occur (Amin, 2012; Wessendorf, 2014). To this end, based on more than twenty years of field-work and research, as well as on exchanges with colleagues dealing with these issues (Briata, 2014; 2019; 2020; 2022; Fioretti, Briata, 2019; Bovo, Briata, Bricocoli, 2022), a sort of “draft checklist” of some core points to be considered to develop ethnographical paths focused on the uses of the space (Cranz, 2016) in multicultural areas is proposed. This includes a methodological positioning on ethnographical approaches carried out by multicultural research teams where an added value is given to different viewpoints; a capacity to consider the intertwining between the very local dynamics of the micro-publics of encounter, but also the structural conditions underpinning the possibility for the encounter to occur; a broad view of multiculturalism related to an intersectional perspective where also inequalities are a core point (Valentine, 2008); a very open definition of resources for planning and policymaking, able to go beyond the economic and growth-dependent dimension (Rydin, 2013).

Keywords: planning, urban policy, everyday multiculturalism, intersectionality, ethnographical positioning

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THE MEANING OF PERFECT HOME: EMERGING NEEDS FOR SUSTAINABLE LIVING AND SOCIAL RESILIENCE IN MALAYSIA (341)

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COVID19 changed many of our existing perspectives on our dependent towards home. With the current national target on achieving SDG 11: Sustainable Cities and communities, people are urged to live sustainably, yet there are people who are still struggling to cope with the changed lifestyle of post pandemic. The importance of home not only for shelter and security; as home also provides the place for renewal and recovery, especially for the vulnerable and infected groups. This reflected in Heidegger (1951) which described home as sanctuary and security and privacy to dwellers. Home also seen as symbolic and metaphorical functions to allow dwellers to perform certain practices and activities, to form individual or collective experience and this function has expanded during the pandemic (Yalçın and Düzen, 2022). However, home ownership status may pose different feeling towards the dwellers. Renters may feel much vulnerable with high unsecure threat of evictions due to precarity of work conditions which inhibits their continuous pay (Bryne, 2020). “Forced innovation” as described by Bonancini et al. (2021) for working from home (WfH) during lockdown, significantly reduced commuting time (Theorovicz et al. 2021) which create high productivity and cleaner environment because of depletion of traveling to work requires good digital technology to make an efficient WfH arrangement. WfH may also challenge the traditional gender roles on childcare which allows women for better progression and man to spending more time at home (Arntz et al. (2020), which also relates towards economy equality. Bonancini et al. (2020) explained based on their study that WfH may further widen the economy inequality as only benefits for older white male in highly paid employment and having good education. Now, with the current economy adversities, due to inflations, high energy cost and increased cost of living; many people struggling to keep their home, to buy or rent a home. This amplified us to think the meaning of home. The new emerging needs may diversify the meaning of home has become the springboard of this research. The main aim is to explore ways to reduce the inequalities and vulnerabilities against people from different social and economic background. We have two main questions: 1) How and in what way inequalities can be reduced in relation to home, 2) what really the dwellers need and how we can support the dwellers in creating social resilience? In this study, we explore how some populations are more adversely affected by examining their needs and attributes associated to home including the main factors driving such attributes towards home and the dwellers aspirations. A dataset of 76 individuals from Malaysia which consisted of diverse demographics (age, gender, status, marital status and employment) were collected during the mid-period of COVID19. Based on constructivist view during the analysis, the findings demonstrated that there were other elements should have been considered for sustainable living. Personal and other well-being, caring responsibilities, access to digital Wi-Fi, space for working and access to decompress after work are new urgent requirement set by people. However, requirements for each group demographic are different and people makes few adaptations to satisfy the emerging needs to suits post pandemic way of living. Surprisingly, self- identity in relations to home is not based on passive individual role in constructing the meaning of home which relevant to Giddens (2020).

Keywords: equality, home, ownership, rent, social resilience

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MULTI-FUNCTIONAL ORIENTED AREA REGENERATION: PATHFINDING FOR SPATIAL JUSTICE IN SHANGHAI (374)

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“Urban Regeneration Action” is an important development policy for economic and social transformation in China. Instead of the mechanism of urban repeated self-replacement, the government hopes to find suitable paths, forming regeneration projects as a catalyst to flourish the surroundings. Therefore, delineating the appropriate scope and setting clear objectives has become the primary problem in the practice of urban regeneration. From the perspective of the overall and long-term interests of the city, it is worth exploring Urban Spatial Justice (USJ) in the Urban Regeneration Project (URP), which resolves the contradiction among different right subjects for inclusivity and takes the government's intentions and the demands of property rights subjects into account for diversity. In this research, the boundary area of Huangpu District and Jing'an District in central Shanghai is selected as the research scope. We use Spatial Analysis and Residents' Will Survey as research methods to explore the planning path of regeneration scope delineation and objective determination. Firstly, the composition, preferences, and demands of property rights holders within this scope are surveyed. Social characteristics (e.g. place of origin, occupation, income, educational background, age), the use, satisfaction, and preference of public space and facilities are obtained through questionnaires and interviews. Secondly, by visualizing the spatial of the residents' background, we analyze the social attributes of residents and POI/AOI to form the Spatial Clustering results. The research boundary is clear based on the clustering results, public space, and the use of facilities. Thirdly, we compare the differences in the needs of different social groups. Extracting the specific connotation of the multi-culture in this area and revealing multiple preferences for the use of public space and facilities, we find out public space and facilities with high consensus and great differences. Based on this, we discuss whether spatial inclusiveness and differential allocation of facilities can promote spatial justice realization. Fourthly, this research reveals the differences between the intention's government and residents' aspirations. We find out the main public space and facilities that multi-cultural groups think are insufficient, and explore whether mitigation can promote spatial justice. Fifthly, a new policy is analyzed which was put forward in the Urban Regeneration Regulations and supporting files called “Multifunctional oriented Area Regeneration” (MFAR), that is, implement several regeneration projects within the delineated scope by giving the “co-ordination subject” rights to participate in planning and coordinate the interests of all parties. However, the local documents do not provide specific guidelines for the scope delineation and objective setting. This paper holds that MFAR provides an institutional framework and opportunity for the realization of spatial justice, which can be achieved through the participation of multi-culture in delineating the scope of regeneration areas and setting objectives. It was found that: 1) Primary and secondary schools, the green space, and parks are two links of multi-cultural groups, which affect area inclusiveness, and can be regarded as an important connotation of Spatial Justice in a specific area. 2) Due to the heterogeneity of urban society and space, the uniformity and adequacy of public elements are the standards of Spatial Justice in urban centers. 3) The conflicts between the government and residents can be alleviated through MFAR. 4) Urban regeneration provides an opportunity to

complement the spatial injustice phenomenon, and the MFAR enables the integration of multicultural groups and spatial justice realized. This research has theoretical value for defining the connotation of multicultural groups and Urban Spatial Justice in China; has practical reference value for cities to delimit the appropriate scope and formulate clear objectives in urban regeneration.

Keywords: urban regeneration, multicultural background, Urban Spatial Justice (USJ), Multi-functional oriented Area Regeneration (MFAR), Shanghai

LGBTQI+ NEEDS AND PLANNING: AN INQUIRY OF THE INCLUSIVITY OF PLANNING POLICIES AND PRACTICES TO ADDRESS SOCIO-SPATIAL JUSTICE (376)

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As much as integrated planning is needed to address acute problems of global turbulence, it is also a necessary means to tackle more chronic and deep-rooted issues encountered in urban areas, including those related to democracy, social justice, and inclusion. A clear depiction of such problems—both acute and chronic—is apparent in the lack of inclusion of LGBTQI+ minorities when addressing diversity and social well-being in urban spaces. This study aims to clarify LGBTQI+ individuals' planning-related expectations and how—or whether—they are integrated in planning and to define ways to bridge the gap between the current and expected planning agendas regarding this specific group in Istanbul.

The socio-spatial exclusion of LGBTQI+ individuals manifests itself as exclusion on a cultural basis, exclusion from production and sharing processes and social institutions, and due to legal structures (Takács, 2006), mirroring the alienation these individuals also experience within their families and hometowns. In rather conservative and religion-driven cultures such as that often found in Turkey, queerness is generally viewed as a deformity, sin, or crime, which serves to legitimize violence towards LGBTQI+ individuals. Today, Turkey ranks first in Europe and 12th in the world in transgender homicides (Transgender Europe, 2023). In major cities such as Istanbul, chronic social exclusion translates into excessively expensive housing, loss of jobs and job opportunities, discrimination in education and health services, and harassment on public transportation (Özer and Erciyes, 2021). This atmosphere has led to the fear of outing, constraining LGBTQI+ individuals from seeking help when they encounter social or psychological harassment in daily urban life. While civic mobilization efforts, solidarity networks, and NGOs are emerging to champion queer rights-based claims and demands, such endeavors have thus far been very limited.

This study examines the applicability of LGBTQI+ groups' rights-based spatial appeals to tackle the socio-spatial exclusion they face in Istanbul, the most preferred city in Turkey for LGBTQI+ individuals to seek to exist and actualize their identity. It thus aims to reveal the extent of the inclusivity of planning at both the policy and implementation levels. The empirical research has been designed in three stages. The first stage comprises four in-depth interviews with informed activists and a representative of SPoD, the leading LGBTQI+ association in Istanbul, in order to uncover the planning-related expectations of the city's LGBTQI+ community. In addition to the main demand of gender-inclusive urban policy-making, the interviews reveal nine specific space-based demands in two categories: LGBTQI+-specific urban uses and the restructuring of existing spaces as non-binary and/or genderless. The second stage consists of interviews with informed planning, participation, and equality department officials of the Istanbul Metropolitan Municipality, the city's chief governing body, in order to evaluate current LGBTQI+-related planning policies and the practicality of the demands in terms of current planning techniques. The

third stage consists of a critical discussion of primary research findings in the context of inclusive planning and gender literature.

The study thus uncovers both consistencies and disparities between the inclusive planning expectations of the LGBTQI+ community and existing and potential planning policies/applications in Istanbul. At the same time, it suggests ways to encourage more inclusive and just planning practices that would eliminate the socio-spatial exclusion and relevant externalities LGBTQI+ individuals face in their everyday lives.

Keywords: LGBTQI+; inclusive planning; socio-spatial justice; planning practice; Istanbul

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ASSESSING HOUSING QUALITY FOR LOW- INCOME GROUP IN THE CENTRAL BUSINESS DISTRICT OF BANGKOK, THAILAND (430)

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Most of the lower-income people in the central business district (CBD) of Bangkok are migrants from other provinces of Thailand as well as some of Thailand's neighbors. This population of migrants needs to find some form of stable housing that is appropriate for their situation and limitations.

Affordable housing for low-income earners that is sufficient to meet their needs and having a suitable standard of living is essential to enhance the quality of life of these migrants and their accompanying dependents. The purpose of this research was to study the current situation of housing for low-income people in the CBD of Bangkok. The study examines both housing needs and accessibility to housing. There is an analysis of the balance of housing demand and supply.

The scope of this research is the Rama IV area encompassing the Saphan Leuang Community and the community behind Hua Lamphong Station, comprising 265 structures. Interviews were conducted with 235 low-income migrants to explore housing needs. Younger, non-Thai migrant workers had poorer living conditions and quality of life due to congestion, lack of hygiene, and lack of basic amenities. Migrants lack job security and often have to move in order to find or maintain their source of income. While many of these workers provide valuable services for the city, they live in squalid conditions. What is more, they are surrounded by privately-owned buildings with underutilized space; such edifices account for the majority of (60 percent) of structures in the study area. Many of these multi-story buildings only use the lower floors for their business activities. In addition, there are numerous plots of government-owned land that are not fully used. Therefore, the development of affordable housing to accommodate lower-income migrant workers, both Thai and non-Thai, would seem to be a feasible endeavor, especially for newly-arriving migrants. Addressing the needs of this "hidden" population is integral to promoting the quality of life and economic productivity of the city at large. However, at present, the government's low-income housing development policy does not yet cover these groups. This is a policy gap that needs to be addressed in urban development plans by improving the community habitat in collaboration with privately-owned and government-run space. Such measures will go a long way to reducing inequality and promoting environmental quality, as well as strengthening the ability of Bangkok to compete economically with other cities in Southeast Asia in a sustainable manner.

Keywords: Affordable housing, Low-income worker, Central Business District, Bangkok, Thailand

A NEW STORY: COUNTER-NARRATIVES TO OVERCOME THE STIGMA OF MULTIETHNIC WORKING-CLASS NEIGHBOURHOODS: THE CASE OF AURORA IN TURIN (ITALY) (433)

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The contribution aims to reflect on the reputation of neighbourhoods (Parmentier et al., 2008; Kearns et al., 2013) and on strategies based on artistic projects and social innovation to help overcome the stigma that often connotes certain urban areas. Urban studies literature has, in fact, already identified the existence of a 'prejudice based on peoples' postcode address' (Arthurson, 2013). Neighbourhood reputation is a social construct that stems from personal experiences and very often also from negative media narratives (Wacquant, 2008).

To construct a counter-narrative, it is vital to act both from within – by strengthening the sense of belonging – and outside the neighbourhoods to narrate the positive features of these areas.

The paper discusses these theoretical arguments by focusing on the case study of Aurora in Turin (Italy). Aurora is a *multiethnic* working-class neighbourhood close to the city centre characterised by deep socio-spatial fractures. It is one of the city's most fragile and deprived neighbourhoods, and the media narrative on the neighbourhood tends to emphasise its weaknesses. However, the neighbourhood is lively, multicultural and rich in social resources active in the area. In addition to a qualitative and quantitative analysis of the external reputation of Aurora, the contribution presents the results of a project carried out by the authors – operating a university action-research laboratory in the neighbourhood – together with a local cultural association as part of the European Urban Innovative Action (UIA) initiative. The work, which lasted several months, actively involved the different communities of Aurora in working on the sense of belonging between people and places in the neighbourhood and constructing a counter-narrative of the area. The result led to a series of posters being put up throughout Turin, narrating 'Aurora outside Aurora' beyond prejudices. We discuss the case study to highlight the possible strengths and weaknesses of artistic strategies to construct counter-narratives of neighbourhoods in difficulty, as well as to reflect on the university's role in these processes.

Keywords: neighbourhood reputation; stigma; counter-narratives; art; social innovation

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EXPLORING SYSTEMATIC MAPPING OF THE PLAYScape QUALITY OF CITIES TO INFORM SPATIAL PLANNING (436)

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It is well established that play and space for play are of key importance for a mental and physical development of children since it gives them the opportunity to develop physical competence, enjoyment of the outdoors, interact with their immediate surroundings, and make sense of their world. Due to ongoing urbanization around the globe, children increasingly live-in cities, yet, in cities the availability of spaces for play is not automatically catered for, and even often overlooked in urban planning. This paper explores developing a PPGIS-approach for identifying in a systematic and preferably standardized way the so-called 'playscape quality' of a city and bring this map-based knowledge in a form that can inform spatial planning. The first premise of our approach is that it is essential to have systematic information about the children's play behaviour in their current urban space and their preferences for different places. Systematic analysis of this information can feed the urban planning process and can contribute to a better, i.e., more child-friendly balancing of alternative uses of urban space. The second premise of our approach is that, the time is ripe for a more or less standardized, internationally useable PPGIS-approach to fuel child-friendly spatial planning throughout the world, since this would provide comparison, benchmarking and learning options for cities. We report on the approach and the results from the first of a series of international case studies.

This study argues for developing/testing a PPGIS digital participatory platform, named Playscape-mapper, to harness technologies for participatory-mapping and capturing children's landscape perceptions. Innovations in using PPGIS tools are implemented in Playscape-mapper. Children map their playable/meaningful urban landscapes, playscapes, with polygons not points, which to our knowledge, is the first PPGIS-survey with children that does it (See e.g., Bagheri & Zarghami, 2022; Broberg & Sarjala, 2015; Egli et al., 2019; Kytä et al., 2018). Polygons contribute potentially to a higher accuracy of provided spatial information. Another PPGIS-innovation of the Playscape-mapper is geo-visualisation. We ask children to geo-visualize their playscapes with pictures, drawings, or both. We asked children to mark four playscapes divided into two scales, neighbourhoods and the city-level-scale, and geo-visualize one of their playscapes. Each polygon-drawing-activity included a pack of pop-up questions related to the playscape. Children, therefore, answered the same four 'question packs' for four playscapes. The pop-up question pack involved an open question of "Why do you like to go to this place?", and closed questions about transport mode, accompaniment, environmental affordances, and the frequency of visit.

We are currently in the process of gathering data on the playability of cities in the Netherlands, New Zealand, and Iranian Kurdistan via Playscape-mapper. In this study, urban-everyday experiences of 416 Kurdish-children -aged 9-14 years- were mapped in Mariwan located in the low-resource-region of Iranian-Kurdistan. Children mapped 1664 polygons which covered 9.3% of the total urban-area. Differentiating the two scales of neighbourhood and city-level in this research have more detailed results. The heatmap generated from polygons depicted none of the

neighbourhood-scale playscapes are popular while natural/green settings are the most favourite components of playscapes; This also confirmed in 120 geo-visualisations. The spatial-network-analysis as well as statistical analysis of pop-up questions shows many of these hotspots fell outside of the range of children's daily movements and most majority of children have no choice in their daily-life but asphalted streets/alleys near their house. Our first experience of Playscape-mapper showed it is feasible to systematically identify the playscape quality of a city, engaging hundreds of children in a meaningful educational, perhaps potentially even empowering way. The combination of rigorous geo-information combined with geo-tagged visualization caters for rich information for more child-friendly spatial planning.

Keywords: Child-friendly cities, Public Participation GIS (PPGIS), urban spaces, child-inclusive urban planning, Playscape-mapper

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THE ELDERLY'S SOCIAL WELLBEING AT THE NEIGHBOURHOOD SCALE: SCALE DEVELOPMENT AND VALIDATION (445)

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Background: There is a global trend of population ageing, and it is known to have various implications for social policy. However, there is still not a consistent definition or measurement scale for understanding and measuring the elderly's social wellbeing. Despite the influence of unsatisfied social needs on the elderly's mental and physical health, it has received relatively little scholarly attention, particularly at the scale of neighbourhood. This study aims to develop and validate a unified definition and multifactoral scale of the elderly's perceived social wellbeing through exploratory and confirmatory factor analysis (EFA and CFA). We argue that the elderly's social wellbeing is a multidimensional concept and introduce the main factors.

Methods: Semi-structure interviews with 32 elderly residents aged 65 and more were conducted in 6 neighbourhoods in Isfahan/Iran. Thematic analyses were used to find some shared patterns concerning the influential factors of the elderly's social wellbeing. Based on both literature and interviews with the elderly residents (qualitative research), a questionnaire of perceived social wellbeing was developed for empirical validation. The questionnaire was collected from elderly respondents in six neighbourhoods in Isfahan/Iran. An exploratory factor analysis (EFA) was applied to examine the factor validity on the 32 items, and to verify the model fit, confirmatory factor analysis (CFA) was conducted, using AMOS 24.

Results: As the output of quantitative analysis of the questionnaire, the elderly's social wellbeing concept incorporates seven main factors.

Conclusion: Our research highlights the gap in knowledge surrounding the elderly's social wellbeing between the perception of the elderly residents and policymakers in the scale of neighbourhood. The result of this research is a valid definition and the multifactoral scale of the elderly's perceived social wellbeing in the context of Isfahan/Iran. The research was concluded by highlighting both research and policy implications of the conceptual framework and providing future research directions.

Keywords: social wellbeing; neighbourhood scale; the elderly residents; measurement model

ADAPTIVE RESIDENTIAL OUTDOOR ENVIRONMENT FOR INCLUSIVE AGING IN PLACE (470)

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Today the modern world is facing the constantly growing number of older adults, the majority of whom are living in cities. Steady urbanization, digitalization and globalization put more pressure on the spatial accommodation of the city, where the quality of public space is increasingly correlated with the physical and mental health of its inhabitants. While birth rates are declining globally, the elderly as a focus group become a catalyst for more sensitive urban development in general, addressing basic human values of all other age groups in particular.

Despite the urgent need for a spatial response, planning initiatives has not yet been paralleled by the noticeable change in the design of common infrastructure of our cities. The building (design) codes, which came into effect within the last decade, demand high standards of accessibility, but are incapable to set corresponding psychological and social requirements for public environment. Thus, contemplations about urban aging and public space must be viewed more holistically, embracing not only how people move around and act independently within the community (their Agency) but also the extent of emotional attachment to the place they live their lives in (their Sense of Belonging).

Since accommodation of aging individuals contributes to diversity in public space, in order to create age-inclusive environment it is crucial to respect the Ecology of ageing, have a certain degree of Elasticity, allowing continuous adjustments in accordance with changing personal competence in old age as well as Polyvalency, which encourages different uses within the same geometry. The last is especially important in later life due to declining functionality.

When cities need to become more welcoming for age and program more inclusive neighbourhoods, so far little is known about the influence of objective and subjective features of the quality public open space in relation with physical activity patterns of different age groups of older adults. This study fills the knowledge gap by investigating how aging population perceive the current public open space and which objective and subjective features they find important in their perception of inclusiveness of the neighborhoods for comfortable aging in place.

An ambition of the research is to expand the architectural knowledge about older people's interactions with neighbourhood outdoor environment; to define optimal urban qualities for inclusive ageing in place, and to explore how these qualities with the agency perspective may be transferred into an architectonic vision to meet the needs of aging population.

Keywords: Inclusive City, Aging in Place, Public Open Space

IF PARTICIPATORY BUDGETING CAN BE A TOOL SUPPORTING URBAN REGENERATION PROCESSES? THE EVIDENCE FROM ŁÓDŹ (POLAND) (475)

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In the last decade, the participatory budget (PB) has become a valuable instrument to shape the space of Polish cities (Leśniewska-Napierała & Napierała, 2020). It is defined as a process during which the inhabitants of a territorial unit directly decide or co-decide on the allocation of a part of the available public funds (Kocot 2014). This tool can be considered as an effect of development processes, in particular in terms of shaping a conscious civil society that wants to influence what public funds are spent on (Primmer et al., 2006).

When implementing participatory budgeting in local government units, authorities must be ready to transfer part of their own competences to residents and must secure a certain amount from the budget that will be at the disposal of the local community (Friendly, 2016).

This presentation is an attempt to answer the question whether the participatory budget can be a tool that supports the revitalization process of urban spaces. Łódź, a city that has been implementing a revitalization program in the downtown area since 2004, was selected for the analyses. Currently, this area covers 6.07% of the total area of the city and is inhabited by more than 1/5 of the inhabitants. The goals established in the revitalization program clearly indicate the need to stimulate the activity of Łódź residents, and PB is defined in it as the potential for civic activity. The size that would define it is the number of applications submitted to the PB in the area of revitalization (*Municipal Revitalization Program for the city of Łódź 2026+*; Resolution No. XXV/589/16).

The research objectives of this study are:

- Identification of projects implemented as part of PB in the revitalization area in Łódź,

Characteristics of the implemented projects under PB, e.g. in terms of distribution, category, or amount of funds spent.

Information on the procedures for carrying out the participatory budget, the description of the submitted projects, the amount of funds allocated to financing the tasks, or the voting results themselves were obtained from the City of Łódź Office.

The research topic is part of the scientific discussion on the participation of the local community in the life of the city, in particular in the changes made in its space, as well as the effectiveness of the use and role of the participatory tool, which is PB (Chruściński et al., 2014; Polko, 2015; Kempa & Kozłowski, 2020; Szczepanska et al., 2022).

Keywords: participatory budgeting, social participation, urban regeneration process, Łódź

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TOWARDS HIGHER-DENSITY COMMUNITIES: A DISRUPTIVE TRANSITION? THE CASE OF NANHUAN NEW RESIDENTIAL COMMUNITY IN SUZHOU, CHINA (478)

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The recent development guidelines issued by the Chinese National Government require an efficient use of resources for a sustainable development beyond mere growth. These guidelines promote also the transformation of the “old” residential communities, the ones built cheap and fast before 2000, which often are obsolete and do not offer what can be considered a decent house in an increasing middle-class society. The indication of the National Government opens up a huge regeneration task in terms of built stock quantities, involving social, ecological and economic aspects.

The spatial and environmental qualities the regeneration should achieve are not specified by the national guidelines, but according to our research one element is being changed: high-density urban forms are increasingly supported by some local governments (Su, Wei, Zhao 2017). In addition to this radical change some forms of participation of residents are also introduced into the decision-making process in spatial planning.

The research studied a residential community in Suzhou, a 12 million people city in the Yangtze River Delta area, NanHuan new community, that was a pilot action of regeneration and densification that in 2010 demolished one part of a resettlement village and tripled its FAR. This new urban environment – new morphology and building types: no super-blocks, mixed uses, underground parking, high-rises and linear commercial structures – was built as an upgrading of the pre-existing conditions, which were themselves an upgrading of the pre-existing conditions in the old town in the early '80s (Wu, 2019).

Despite improvements in housing, public space and welfare provision, the last version of NanHuan is criticized both by its inhabitants and the city officials who promoted it, was labeled as a failure and – differently from the original intentions – was not repeated in its public-led process elsewhere in the city, even though private real estate companies are replicating similar transformations (Webster, 2021).

This critique and its multiple reasons have been explored with both quantitative (sensor data, mapping and space syntax) and qualitative methods (surveys, in-depth interviews, questionnaires and meetings), focusing on the planning process, the money spent and the social sustainability of the process.

The NanHuan case shows that the radical transition is perceived as disruptive in relation to the advantages obtained from the transformation and that socially sustainable practices must be improved. The case shows as well that a debate about the urban spatial qualities a moderate prosperous society - which is one of the main targets of the Chinese Communist Party - should have is needed.

The NanHuan case shows also how adaptivity is not an option if durability – in every sense: living standards, structural capacity, socio-political demands – is not conceived when the buildings are designed, but in a fast-changing society as China is the idea of durability does not seem to hold.

Keywords: high-density, transition, social sustainability, durability, China

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MEASUREMENT AND OPTIMIZATION OF CHILDREN'S SLOW-WALKING SPATIAL ENVIRONMENT IN RESIDENTIAL AREAS UNDER THE BACKGROUND OF HEALTH PROMOTION (479)

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With the continuous development of industrialization and urbanization, the rapid economic growth has also brought serious environmental problems and social problems. As a basic unit in a city, urban health problems directly threaten the physical and mental health of residents and are not conducive to the growth and development of children. As the basic unit of urban pedestrian transportation, slow walking space in residential areas is of great significance for building healthy, safe, comfortable, convenient, inclusive and diversified high-quality residential areas. Since China has entered the new era, urban space has entered the stage of storage-oriented development, and the improvement of urban inclusiveness has put forward higher requirements for the organization of slow space. However, the study of slow travel space in residential areas in China is still in its infancy, and from the current situation, the construction of adult-dominated unit urban built environment inevitably lacks consideration for children, especially in the neighborhood environment of residential areas, weakening or even ignoring children's own rights and interests has become the norm, and the problem of injustice has become prominent. China has the largest number of children in the world. The concern about children's rights and interests, the promotion of children's healthy growth and the establishment of fair cities have attracted more and more attention from relevant scholars. In this paper, slow traffic measurement index system is constructed by taking slow traffic space in residential areas as the object and child-oriented as the starting point. Factor analysis and analytic hierarchy process are used to refine and distribute the weight of each evaluation index. Through the evaluation and comparison of 8 streets in Suzhou, the level of children's slow walking space in different streets is evaluated, the credibility and operability of the evaluation system is tested, and the optimization path and improvement measures are explored, with a view to providing reference for the establishment of an inclusive, diverse and just city.

Keywords: slow space, child-friendly, inclusive and diverse

INSTITUTING LANDSCAPES: A NEW APPROACH TO CIVIC ENGAGEMENT IN THE PLANNING DEBATE (483)

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There is a long-term debate on the planning relevance of residents' direct engagement in urban care practices, especially in response to the shortcomings of traditional planning authorities. Scholars begun studying 'commoning' practices, identified as those engaging the non-experts in shared spatial governance solutions (Ostrom, 1990). Subsequently, they added 'insurgent' or 'co-productive' practices, identified as those developed independently or in open opposition from public institutions (Sandercock, 1999, Watson 2014, Albrecht 2012). This work has had the important role of showing to the planning scientific community the importance of recognizing and counteracting institutional technocratic and exclusionary spatial practices. However, after decades of debate on the matter, it might be time to recognize that a portion of this literature, especially the one focusing on highly politicized and counter-hegemonic practices, poses the risk of irreversibly undermining some of the historic political achievements that generated modern European public institutions and their namely responsibility over the public interest.

From this perspective, the paper suggests a new approach to frame civic engagement in spatial self-care, looking at the case of civic spatial care in Librino, a public housing neighborhood in Catania, the second-largest metro area in Sicily, Italy. Planned in the 60s as a satellite town, Librino is the local manifesto of the failure of the rationalist urban ideal, where social-justice-inspired top-down plans have not matched people's real needs and habits, generating social isolation and socio-economic distress. Here, residents have engaged in a variety of practices of urban care, specifically 'community gardening', to foster social inclusion and solidarity.

The paper uses the case of Librino as a *testing ground* to discuss the planning significance of *instituting practices*, a concept inspired by a political ontology paradigm highlighting the political relevance of «social, judicial, and political creation of new temporary instituting processes, through associations, organizations, and networks aimed at broadening, in every sphere, the circle of social inclusion» (Esposito, 2021: 120). Specifically, Esposito (2021) re-signifies the relationship between people and institutions by disentangling the normative level, characterized by a legally exclusionary order (Agamben, 1995), from the institutional level, that is represented by all those social arrangements (such as associations, organizations, coalitions, etc.) that produce and/or apply norms but do not coincide with them. Rather, thanks to their intermediate position, instituting practices are both produced and nurtured by inclusive (even when conflictual) dynamics and are seen as socially meaningful temporary systems able to deal with the tension between norms and unexpected context-based specificities and conflicts.

Drawing from datasets collected through a methodological approach combining case-study research and participatory action-research, the paper interprets Librino as a potential *instituting landscape*, and investigates local organizations' *instituting* force by looking at features such as their organizational arrangements, engagement strategies, short- and long-term goals, etc.

Finally, it suggests a particular role for planning, seen as an *instituting booster* that helps local actors to upgrade their organizational tools, allowing them to productively relate with civic instances, conflicts, and the normative realm.

Keywords: instituting thought, civic organizing, social inclusion

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THE EFFECT OF CRIME VULNERABILITY AND FEAR OF CRIME ON LIFE SATISFACTION IN FOREIGNER CONCENTRATED AREAS: COMPARISON OF NATIVE AND FOREIGN RESIDENTS (485)

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As the increase in the number of foreigners staying in Korea and the phenomenon of long-term residence coincided, FCA(Foreigner Concentrated Areas) were naturally formed around a specific area. However, due to conflict with multicultural society around foreigners, the increase in illegal immigrants, deterioration of the local environment, and foreigner's crime problems, FCA were recognized as negative factors that violated the safety of our society. From the perspective of the Group Threat Theory, it is said that the influx of foreigners increases the fear and anxiety of crime for the majority of natives(Blalock, 1967).

Fear of crime is a psychological response such as anxiety or concern about crime damage(Garofalo, 1981), which is caused by the occurrence of crime. However, apart from the occurrence of actual crime, fear of crime negatively affects mental health or physical function at a personal level, reduces trust in others, decreases participation in social activities, and lowers overall satisfaction with life(Jackson, 2006;-Hanslmaier, 2013). In addition, it acts as an obstacle that weakens the bond between neighbors socially and reduces inclusiveness in a multicultural society nationally. Due to these characteristics, fear of crime is treated as an important research topic as much as criminal behavior.

Most of the studies on crime and fear of crime associated with foreigners are related to crime status, countermeasures, and factors of fear of crime, but few studies have been conducted on foreigners and natives living in the same area. Therefore, this study aims to identify the factors of criminal vulnerability (spatial vulnerability, social structural vulnerability, and social integration vulnerability) for foreigners and natives living in FCA, and to analyze the impact of local criminal vulnerability on emotional and cognitive crime fears, and life satisfaction. Through this study, it aims to contribute to creating a residential environment where both foreigners and natives can live safely, improve awareness of socially vulnerable FCA, and expand inclusiveness for establishing a multicultural society.

In order to achieve the research purpose, data from the Environment Survey of FCA conducted by the KICJ in 2019 were used. This survey was conducted on 800 Koreans and 1,200 foreigners living in 20 FCA. In order to determine the level of criminal vulnerability in FCA, variables are set based on the physical, spatial, social structural, and social integration factors dealt with in the theoretical model explaining fear of crime. Fear of Crime is divided into emotional and cognitive fears, and it uses values that measure the evaluation of the risk of damage and crime against specific crimes(assault, theft, residential invasion, etc.) rather than vague fears. Life satisfaction is used focusing on the residential environment, security level, and relationship with local residents that reflect regional characteristics. Based on these variables, we will examine the effect of criminal vulnerability on fear of crime, criminal vulnerability on life satisfaction, and fear of crime on life satisfaction using the structural equation path model(Using the AMOS statistical program).

Keywords: FCA(Foreigner Concentrated Areas), Criminal Vulnerability, Fear of Crime, Life Satisfaction. SEM(Structural Equation Model)

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IDENTITY CONSTRUCTION AND COUNTER-HEGEMONIC STRUGGLE: THE CASE OF HONG KONG RURAL SQUATTERS (491)

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This paper documents the resistance of rural squatters in Hong Kong who are being evicted in two development plans, one in Northeastern New Territories (NENT) and the other in Wang Chau. Despite their legal status as squatters, some families have occupied the same site for generations. Drawing on the post-political concepts of radical democracy (Laclau and Mouffe, 1985; Mouffe, 1989, 1992, 2005) and subjectivation (Rancière, 1999), I examine four discourses common in the development processes that respectively see land as (i) assets, (ii) a tool to achieve public interest, (iii) sites of lived experience and (iv) where justice and injustices unfold. That is followed by an analysis of how alliances were formed and identities were constructed during the resistance.

My analysis shows how the long-standing alliance between the government, developers and other prominent landowners sought to delegitimise the squatters' and protesters' stakes in the plans by pitching people who own properties and those who do not. They emphasised the need for "sacrifices" for wider social good and called those who refused to move out of their homes "selfish".

In response to these labels (propertyless, selfish), the squatter villagers created a discourse that emphasised their connection to the land. They challenged the hegemonic definition of land as assets and tool, pitching themselves against "coldblooded people" who did not appreciate non-instrumental values of land. A new identity in negation of the hegemonic alliance was formed when activists from outside the villages joined their struggle, as they broadened the cause of their protests to reclaim "justice".

This paper addresses the critique of post-politics, which sees the theory as potentially disempowering (Dean, 2009; Darling, 2014; Larner, 2014; Beveridge and Koch, 2017). According to these critics, the theory has painted a picture of no escape and could stifle agency as a result. This paper, alongside with other research in politically restricted areas, shows that post-politics has the potential to guide and enrich understanding of resistance.

Keywords: Hong Kong, discourse theory, post-politics, resistance, radical democracy

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CHILDREN AND PLANNING IN GREECE: HOW CAN LOCAL COMMUNITIES OPERATIONALISE A MORE JUST CITY FOR CHILDREN? (518)

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About 80 million children and youth up to the age of 18 live in the countries of the European Union (UNICEF Data, 2023), representing 18% of the total population – a numerous group which, however, is misrepresented in decision making, while their wellbeing remains at a very low order in the agenda of urban development. Urban planning and design play a central role in determining the quality of the built environment and the ways families with children can access and use public space (Ataol et al., 2019). Nonetheless, although research on children and the environment is growing, findings are rarely transposed into planning (Katsavounidou, 2021; Wood, 2015).

Throughout the previous century, children's rights have advanced considerably, culminating in 1989 with the United Nations Convention on the Rights of the Child (UNCRC), which has been ratified by all States members except the United States of America (United Nations, 1989). The UNCRC gives specific rights to people below the age of 18, which include their right to play (Article 31), the right to gather and organize their own activities (Article 15), and to participate in the decision-making processes (Article 12) in all matters affecting them. Following the UNCRC, UNICEF has undertaken the Child Friendly Cities initiative (CFCI), with the explicit aim of providing local communities with the necessary framework to create more child-friendly environments and to include children in all decisions related to urban issues that influence their everyday lives (UNICEF, 2022). The CFCI network has been expanding during the past decades and today thousands of municipalities in 36 countries around the world are members.

In Greece, more than 80% of 1,736,170 people under the age of 18 who reside in the country live in cities and towns. Recently (2022) seven Greek municipalities joined the CFCI (Unicef Greece, 2022). Three of the six thematic areas that CFCI-Greece focuses on are directly linked to urban planning: Participation and Citizenship; Environmental sustainability and living conditions; Play and recreation (CFCI). Therefore, for the CFCI to have tangible results in these areas, a close collaboration with urban planning is needed. This is showcased in recent developments in other countries such as Sweden (Rodela & Norss, 2023) and Canada (Canadian Institute of Planners, 2015), at a national level, and in municipalities such as London's Hackney Borough (Hackney Borough, 2021) and Rotterdam (Gill, 2018). CFCI itself has recently issued a handbook on child-responsive urban planning (UNICEF, 2018), to promote the key role of urban planning in achieving results, by setting 10 "Children's Rights and Urban Planning" principles in terms of housing, public amenities, public space, transportation, etc.

This paper argues that it is due time that children's rights in Greece, too, be transformed from an 'advocacy' movement into a constituent of community planning at the municipal level, as well as of the national planning framework. First, it presents a comprehensive review of recent practices from pioneering cities and countries showing how the CFC can be integrated in the multiple levels of urban development, from the neighbourhood design to the national planning level. Second, it offers a preliminary report of the situation in Greece regarding the inclusion of children and of

children's rights in urban planning and design. Finally, it maps opportunities and obstacles in the path of operationalising child friendly policies and practices in Greece, leading to a series of recommendations.

Keywords: children's rights; Child Friendly Cities; Greek planning system; Greek cities

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COMBINING COMMUNITY ORGANIZING AND ALTERNATIVE FORMS OF HOUSING TO REDUCE SOCIO-SPATIAL INEQUALITIES: EXPLORING EXPERIMENTAL PRACTICES IN THE CITY OF BOSTON (525)

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This paper takes the relationship between organizing and housing as the primary object of inquiry to answer the question of how to provide housing for the most disadvantaged in contexts where socio-spatial inequalities are stark. It presents findings from a research project focused on how approaches, methods, and techniques drawn from the community organizing field can help to overcome challenging issues currently faced by the housing planning field.

Intended as a primary good, housing and its provision constitute the litmus test showing the persistence of inequalities and various forms of exclusion in any living environment. For Madden and Marcuse, housing can be considered even an extension of the human body and, as such, the fundamental precondition to participate in social, political, and economic life (2016). Moreover, these scholars have highlighted how the housing crisis is not a failure of any housing supply system in place but the obvious result of a structural system initially conceived to reproduce inequalities (ibidem). On this foundation, housing planning has become a paramount concern in all cities worldwide to reduce socio-spatial inequalities.

A strain of planning literature has looked with interest at the increasing role of housing co-operatives (Co-Ops) and community development corporations (CDCs) in providing affordable housing (Macedo, 2009). Some have argued that these initiatives are instrumental in offering housing provisions and achieving justice in contexts characterized by inequalities (Hyra et al., 2019). However, several scholars have shown the considerable criticalities of the “third sectorialization” of the right to housing, given that Co-Ops’ and CDCs’ concrete actions often exclude the most fragile subjects from that very right (Tosi, 2008). Additionally, several studies have shown how the establishment of third-party institutions providing housing can be fully considered a phenomenon of neoliberalisation (Clapham, 2006) and financialization (Fernandez & Aalbers, 2020), and concluded that these organizations provide unaffordable housing.

In trying to address these raised critiques, many others have looked at the link between the decommodification of housing and the promotion of community organizing to reduce socio-spatial inequalities (Stein, 2019). These scholars have noticed how community organizing plays a strategic role because it represents a process through which residents mobilize to build collective power to challenge other forms of power established in the housing supply system (Christens et al 2021). This power might be used in the housing field to face market forces (Axel-Lute & Hawkins-Simons, 2015) and generate more affordability by preventing displacement (Donaghy, 2018).

Nevertheless, scholars have flagged the development-organizing tension as problematic. On the one side, some have highlighted that even when housing development entities embrace community organizing strategies, these entities often lose the “confrontation,” “agitation,” and “conflict” components crucial to effective mobilization (Stoecker, 2003). On the other, some have shown how non-capitalist property ownership models represent just a part of the aspired housing system change but cannot be the only elements because these do not challenge larger relations, processes, or societal institutions (DeFilippis et al., 2019).

By building on this debate, this paper analyzes the contribution of community organizing in housing development projects carried out by City Life/Vida Urbana (CLVU) and Community Agency Action in Somerville (CAAS) operating in Massachusetts (USA). These organizations launched three experiences of de-commodified forms of housing, including two Community Land Trusts (CLT) and one Neighborhood Trust (NT). These experimental practices intertwined advocacy activities for the right to housing with innovative technical housing development strategies to provide long-term sustainability and affordability in Boston’s two most rapidly growing neighborhoods. The paper highlights the relevance of organizing approaches conducive to building housing development and providing the necessary support to the most disadvantaged in the long run.

Keywords: community organizing; community development; housing; inequalities; marginalized neighborhood; Boston

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BALANCING POLITICAL, ENVIRONMENTAL, AND SOCIAL OBJECTIVES IN RURAL COMMUNITIES: A COMPARATIVE STUDY OF “SOCIAL ENTREPRENEURSHIP” AND “INDIGENOUS” APPROACHES (533)

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A rural economy is a complex system that is impacted by various political, environmental, and social factors. Balancing these factors is essential for planning sustainable development and equitable outcomes in rural communities. While social entrepreneurship has gained popularity as a potential solution to these challenges, the concept is often inadequately defined and conflated with indigenous business models. For instance, both models may prioritize their firm or community objectives over profit but for varied motivations and yet, seen as similar. To address these limitations, this proposed study aims to conduct a comprehensive literature review to gain a deeper understanding of the relationship between social philanthropy as a *motive*, indigenous systems as an economic *practice*, and sustainable rural development as a *goal*. An analytical ‘*objectives and outcomes framework*’ will be developed for both, social entrepreneurship and locally embedded indigenous models, from an evolutionary and theoretical perspective. The study will also adopt a human-capital perspective, which focuses on the role of human resources and skills as developed by the Community-Based Natural Resource Management (CBNRM) techniques. Additionally, the study will utilize two cases to establish both the positive and negative impacts of social entrepreneurship on the rural economy. The results of the research will provide a critical evaluation of the commonly held views on social entrepreneurship and its role in promoting sustainable rural development. Finally, the study will conclude with recommendations for evaluating and planning for equitable outcomes within the developed ‘*objectives and outcomes framework*’.

Keywords: Rural economy, Social entrepreneurship, Sustainable development, Community-Based Natural Resource Management (CBNRM), Policymaking

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HOW EDUCATIONAL PLANNING AND INSTITUTIONAL PRACTICES SHAPE SCHOOL SEGREGATION (537)

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School segregation is a key topic in urban, educational as well as inequality research (Boterman et al., 2019; Karakayali, 2020, Nast, 2020). While there are various studies illustrating parents' influence on school segregation, the impact of schools and urban educational planning on school choice have hardly been studied (Jennings, 2010; van Zanten, 2005). The paper's main aim is therefore to analyze how educational planning and school practices influences students' access to primary schools. Specifically, we ask: What effect do planning guidelines, routines, and practices of both local education departments and school principals (e.g., regarding admission and information policies) have on parental school choice behaviour and, subsequently, on primary schools' socioeconomic and racial composition and challenges of educational justice?

In our research, we focus on a neighborhood with a socioeconomically and racially diverse population in a large city in the German state (Bundesland) of North Rhine-Westphalia. We conducted qualitative interviews with school principals, staff of the local education department, and other local institutions, to scrutinize the different instruments they use to influence access to schools – and thereby steer (consciously or subconsciously) segregation. Additional qualitative interviews with and a quantitative survey among parents are used to contextualize those institutional practices.

Looking at the five primary schools located in our case study neighborhood, we find that the student composition varies significantly from one school to the other without mirroring the average composition of the surrounding neighborhood. The case study demonstrates that a neighborhood's composition and parental choice are not the only factors determining the social composition of schools. The institution school and educational planning also play a crucial role in school segregation and spatial justice. Institutional guidelines and practices reinforce rather than mitigate segregation. Furthermore, the analysis shows a close interplay between school and parents: a school's structure and institutional practices influence parents' choices, and vice versa.

Keywords: school segregation, educational planning, institutional discrimination, institutional practices, spatial justice

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THE RIGHT TO HOUSING IN TIMES OF CRISES: SOCIAL MOBILIZATION IN THE FIRST SPANISH HOUSING LAW (539)

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Spain remains without housing national policy, even though the Spanish constitution stated the right to housing in 1978. As a result, thousands of citizens victims of the housing crisis still demand their rights after decades of commodification and financialization. Before the outbreak of the crisis in 2007, a set of policies had increased the rate of housing tenure in Spain. The effects into the economy the growth of the indebtedness of thousands of families. After the burst of the housing bubble Spain was one of the most affected countries in Europe. More than 1'000.000 evictions were implemented after the outbreak of the global crisis in 2007 (Epdata, 2022). In addition to it, the government set measures to benefit investment funds and to rescue the financial entities. Some of them included taxes benefits for real state corporations and the decrease of the times of rental contracts. It provoked the massive acquisition of empty houses over the right of the tenants. In that scenario, the government was not supporting enough the increasing number of housing affected dwellers. The lack of trust in the government to solve the situation triggered the mobilization of the victims to defend the right of housing. The social mobilization implemented short-term and long-term strategies to facilitate housing access to citizens and demand the housing right to local, regional and national government during the last decade. In 2021 was presented a housing law proposal among movements and parties that intended to respond to different factors of housing emergency. Even though this law was rejected in parliament, it set a precedent about the housing demands. Moreover, it unleashed the government answer with a housing law project that is currently under revision. The paper aims to analyze, according the Gidden's structuration theory, to what extend the law process of the social movements change the allocative structures, authoritative structures and systems of meanings in the housing field. After decades of utilitarian approaches that converted housing into financial assets, the analysis exposes the current challenges of the housing policy-making for inclusive cities in context of economic crises. This analysis reflects about the inclusion of social justice in terms of housing in the planning of just cities. The research used quantitative information from interviews to different members of the PAH and other actors involved in the current housing policy debate done between April 2022 and October 2022, as well as systematic review of the current housing policy proposal. It concludes with the influence of the social movement in the transformation of imaginaries about housing that led to a policy construction that guaranty the right with the inclusion of the affected people of the crisis, citizens involved in social justice and other stakeholders in the decision-making. In sum, the times of housing crisis and political tensions evidenced the need of a transformation in the housing policies to a more inclusive and justice scenario.

Keywords: housing right, social movements, policy-making

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JUSTICE AND SPACE. DISENTANGLING THE NOTION OF “SPATIAL JUSTICE” AND REDISSCUSSING THE “SPATIAL TURN” (542)

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The concept of “spatial justice” is widely employed in contemporary literature; for instance, in the fields of urban studies, planning theory and human geography. The attention to spatial justice is a consequence of the recent “spatial turn” that occurred in many disciplines. However, there is no agreed definition of “spatial justice”. The aim of this paper is to revisit the idea of spatial justice; indirectly, the point is also to reconsider what the spatial turn is and can be. The paper is divided in two parts. The first part clarifies “what justice is”, making some preliminary specifications. The second part discusses five cases in which space is involved in justice issues: as an influencing factor; as a unit of allocation; as a privately owned asset; as a publicly controlled realm; as a context of segregation.

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REGULATIONS FOR PROVIDING PHYSICAL ACCESS TO HOUSING FOR PEOPLE WITH DISABILITIES (547)

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Legislation in many countries anchors the rights of people with disabilities – PWD - to access the built environment. The legislation often includes public services, transportation, and housing as well. However, all existing studies indicate a significant lack accessible housing units that meet the needs of people with disabilities. In many countries, even where there is legislation in place, housing developers and suppliers do not always fully comply with the requirements. An international literature review suggests that there is a major gap in analytical research about the legislation regarding housing for PWD. There is also a gap in assessment of degree of compliance.

The research presented here is the first stage in a broader cross-national comparative project. The pilot study will focus on the legislation and implementation in a single country - Israel. Israel's Planning and Building Law places obligation on developers of new housing with 6 units or more to provide means of accessibility from outside the building, including parking, to each apartment. However, the regulations also allow builders to submit a request for an exemption in cases where they can demonstrate that compliance with the mandatory provisions is not reasonably possible. Applications for exemption are submitted to the Commissioner for Equal Rights for Persons with Disabilities in the Ministry of Justice. This office examines and decides whether to approve or to reject the exemption request.

We will present the findings of statistical analysis of all exemption applications submitted over the past decade. The study – the first of its kind reported in the local or international literature – tests a set of hypotheses and their relevant variables: the type of housing, location type, socio-demographic characteristic of the neighborhood, the appraised value of the housing units in that building, and the estimated costs of fitting for accessibility (which the developer wishes to avoid). Through this empirical analysis, we seek to shed light about the degree of impact of exemptions on the stock of accessible housing. The broader aim is to contribute towards evaluation of the current legislation and ultimately, to greater social justice for PWD.

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PUBLIC OPEN SPACES AND INFRASTRUCTURES IN LARGE INDUSTRIAL HOUSING ESTATES: IDENTIFYING AND BRIDGING GAPS FOR JUST, ATTRACTIVE AND SUSTAINABLE NEIGHBOURHOODS (548)

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The large industrial housing estates in Eastern Germany have been faced several challenges in the last three decades, all meaning fast changing paradigms and specific needs to be addressed by urban development and regeneration policies and urban planning: population loss and demolition, segregation, in-migration, growth, accumulation of diverse socio-economic challenges, as for example childhood poverty, youth unemployment, ageing, ethnic conflicts.

Additionally and partly linked to the facts mentioned above we can observe an unequal provision as well as economic and social barriers with regard to accessibility of infrastructure facilities, and limited participation in adopting public spaces, all together forming substantial gaps for these neighbourhoods to be just, attractive and sustainable.

This contribution will focus on the linkages of the physical preconditions which are typical in large industrial housing estates and the ways spaces and infrastructures are approached as places for daily needs, encounter, and adoption.

By using the theoretical perspectives of 'built spaces' and 'lived spaces', we were able to identify linkages of shape and function of spaces and infrastructure provision and both positive and negative impacts for usage, participation, and empowerment.

In case studies we applied on-site and digital mappings to describe the physical situation and to observe the behaviour of people using the spaces. Additionally, we used survey data and interviews to gain insights to the perception of public open spaces and infrastructure facilities.

We could identify the following main gaps:

- Besides an adequate basic provision of infrastructures of daily needs (supermarkets, schools, health services, public transport), the neighbourhoods are missing diverse, small-scale, and inviting amenities (cafes, restaurants, small and specific shops, and cultural facilities) to make them attractive, vibrant, and livable and allow urban life, occasions to meet and social cohesion.
- Infrastructures provided by public authorities or NGOs are regularly addressing prior problems of the inhabitants (education support, free meals, language courses, etc.) or specific target groups (women, disadvantaged children, unemployed etc.). Open, positively framed and inclusive offers are rare, thus enhancing the perception of deprived neighbourhoods.
- Despite large efforts to provide manifold and targeted infrastructure offers, perception and utilization is limited to some extent. Besides social and economic barriers, also spatial aspects as spatial distances, missing physical linkages to the public spaces and limited visibility of facilities and initiatives are influencing the accessibility.

- The abundant public open spaces are missing opportunities to be appropriated by individuals or groups, and to use them as inclusive places for encounter.

Based on exemplary sites in large industrial housing estates in three East German cities we will discuss the potentials and limits of public open space and the infrastructure situation. Following these findings, some conclusions for urban planning to coordinate the creation of liveable, diverse and socially inclusive urban spaces in order to form just, attractive and sustainable neighbourhoods will be presented.

Keywords: Urban regeneration, migration, encounter, adoption, participation

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PARK SEGREGATION AND PARK ACCESS: AN ENVIRONMENTAL JUSTICE INQUIRY OF URBAN PARKS IN MONTGOMERY, ALABAMA (558)

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This study investigates the contemporary connotations of segregated urban parks in the context of Montgomery, Alabama. Racial segregation of urban parks in the United States of America has been a key yet less discussed component of the civil rights movement. In the Jim Crow era, city officials and Southern Whites segregated access to urban parks with a fear of racial mixing. Even after the 1964 Civil Rights Acts and several other laws against segregated public facilities, the government was reluctant to desegregate urban parks in Montgomery. In the 1950s, there were only four parks that African Americans were allowed to use, among a total of fourteen city parks. Not just by quantity, these Black-only parks were also of inferior quality compared to their White counterparts. The White-only parks will often be located in African American neighborhoods but will deny access to the immediate residents. In the 1970s, when the city officially integrated the parks, Montgomery neighborhoods experienced a White flight to the suburbs, leaving the city parks in poor conditions for African Americans. Today, Montgomery has a desegregated park system with sixty-four parks spread across its different neighborhoods. The question remains whether park segregation still exists in Montgomery and, if yes, in what forms?

Literature on park access and equity shows that minorities and low socio-economic groups lack access to good urban parks. Access to urban parks profoundly contributes to the issues of environmental justice. Nevertheless, the design and management of park facilities and amenities often indirectly affect the diversity, inclusion, and equity of park users. This study empirically examines park segregation from the perspective of park quality and access by surveying sixty-four parks in Montgomery using five indicators – accessibility, recreation, amenities, natural features, and incivilities – and quantitative and qualitative measures. The survey involves site visits and field observations to analyze and document the quantitative and qualitative measures of the indicators for each park. The study compares the evaluations with respect to the demography of people who live within a half-mile area from the parks, assuming them as potential users. The 2019 American Community Survey data shows thirty-six parks are located in areas with more than 60% of African Americans, while White neighborhoods surround the rest.

The assessments show more quality-based disparities than quantity-based disparities between the White and African American parks. African American parks, located mainly near downtown and southwest neighborhoods of the city, have limited walkability, degraded amenities, fewer recreational facilities, and signs of incivilities. As the African American neighborhoods suffered from urban renewal plans in the 1960s, many parks in such areas were disconnected by highways and had severe noise pollution issues. The superior quality parks are mostly found in White-dominated areas and are primarily used as sports and recreational facilities. Small neighborhood parks, especially in African American neighborhoods, have minimal amenities and fewer natural features than privately maintained large recreational parks. The observations suggest that park segregation still exists in the form of quality-based inequalities for park facilities and access in Montgomery. Assessment of park quality is crucial to practice environmental justice, especially in

cities with a history of racial segregation of public amenities. In 2020, Montgomery adopted the 2040 Comprehensive Plan, which aims to create a citywide parks and recreation master plan. The parks and recreation department can benefit from this study by addressing the quality-based inequality issues in the future master plan.

Keywords: segregation, parks, environmental justice, Montgomery, Alabama

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A PHOTOVOICE APPROACH TO STUDYING NEIGHBORHOOD-LEVEL FOOD ENVIRONMENTS FOR PLACE-BASED FOOD PLANNING IN THE METROPOLITAN REGION OF AMSTERDAM (559)

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In the context of a lack of access to healthy, nutritious and sustainable diets (Davis and Geiger, 2017), marginalized socio-economic groups are disproportionately affected (Garratt, 2020). In response, EU cities formulate food governance and planning frameworks that focus on social justice in general, and participatory practices in particular (Candel, 2020; Smaal et al., 2020). This attention on citizen and wider stakeholder involvement aligns with the participatory turn in urban planning (Amado et al., 2010; Chilvers, 2009). However, participatory planning has been found to perpetuate and legitimize already existing power relations (Metzger et al., 2017; Swyngedouw et al., 2002). Specifically, in food planning “genuinely participative structures” are lacking that “overcom[e] the impediments of public institutional structures [and] reshap[e] the current flows of power and exclusion that currently characterise uneven urban foodscapes” (Moragues-Faus and Morgan, 2015, p. 1569; cf. Candel, 2020; 2022). A place-based approach to food planning arguably needs to connect participation with analyses and attempts to change political power and institutional arrangements (Moragues-Faus, 2020; Sonnino and Milbourne, 2022).

One approach contributing to place-based food planning is doing research mapping (urban) food environments. Where scholars have spatially studied aspects such as food availability, access and quality (Nodari et al., 2020), food environments have been qualitatively understudied. This can lead to food environment discourses that misrepresent people’s lived experiences (Petteway, 2022), problematic when such knowledge then informs food planning (cf. Duncan, 2006). In response, qualitative studies on food environments increasingly use photovoice. A participatory research method aimed at documenting people’s experiences (Sutton-Brown, 2014), photovoice can contribute to just planning if empowering marginalized communities (cf. Evans-Agnew and Rosenberg, 2016). While scarcely used in research for food planning (but see e.g. Shannon et al., 2021), public health scholarship in Spanish (Diez et al., 2017; Gravina et al., 2021) and US cities (Hines et al., 2022; Lindow et al., 2021) have used photovoice to study perceptions of (urban) food environments. A gap remains to explore how photovoice-based research in different geographical areas can contribute to place-based food planning.

This study will focus on the Metropolitan Region of Amsterdam (MRA) as part of the EU-funded project FoodCLIC (2022-2027) that combines social and environmental understandings of place with analyses of identity, power and spatial practices (see Sonnino and Milbourne [2022] for the conceptual framework). Acknowledging that urban food planning should advance justice, we follow Simón-Rojo’s (2021) methodology to empower social practices against food injustice in neighborhoods with the worst combined indicators related to income, poverty and health; combined with available social, material or political resources against food poverty. Based on similar criteria, this study aims to perform photovoice research in two vulnerable neighborhoods in the MRA.

We expect to find results possibly similar to earlier research on local food environments (e.g. Diéz et al., 2017). However, we stress that any attempt at participatory research or planning should

avoid being overly focused on results or methods only. This can arguably be detrimental to the capacity of urban sustainability planning to advance social justice objectives (Fainstein, 2013). While indeed more ‘meaningful’ or ‘sustainable’ forms of participatory planning are needed (Ferilli et al., 2016), they need to go hand in hand with changes in their institutional and political context (Fung, 2015; Zakhour and Metzger, 2018). To this extent, our participatory study on food environments intends to directly inform experimental local planning initiatives and form the basis of reflexive engagements with city planners throughout the project, where we as researchers take on a scholar-activist role in knowledge and practice co-creation for food systems governance (Hammelman et al., 2019).

Keywords: participatory research; place-based food planning; photovoice

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GIVE AND TAKE (AND RETURN): THE 'SYMBOLIC EXCHANGE' AND THE SETTLEMENT OF EZIDI REFUGEES IN ARMIDALE, AUSTRALIA (566)

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Over the past decade and a half, Australian governments have sought to increase settlements of immigrants and refugees in small and medium-sized regional towns, with a view to promoting regional economic development in areas that may be experiencing population decline, labour shortages and declining services. While many of these settlement programs have been regarded as 'successful', challenges have also been experienced in areas such as employment and education opportunities, housing, and access to services in general (e.g. Curry, Smedley & Lenette, 2018). Against this backdrop, the broad aim of this paper is to explore factors which have enabled and constrained the successful settlement of Ezidi refugees in the regional town of Armidale, Australia. Drawing on in-depth, semi-structured interviews with refugees, service providers and community volunteers, its particular focus is on the role of 'symbolic exchanges' in the sense developed by Baudrillard (1993) (drawing on Bataille (1991), Mauss (1990) and others): actions and exchanges of goods undertaken for symbolic reasons, rather than for their intrinsic value. Where much of the literature on refugee settlement focuses on economic and functional issues, it is argued that this 'symbolic' dimension is crucial to understanding the settlement experiences of Ezidi refugees in Armidale.

Keywords: Immigration, Refugees, Symbolic Exchange, Jean Baudrillard

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SUBURBAN REGENERATION VIA SOCIAL INCLUSION AND PARTICIPATORY DESIGN: TURNING THE PRISON OF FLORENCE (ITALY) INTO A PERIPHERAL CENTRALITY (582)

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Prisons are a space of contemporary suburbanity neglected and stigmatised in many parts of the world and, in particular, in southern Europe and Italy (Vessella, 2017). Prison architectures are 'introverted' structures (Milhaud, 2017; Moran et Al., 2017); they are often situated in the middle of nowhere and isolated from infrastructural networks and urban and social metabolisms (Infussi, 2020). In this way, they contribute to the production of disconnected, inaccessible peripheries that appear as a patchwork of modern city rejects located in in-between areas - the *Zwischenstadt* (Sieverts, 2003). Urban policies, clouded by the rhetoric of glossy urban regeneration, deliberately ignore the problems generated by these awkward structures in space and the enormous social and infrastructural impact that the activities in and around prisons generate in the urban fabric.

This paper addresses this issue and presents an ongoing project/process of suburban regeneration that underlines the urgent need to rethink the relationship between prison and the city and restore citizenship rights to prisoners, families, the prison police, and the population that rotates around the prison. But, above all, the project displays an opportunity to rethink the periphery as a place of social, economic and political rebirth.

The main goal is then to convert the area where the prisons of Florence exist into a peripheral centrality that triggers a process of social, economic, spatial and human regeneration.

The process is described under three lenses: (1) social inclusion in contexts of suffering; (2) spatial justice; and (3) territorial well-being, urban health and ecological conversion.

The methodology is based on participatory design and the social inclusion of institutional and non-institutional actors. The institutional decision-making process to address the project is also described.

Keywords: Inclusive city, Prison, Suburbanism, Just city, participatory design

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THE CHANGING ROLE(S) OF HOUSING ASSOCIATIONS IN DENMARK ILLUSTRATED THROUGH 'URBAN REGENERATION' PROJECTS (590)

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While Scandinavian countries are well known internationally for their strong welfarist states, and accordingly ostensibly low levels of inequality, recent anti-segregation urban policy in Denmark has somewhat tainted this image. Driven by a strong 'assimilationist' stance on immigration more generally, as well as an increasing pervasion of anti-immigration rhetoric across the political spectrum, successive urban reform policy packages have targeted non-profit housing estates, run by housing associations, as vectors of social issues. These policies discriminate specifically on grounds of ethnicity, saving the most regressive interventions (including forced demolition) for areas with over 50% of inhabitants from a non-western background (indenrigs og boligministeriet, 2022). While official discourse has shifted from 'ghetto' to 'parallel society', an arguably less explicitly racist formulation yet still with nefarious connotations, these policies can still be seen as an attempt to homogenize and eradicate difference rather than celebrating and protecting different lifestyles and cultures (Jensen & Söderberg, 2022). This article interrogates the changing role of housing associations in this discursive milieu. Housing association dwellings account for around 20% of Denmark's housing stock, and the associations are significant urban and political actors at the local and national scale. I characterize contemporary developments in the housing association sector as a neoliberalisation, thereby retaining focus on the role of ideology in these changes. Here, neoliberalism is understood as processual and variegated (Peck, 2013; Peck et al., 2018) in part guided by external (state) policies and reform, and in part coming from within housing associations themselves as a response to changing housing markets and resident preferences. Using case studies based on document analysis and key actor interviews, this research highlights the various ways in which this change manifests. I argue that rather than 'solving' segregation, purportedly the issue driving the abovementioned policies, these changes rather deepen segregation and damage the ability of housing associations to tackle the *social* issues at the root of the purported problem. Instead, a prioritization of market forces and gentrification-induced displacement is taking place.

Keywords: Segregation, Welfarism, Neoliberalisation, housing associations

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EQUITY AND SPATIAL JUSTICE PERSPECTIVES IN TRANSPORTATION (620)

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Spatial justice is revealed to be a relatively recent concept (Soja, 2010) and has been repeatedly examined by scholars from different perspectives. Several recent studies consider how to reflect sociological concepts of spatial justice within transport and urban policy settings. The concept of spatial justice originates from the conceptualisation of social justice into space, denoting a just distribution of available resources within and across geographical space (Uwayezu and De Vries, 2018). The pursuit of spatial justice can be achieved if the organization of space and the allocation of resources across space respect the principles of equity and respect for human rights (Smith, 2000). However, scholars writing on spatial justice draw attention to the way in which social and spatial forms of injustice can be linked to structural inequalities of different kinds (Jones et al., 2019). Thus, work on spatial justice highlights the need to examine the pluralities of understandings of justice concept itself. Also, this plural way of thinking about spatial justice raises some relevant questions about the measuring variations of justice and equity.

Equity refers to the fairness with which impacts (benefits and costs) are distributed (Litman, 2018). Transport equity refers to the fair distribution of transport outcomes across spatial or demographic groups (Di Ciommo and Shiftan, 2017). However, building a robust measure that allows for a sound assessment can pose a challenge, as the concept itself admits several parameters. There is a wide range of impacts and ways of measuring those impacts, and several possible ways of grouping people for equity analysis. Thus, from a vertical equity perspective, both the adopted definition and measurement of equity could significantly affect analysis results (Litman, 2018).

Our central objective for this presentation focuses on the survey of theories, social groups, metrics, variables, and constraints that have been most recurrently used throughout this century to face the challenge of making space more homogeneous from the point of view of providing opportunities to individuals, families, and companies. Due to the amount and diversity of scientific knowledge produced on these topics our methodology follows a semi-systematic review of the body of literature available in Scopus and Web of Science for analyses of equity and spatial justice related to transport and mobility. This work is supported using bibliometric analysis software that allowed to go further in the articulation of the sources of information contained in each article, unveiling chronological and thematic associations that would otherwise be difficult to find. However, our research findings presented here do not represent an end point in the search for a suitable technique to understand spatial justice, equity theories and transport interactions. Thus, it is intended to support current methodological approaches that can provide new tools to policy makers to respond to the spatial and social disadvantages of some territories, mediated by transport policy.

Keywords: Spatial Justice, Equity, Transport Supply, Urban Mobility

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<https://doi.org/10.3390/land7030084>

DIFFERENCES IN URBAN PLANNING. EXPLORING AFFECT AND BEHAVIOR IN PEOPLE-PLACE RELATIONSHIPS (666)

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‘Difference-oriented urban planning’ (DiffUrb) is the title of a collaborative research project aimed at shifting the focus of urban planning towards the inclusiveness of difference – difference as the pluralism of people and spatial uses of the city. As a part of the DiffUrb project, the present study employs an experimental approach that combines virtual reality and physiological measurements to assess differences in residents’ affective and cognitive experiences in urban environments.

Urbanization has resulted in the homogenization of the spatial structure of cities (Lemoine-Rodríguez et al., 2020), thus affecting people-place relationships, the way that people engage in changing and shaping their environments, and ultimately, their quality of life. Simultaneously, the urban population is becoming increasingly heterogeneous, as cities are attracting people from diverse backgrounds (Cattacin, 2009). These trends present a challenge for urban planning to effectively address changes in people-place relationships while promoting a more inclusive agenda to diversity. Contemporary urban planning has been criticized for inadequately dealing with the complexity of present-day societies (Burayidi, 2015), underscoring the importance of incorporating difference into urban planning. Moreover, planning practices have been continuously shaped by normative ideas contributing to reinforcing inequalities. For instance, the notion of treating all people equally fails to account for the needs of particular populations. Pursuing a more equity-oriented approach leads to considering the specific needs of different populations and minorities (Sandercock, 2000; Schmiz & Kitzmann, 2017).

The present study explores differences in affective responses to urban environments and place qualities, with a particular focus on urban green spaces and biodiversity. Urban green spaces and biodiversity have been demonstrated to reduce stress (Hedblom et al., 2019). Yet, while there is evidence supporting the importance of emotions in shaping behavior (Phelps et al., 2014), an understanding of the role of emotional responses to urban environments remains under-explored. The study aims to fill this gap by providing insights into the impact of difference on affective responses to urban environments, thus contributing to the planning of inclusive cities.

Keywords: difference; people-place relations; affect; urban green space

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DREAMING DIGNITY IN A DARK PLACE: EXPLORING THE MEANING OF LIVING IN DIGNITY IN JOHANNESBURG, SOUTH AFRICA'S HIJACKED BUILDINGS (673)

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It has been noted that in most of Africa urbanization is growing at a fast rate even though most of it is unplanned. In what has been called slum cities or squatter camps, citizens are resettling themselves in unplanned settlements such that the local authorities cannot provide them with the necessary amenities for an urban life (Patela & Shah, 2021; Forjaz & Lage, 2019; Huchzermeyer, 2011; Davis, 2006). In Johannesburg, South Africa's commercial capital, such settlements include emergence of shanty towns, hijacked buildings and settlements in disused old buildings that are disconnected from municipality water and electricity. In such settlements, the residents do their own town planning outside the influence of the local governments. For example, they have to decide and agree on alternatives for ablution facilities. The question that is central to this contribution is around the meanings of living in dignity in Johannesburg's inner-city buildings occupied outside municipality and building owners' permission. In that such buildings are disconnected from the power grid, they are usually called *umnyamandawo*, a place without light or a dark place. The paper's theoretical framework combines literature on insurgent planning and decolonial urbanism (Miraftab, 2017; Miraftab, 2009). Building on ethnographic work, I will conduct in-depth interviews with some of the residents of such buildings to understand their conceptualization of living in dignity at a place where they are cut off from the municipality services such as water, electricity and refuse collection.

Keywords: Decolonial urbanism, Dignity, In-depth interviews, Insurgent planning, Slums

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RULES AND (DIS)ORDER: DO MEASURES LIKE THE AFFORDABLE HOUSING PERMIT IN THE HAGUE MAKE JUSTICE? TO WHOM? HOW CAN WE EVALUATE IT? (676)

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Following a socially divisive and highly debated affordable housing shortage, in the last few years the Dutch government issued a set of framework agreements that enable municipalities to set more stringent housing rental and housing sale rules. Municipalities like Utrecht and Amsterdam, which have been confronted with a growing students population and with a shortage of low-income dwellings for at least two decades, have restricted the areas in and the conditions at which market players can buy-to-rent. In 2019, the municipality of The Hague, a well-known destination for international civil servants, has restricted one entire segment of the ‘vrij huurmarkt’ – the free rental market – by requiring to landlords to rent their properties at regulated fees. The relevant procedure requires to landlords to assess, by means of a detailed points system, the value at which their properties can be legally rented. By their side, tenants who want to access this ‘semi-regulated’ market must comply with specific income requirements to obtain the municipal rental subsidies and the permit to rent these properties.

Whilst in densely inhabited cities these rules find justification in the objective shortage of housing for low-income households, in this paper I would like to reflect on whether the consequent restrictions of the housing market tackle the root problem or, rather, exacerbate it further. I will do so by drawing on a set of PBL studies (e.g. Schilder and Scherpenisse, 2018) that show how, in the past decades, the continuous expansion of the Dutch social housing system and of the relevant subsidies has not only secured thousands of long-term affordable tenancies to households whose income has overcome the initial low-income requirements, but it also proved ineffective in countering the shortage of housing for the so-called ‘starters’: that is, the vast population of fresh-grads and early-career workers that are more likely to find appealing jobs in major cities rather than in peripheral towns. In this perspective, keeping expanding the regulated housing market in these cities by “socializing” private properties – with the clear risk of disincentivizing landlords from investing in their maintenance and quality – risks to delay rather than accelerate the search for more flexible and socially equitable solutions.

Keywords: Urban rules, affordable housing, The Hague, social equity

Reference:

Schilder F and Scherpenisse R (2018) *Policy and practice: affordable housing in the Netherlands*. Netherlands Environmental Assessment Agency (PBL), online.

SHOULD CHILDREN BE SEEN AND NOT HEARD? CHILDREN'S INVOLVEMENT IN GREEN SPACE PLANNING (711)

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Green spaces provide multiple benefits to physical and mental health, especially for children. At the same time, citizen participation – which aims to incorporate the inhabitants' needs into green space planning – typically addresses adults as those whose voice counts, even when it comes to children's needs. Children are most often left out of participatory processes and remain passive beneficiaries of urban planning decisions rather than agents of change. Meanwhile, allowing children to actively participate at each stage of green space planning provides multiple benefits that children can obtain thanks to being included in such decision-making processes.

For instance, thanks to the active participation in green space planning, children develop pro-environmental behaviours, improve their civic knowledge, self-confidence and the sense of responsibility for common goods, such as green spaces. In reverse, children's participation can support green space planning processes by adding fresh perspective to the planning, promoting user-oriented approach for the planning process and transforming unequal power relations. This raises the questions of whether and to what extent participatory processes regarding green spaces enable children to be heard.

This study goes beyond a simple answer whether children are included in the participatory processes regarding green space planning. Instead, it proposes a comprehensive assessment of children's involvement in participatory processes at each step of those process. For this purpose, we selected three exemplary case study participatory processes addressing green space planning that took place in Lodz (Poland): citizens' jury "Greenery in the city", participatory budgeting and public consultations on "Green Streets" in the Stare Polesie district. Those three cases cover different spatial scale, subjects discussed by the citizens, financial scale and cyclicity. To analyse them, we used mixed qualitative and quantitative analysis of legal conditions, process flow and process output that aim to assess whether and how children's voices were taken into account.

We showed that moving children's participation beyond rhetoric claims remains challenging in green space planning. Even if the process allows children to express their needs, it fails to translate these voices into reality. We found various weaknesses that question the equity in hearing and considering children's voices and those of adults in all three-case study participatory processes. Children are often tokenised, treated as decoration, or not properly informed during participatory processes which further limits their real contribution to green space planning. In the broader context, our findings support understanding procedural and participatory environmental justice, which refers to the rules and laws that allow or exclude children from fair treatment in participatory processes regarding environmental issues. For instance, we showed that instead of commonly used equalization of procedural and participatory environmental justice it is necessary to differentiate both terms.

Moreover, our findings supplement ongoing discussion on how to make urban planning processes age inclusive. We demonstrate that allowing children to attend in the participatory process is not enough and cannot be treated as children inclusion as their opinion and suggestions are often not taken into account in reality. Still, there is a need to develop children-oriented methods and tools to enable children's voices to be properly included in the green space planning.

Keywords: environmental justice; participation; green space planning

LEARNING AFTER SCHOOL: AFFORDANCES OF SCHOOL SURROUNDINGS FOR INFORMAL LEARNING OF GIRLS IN THE CONTEXT OF TEHERAN, IRAN (728)

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There are debates that relate the concept of a "Just City" to a setting where all citizens should have access to affordable and well-equipped childcare facilities and schools, opportunities for education and training for young people as well as lifelong learning. But education happens in diverse places and spaces, not only in formal institutions and programs (Million et al. 2019, Million et al. 2017). Against this background, urban districts, neighborhoods have become increasingly important for the debate on the role of non-formal education and informal learning, while also urban planning, urban design and architecture can strengthen neighborhoods and individual learning with educational opportunities in social space (also as response to socio-cultural challenges such as social inequality in general and educational inequality specifically) (Heinrich and Million 2022).

The presented study looks at the urban space around elementary schools of the city of Teheran, Iran as setting for informal learning. Specifically, the functional, social and affordances (Heft 1988, Kyttä 2003, Kyttä et al. 2018, Castillo and Million 2021) of spaces - and with it a "hidden curriculum" (Gordon 1982, Ellis 2004) - for informal learning is being studied. Two schools in neighborhoods with different stratifications are researched via observations and interviews. Since there is a gender segregated school system in place, the study gives specifically information on how the informal learning landscape of girls is constituted and how their actions and times are influenced not only by cultural norms but also embedded in the physical-material and social setting of the school surroundings. A high dependency on female care takers becomes clear, but also how important these places and times after school and around schools are for care takers themselves. A main conclusion of this study is that the female care takers' socialization facilitates affordances for girls and their informal learning (as much as it can be hindering). It also highlights specific physical-material elements and social settings of the school surroundings (adjacent streets, stairs, sidewalks, trees, shops, traffic, abandoned buildings, construction sites, care takers' needs and actions etc.) that can be in the end part of planning and design strategies creating informal educational opportunities.

Keywords: school surrounding, girls, spatial affordances, informal learning, care takers, Iran, Teheran, urban planning, urban design

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https://doi.org/10.1007/978-3-030-78597-0_3.

ASSESSING SOCIAL HOUSING EFFECTS ON INFORMAL SETTLEMENTS IN BOGOTÁ, COLOMBIA (759)

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Housing informality is a worldwide phenomenon, which nowadays became a structural feature of housing systems, particularly in the Global South. Informality is often perceived as a lack of affordable and adequate shelter while the typical state response to this phenomenon is social housing or upgrading programs (Gurran, Maalsen and Shrestha, 2020). Despite the assumption of positive effects of formal housing provision on informality, there is little research on assessing these effects (García-Suaza et al., 2022). Literature on social housing mostly focuses on its quantitative externalities on a citywide scale. Most of them concluded there is a positive impact of social housing projects due to the extension of new infrastructure and services (Schwartz et al., 2006). However, housing construction may increase land values and produce gentrification processes (Alzúa et al., 2016).

This leaves the assessment of urban effects of social housing projects in informal settlements mostly unattended. To address this literature gap, our research studies the empirical effects of social housing on informal settlements at a local scale using paradigmatic projects in Bogotá built in the last 20 years. Bogotá offers a typical Latin American example of an incomplete housing welfare system characterized by a predominant informal market while a marginal intervention of the state in housing provision, mostly through demand-led subsidies. This is the result of three decades of state retreat in Bogotá as a housing provider and a marked preference towards a role as a financier and enabler of housing due to neoliberal policies (Rolnik et al., 2014).

Our research addresses the relation between social housing construction and informal settlements in Bogotá. Through a spatial analysis of social housing projects, we aimed to unveil their impacts on physical and socioeconomic conditions of neighboring informal settlements in the long term. For this purpose, we selected three paradigmatic housing projects built in the last two decades in predominantly informal settlements and analyzed how physical and socioeconomic conditions changed around a buffer area of each project in comparison to other informal neighborhoods distant to the project. In terms of physical conditions, we compared cadastral databases regarding floor area, building heights and construction materials prior and after the social housing projects. We contrasted this information with satellite images to witness infrastructure and service improvements in a 10-year time horizon. Furthermore, we assessed how socioeconomic conditions changed through the comparison of census and cadastral data available at the neighborhood level. We concluded there are significant improvements of socioeconomic conditions in informal settlements near social housing projects product of private and public investments. In contrast, areas without such public investments remained physically similar until further upgrading projects took place. This way we aimed to make a significant contribution to the field of planning in the Global south to understand the potential impact of social housing beyond the traditional role of a shelter to counteract housing deficit but as a tool to trigger the improvement of informal settlements.

Keywords: Housing informality, social housing, Global South, informal settlements

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WOMEN'S PREFERENCE AND PUBLIC SPACES QUALITY: A CASE STUDY OF PUBLIC SPACES IN HONG KONG (761)

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Architecture and urban planning have historically been male-dominated professions, resulting in a homogenous and un-gendered vision of urban space development based on male interests (Garcia-Ramon et al., 2004), while women's needs and interests for public spaces are often neglected in practice (Burgess, 2008; Greed, 2005; Parker, 2016). The gradual commodification of public spaces in Hong Kong favours their exchange value and market logic over their use value, resulting in public spaces becoming less publicness and inclusivity (Chan, 2020). Women's preferences in current urban spaces appear to have received less attention in research on women's studies and urban public spaces. Hence, the main purpose of this research aims to investigate the relationships between the public space quality and women's preference for public spaces from women's perspectives in Hong Kong. To this end, the quality of selected public spaces is objectively evaluated by using the Public Space Index (PSI) (Mehta, 2014). Subjective data are gleaned by an online image-based survey with a supplement of the on-street survey, encompassing five aspects of PSI. Hierarchical linear modelling is then employed to analyse the associations between the objective evaluation and subjective preference in three dimensions (individual, social and environmental) of women's presence in public spaces. The results show that in the individual dimension, there is a significant correlation between women's preference and presence in urban spaces and their marital status. In the social environment, there is a significant correlation between the presence of other different genders and the perception of safety and comfort of women. Among physical components, women's preference for public spaces is most significantly related to the legibility, openness of public spaces and the presence of desolate places, comparing their relative strengths and moderating mechanisms. This study identifies physical components and social environments that provide the context for women's frequent and repeated presence in urban spaces to perform optional or social activities, which indicates the desired quality of urban spaces, and social environments for women in Hong Kong.

Keywords: Women, Public space quality, Presence in urban public spaces, Physical components, Social environment

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MIGRANT HOUSING EMERGENCY: A CRITICAL READING OF FORMAL AND INFORMAL SETTLEMENT PHENOMENA (766)

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In contemporary society, where inequalities between the 'native' population and migrants are increasingly marked, they are inevitably reflected in the places where the population is settled and lives.

Immigration in Italy is now considered a structural phenomenon, yet in public, political and media discourse it is still spoken of in alarmist terms, fuelling the tendency to reject and distance all that is labelled as 'different'.

Regarding reception policies, they show some critical and contradictory issues that reveal the true activity of hotspot centres. These centres are the places characterised by a high degree of invisibility, in fact they constitute shadow zones in our society located on the fringes of cities, in isolated, often degraded places and subject to military surveillance. Compared to these conditions, not even non-profit organisations dealing with migration are aware of the significance of the procedures that take place within these centres.

For migrants who want to settle in the territory, access to society from border and administrative detention centres is very often hindered by the public administration, which in fact fuels both regulatory and physical immobility. The procedures and regulations implemented in these so-called 'border' areas are therefore generally perceived as technical and politically neutral issues, but in reality they are easily associated with actions aimed at exclusion.

For more than twenty years, the migration phenomenon in Italy has undergone ever-increasing incremental changes. Moreover, the continuous and sudden changes in national migration policies have not helped the ever-increasing demand for reception places. On the entire national territory, the necessary measures to identify suitable places to detain asylum seekers have not yet been put in place; in fact, hotspots and CAS (extraordinary reception centres) have so far been used as informal detention places.

If all this is valid for regular migrants, a further and much more serious scenario of marginality opens for 'irregular' migrants considered as 'surplus', who are left alone to face the ongoing crisis and whose chances of integration or reintegration are non-existent. In these unstable basic conditions, informal settlements have also been transformed and relocated in contexts increasingly outside the city, taking forms that now shape the new paradigm of social exclusion. In the light of these informal issues, the contribution addresses the complex socio-spatial phenomenon of migrant informal settlements in out-of-town contexts, which is particularly related to planning and opens new future challenges for the discipline.

Keywords: Informal settlements, housing, migrant, rural areas, informality

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EVALUATION OF THE EFFECTIVENESS OF PUBLIC SPORTS FACILITIES SERVICES IN COUNTIES UNDER THE CONCEPT OF HEALTH EQUITY: AN EXAMPLE FROM NORTHWEST CHINA (774)

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Sports development in the northwest of China lags behind the east and central regions in general, especially in many economically weak and less developed counties. Through research and analysis, the common problem is the insufficient number and low configuration of public sports facilities, the single type of service supply and the serious lack of health services. In recent years, China has promulgated a number of policy documents such as the "Health China 2030" plan and the "14th Five-Year Plan" for sports development, which put forward such policy hotspots as "equalization of public services" and "universal health coverage". The establishment of an evaluation system for the effectiveness of public facilities health services in counties in the Guanzhong region of Shaanxi Province is an important foundation for achieving health equity in backward areas. This paper takes more than 30 public gymnasiums in county cities in the Guanzhong region of Shaanxi Province as the research object, based on the concept of health equity, applies multi-source data methods to collaboratively obtain index data and establishes a case sample database; dissects the correlation mechanism between typical venue parameters and health services, and proposes five categories of index groups: supply adequacy, physical and medical integration, demand matching, environmental healthiness, and service efficiency. Compare the correlation relationship and potential demand relationship between architectural planning and design and health service effectiveness, deepen and sort out the hierarchical relationship of classification and grading index groups; finally, combine AHP hierarchical analysis method for evaluation index optimization; Delphi method and entropy weighting method for comprehensive weighting, establish a three-level 86-index item health service effectiveness evaluation system, and use the system to conduct health service evaluation of typical venues in the case sample database. The system is used to evaluate the health service effectiveness of typical venues in the case sample database, derive grading criteria and optimize design strategies. To improve the health service capability of public sports venues and promote people to enjoy health equity.

Keywords: Health Equity, Counties in Northwest China, Public Sports Facilities, Effectiveness Evaluation

WHERE SOCIAL POLICY AND PLANNING MEET: PROVISION OF CARE FOR THE ELDERLY IN DENSIFICATION PROJECTS (781)

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This paper contributes to an emerging recognition of the role of planning as a spatial intervention to mitigate the care gap. “Care gap” has entered scholarly and policy debates to refer to the growing mismatch between the care needs and shrinking material and immaterial resources allocated for its provision following the austerity and neoliberal restructuring of many public services. Apart from social and economic factors contributing to the growing care gap, ageing stands out as a pressing demographic challenge that urges public policy response at all governmental levels. While federal social policies primarily regulate direct/indirect subsidies to make care accessible for those who depend on it, the allocation of space for the delivery and the performance of care remains a spatial planning challenge at the local level. Our central research question concerns the spatial planning instruments and strategies that public authorities use at the local level for the governance of care. We conducted a single case study of Nieuwegein (Netherlands), one of the first Dutch municipalities to formulate a policy combining housing and care by introducing a planning instrument called “care circles.” Based on the analysis of interviews with planning officials, landowners, and developers, as well as the planning documents and reports, our initial findings demonstrate the prominence of private law contracts between the public authority and for-profit market actors to address the care gap through housing projects. Therefore, implementing policy objectives strongly depends on negotiations between public and private interests. We argue that with the continuous rollback of the state from essential social services, local governments are pushed to act more entrepreneurially to incentivize the provision of elderly housing on an ad-hoc basis. This study demonstrates that socially sustainable urban policy responses to the care gap require deliberate coordination between social policy and land use planning to mitigate the growing care crisis in ageing societies for inclusive and just cities.

Keywords: care gap, elderly housing, new public management, planning instruments, property rights

THE UNIVERSITY CITY IN THE MAKING: PATTERNS OF SOCIAL EXCLUSION IN TURIN, ITALY (790)

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The contribution presents preliminary results from the H2020 project SMARTDEST, which aims to tackle forms of social exclusion provoked by human mobilities, across different cities in Europe. Among the several case studies in the project, the one presented focuses on student mobilities' impacts in the socio-spatial domain of the city of Turin, Italy's fourth largest city. During the last twenty years, this former industrial town has tried to leverage on local universities as a crucial asset for the local economic system in a knowledge economy framework. On their part, local universities have shown their relevance both in terms of their capacity to attract new, mobile, young populations, and as assets for a broader process of urban socio-economic restructuring (Zasina, Mangione & Santangelo 2021). As a result, 120.000 university students – one third of which are off site – spend their day and night time in a shrinking post-industrial city of 860.000 inhabitants. As widely observed by scholars, student concentration in cities can have conflictual and disruptive impacts (Sage, Smith & Hubbard 2012) synthesized by the term 'studentification' as the exclusive physical, social and economic transformation of urban spaces they live in (Smith 2005). Nonetheless, we want to stress how looking only at students' agency as driver of transformations and negative externalities risks underestimating the complex array of interests and agencies that lay behind the production of geographies of (more or less latent) exclusion and conflicts. Heterogeneous urban dynamics can be located within broader conflict-ridden trends in urban transformation, in which the simplified causal relation between students and exclusion appears misleading (Cenere et al. forthcoming). Through an in depth on field qualitative analysis, we look at how the growing student population is affecting new public and private space uses and regulations. In fact, student demand for housing, services and leisure activities produce new informal uses of public spaces (i.e. the proliferation of new night venues and economies) as well as move the interest of Purpose-Built Student Accommodation private investors, which find in Turin and its growing universities a promising market. On the one hand, we are interested in unfolding the policy process through which an urban coalition of public institutions, investors and entrepreneurs is fostering urban transformations related to university and students new facilities. On the other hand, we observe how this is generating commodification processes of retail and housing sector which negatively affected local community. In other words, the case present how an urban context in crisis can be challenged in keeping a fair balance between political, market and social objectives and forces. The investigated area is Aurora, a neighbourhood in North Turin that has been recently undergoing relevant urban changes mostly, but not completely, related to the transformation of Turin into a university city. More precisely, we concentrate in three sites of urban change in the neighbourhood, characterised by the emergence of different forms of socio-spatial exclusion related not simply to the increased concentration of students, but also to different 'expression(s) of capitalism in urban space' (Revington 2021).

Keywords: social exclusion; neighbourhood change; student population; university; Turin

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<https://doi.org/10.1080/02723638.2021.1969142>

A TAIL OF TWO CITIES: REEVALUATING THE SUPERBLOCK CONCEPT IN BELGRADE AND DARMSTADT (793)

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The concept of superblocks represents a sustainable and eco-friendly urban planning measure that essentially serves to contain motorized, individual traffic without significantly restricting its usability. This, in turn, increases traffic safety and the general quality of life for its residents. Although the main elements of this concept were already promoted by the Modernist movement, the contemporary planning practice has recently popularized its application in the traditional city core, as an urban regeneration tool easily adjusted to typologically different settings. This trend has gained momentum after the city of Barcelona successfully implemented the concept to transform an existing urban fabric into a more livable, calmer, and greener urban neighborhood – in accordance with the latest urban development agenda. Paradoxically, however, the original superblock features and environmental qualities of many Modernist blocks have been severely challenged over the last few decades. This is especially noticeable in the former socialist contexts exposed to transitional processes and neoliberal forces.

Considering the opposing transformation trajectories of the superblock concept, the paper will follow two cases that demonstrate both trends: the apparent deterioration of the original idea of the Modernist blocks in New Belgrade, Serbia (Block 37) and, following the contemporary reinterpretation of the same concept, the efforts on upgrading the traditional blocks in Darmstadt, Germany (Lichtenberg block). The comparison of these examples will provide an insight into the existing problems, challenges and opportunities associated with the ongoing processes.

In the case of New Belgrade, the threats to the original idea were generated by the introduction of neoliberal ideas, the changed patterns of use, and the specificities of its original spatial features. At the same time, this situation also provided a stage for community engagement and innovative responses leading to reconsideration of the power (im)balance between political, market and social objectives. Highlighting the importance of life quality for both the individuals and the community, the use and the inclusive character of existing public spaces became the focus of the collective action promoting environmental and social values of the Modernist super-block concept. On the other hand, a pioneering initiative in Darmstadt aims to implement the first superblock in the German Federal State of Hesse, clearly following the Barcelona example. It gained a lot of supporters through the Heinerblocks citizens' initiative advocating for the establishment of low-car neighborhoods. Although the authorities in Darmstadt supported the creation of a superblock, the initiative is innovative but also groundbreaking, which generates some implementational challenges. The so-called Lichtenberg block in the central historic residential neighborhood was recently selected as a test area, hoping to serve as an incentive for the dissemination of the concept.

Keywords: superblock, inclusion, power (im)balance, transformation, sustainability

DOING DIVERSITY IN THE CONTEXT OF URBAN RESTRUCTURING PROCESSES (805)

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Urban restructuring processes are commonly taking place in cities throughout the world. They are an answer to the decline of social cohesion in infamous distressed neighbourhoods, especially in western European cities. This lack of social cohesion results in problems such as poverty, unemployment, and deteriorating housing quality. Declining social cohesion and related problems are linked to the concentration of low-income households and ethnic minority groups. Policy makers see the implementation of social mixing policies as an answer to this issue of declining social cohesion. However, both the notion of social cohesion as an unambiguously good thing as well as the idea that social mixing policies contribute to increased social cohesion were debated throughout the past decades. In addition, a clear definition of social cohesion as a central goal of urban restructuring processes is lacking (Volker, 2019). Instead of aiming for community cohesion, these urban restructuring processes might as well mask the focus on other elements such as class, ethnicity or the spatial concentration of recent immigrants (Bricocoli & Cucca, 2016; Fincher et al., 2014). Within this context of urban restructuring, policy practioners fulfil an important role as they are the intermediate level between policy and practice. However, it is not easy for policy practioners to act in this unwell-defined policy context. Urban restructuring processes and social mix policies are targeting specific groups within society. The theoretical lens of doing diversity is useful to approach this complexity encountered by policy practioners (Ahmed & Swan, 2006). By reviewing the literature on social cohesion in urban restructuring processes throughout the past three decades, the aim of this paper is to understand how policy practioners are making policy implementation choices within this context characterised by dilemmas of doing diversity. This will result in an overview of potential rationales for policy practioners when dealing with diversity related dilemmas in urban restructuring processes.

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TOWARDS A BETTER UNDERSTANDING OF PEOPLE'S PERCEPTION OF FAIRNESS THROUGH COMPARING SOCIO-ECONOMIC WITH SPATIAL EXPLANATIONS: A RESIDENTS' SURVEY ON PUBLIC ACCEPTABILITY OF THE LONDON ULEZ (808)

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The growing evidence on the health impact of exposure to air pollution, heightened public concern and stricter environmental legislation make local governments adopt increasingly strict measures to improve urban air quality. A popular instrument is the Low Emission Zone (LEZ), a defined urban area where the most polluting vehicles are no longer welcome. Although several studies have shown a significant (small) reduction in pollution levels after implementation, the policy measure has proven controversial.

The controversy is explained by two dimensions of social justice that can come into conflict when implementing this measure: environmental justice (Walker, 2012) and transport justice (Martens, 2016). Supporters of LEZs often use environmental justice arguments based on the principle that everyone has the right to a healthy environment, including clean air. They think it is a fair “polluter pays” instrument that benefits more deprived communities in particular, because they are more exposed and contribute less to air pollution. Opponents of LEZs often use transport justice arguments based on the principle that everyone has the right to a minimal access to an adequate transport network, because accessibility is essential for social inclusion. They fear an unequal access to different transport options and disproportional financial burdens on disadvantaged socio-economic groups.

This conflict leads to a just sustainability dilemma: what is a “fair” or “just” balance when looking at policy instruments that have positive and negative effects across different domains, touching on collective values and individual aspirations? According to the work of political theorists, universalism should not be prioritised above the local and plural when considering justice and fairness (Schlosberg, 2009) and criteria will differ according to how we value things in a certain place and time (Walzer, 1983). However, we can still learn from local case studies to operationalise these values and develop fair rules.

In this paper the results will be presented of a survey with approximately 1,000 Greater London residents. London is a leading city in implementing LEZs, having introduced an initial central Ultra Low Emission Zone (ULEZ) in 2019, which significantly expanded in autumn 2021 to cover an area of 381 km². Now there are talks underway to expand it further to encompass all of Greater London (1,569 km²). The recent developments and future plans provide an interesting backdrop for a survey on public acceptability and perception of fairness of the instrument. By associating the postcode-based location of responses with individual socio-economic and demographic characteristics collected through the survey, it can be analysed whether socio-economic characteristics (such as education and income), or residential location (determining how one is impacted by the measure) are more important to explain acceptability and perception of fairness. This people-driven perspective can help to develop the right mitigation and support measures, either based on location or socio-economic group. In addition, the results provide valuable input

for academic discussions on just sustainabilities and just transitions and can inspire other cities in adopting fair urban air quality management strategies.

Keywords: environmental justice, transport justice, fairness, public acceptability, just sustainability

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WHO AND WHERE BENEFITS FROM SCHOOL GREENERY? AN ASSESSMENT OF SOCIO-ENVIRONMENTAL DISPARITIES IN SCHOOL GREENERY AMONG CHILDREN UNDER FIXED URBAN MORPHOLOGY (832)

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Schools are places where children spend a substantial amount of time and are a primary source of their daily physical activities. Therefore, the quality of the school's outdoor environment is essential for their health and well-being. Previous studies demonstrated that greenery is one of the essential factors shaping the outdoor environment, which further affects children's health and school performance. Moreover, multiple benefits provide by greenery on the schools' plots, such as air purification, noise mitigation, and reduced temperature, to mention just a few. The greenery, in a view, supports children's stress reduction, improves their concentration and strengthens their relationship with nature. In addition, school greenery supports enhancing socio-environmental justice as the provision of greenery in children's living places and during their home-school routes is often low and unequal.

While the provision of greenery has been studied broadly in the urban context, little attention has been paid to spatial and socio-economic inequalities among children in providing environmental benefits from school greenery. Nevertheless, most recent studies highlighted that socio-economic disparities in the provision of school greenery might occur. This study supplements the existing research gap by assessing school greenery and its environmental benefits and identifying socio-environmental inequalities among children in the provision of greenery. In contrast to previous attempts to assess disparities in the provision of greenery, our study aims at assessing how the benefits from school greenery are distributed among children, taking into account the urban morphological context. We hypothesize that the amount of school greenery and its benefits varies in urban spaces, which further results in disparities in their provision among children.

To achieve our goal, we conducted comprehensive in-site environmental measurements of greenery in the schoolyards. A spatially stratified sample of $N = 54$ schools was drawn randomly from all primary schools in Lodz (Poland). For each schoolyard we took environmental measurements in two locations most frequently used by children – close to the school building entrance and the school's recreational site. Environmental measurement consisted of air temperature and air pollution (PM 2.5 and PM10). In each location, we took panoramic pictures and thermal photos. In addition, we listed the major vegetation structures such as trees, shrubs, grass and quantified their leaf area index. We linked in-site environmental measurements with multiple secondary databases to characterize the school's surroundings from the perspective of urban morphology and to describe school children's socio-economic status. Then, we conducted

spatial data analysis for merged spatially explicit socio-environmental datasets to verify our hypothesis.

We found that school greenery is distributed unevenly among schools and within schoolyards. Furthermore, the amount of greenery and environmental benefits depends on the school's location in the city area and varies according to the spatial features of the school's surroundings. This further informs us about the importance of urban morphology for the quality of the school's outdoor environment. Also, we found socio-economic disparities in school greenery. Our findings support urban planning and design by highlighting the necessity of focusing more profoundly on the amount and structure of greenery around schools.

Keywords: environmental justice, urban greenery, air purification, cooling effect, visibility

IMPACT OF NEIGHBOURHOOD URBAN FORM AND SOCIO-ECONOMIC CHARACTERISTICS ON THE ELDERLY'S PLACE-BASED SOCIAL WELLBEING (833)

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Background

There is a global trend of population ageing, and it is known to have many implications for social policy. However, there is still not a consistent study looking at the impact of neighbourhood urban form and socioeconomic characteristics on elderly people's place-based social well-being. This is important, as it can help improve overall wellbeing. This study is looking at the relation between socioeconomic characteristics and urban form factors of neighbourhood such as density and diversity on elderly people's perceived social wellbeing (ESW).

Methods

This study used a questionnaire to collect information from elderly people in six different neighbourhoods in Isfahan, Iran. Out of the 1200 questionnaires that were distributed, 182 were returned. This study used a quantitative method to collect the data, which means that the questionnaire was collected in a systematic way.

Results

The study looked at how different perceived urban features (like density, landuse-mix, and socioeconomic characteristics in neighbourhoods) affects a senior overall feeling of social wellbeing. Urban planning schemes need to take into account the different needs of different age groups in order to make sure cities continue to be functional and enjoyable for everyone.

Keywords: social wellbeing, elderly, place-based, neighbourhood, urban form

SHADES OF COOPERATION IN DENSIFICATION PROJECTS: CONTEMPORARY URBAN DEVELOPMENT IN ZURICH, SWITZERLAND (872)

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Influenced by the global trend of neoliberalism, planning practice in Switzerland faces various adverse effects like gentrification, social exclusion, and distorted power geometries. Such a shift towards neoliberal planning questions the norm of cooperative planning as traditionally exercised in the Swiss planning context. This is best seen in the example of densification – as a nationally recognised urban planning mechanism – which, by its nature, produces often confronted effects on spaces and people. Using the in-depth qualitative multiple case study of the densification projects in Zurich's district of Altstetten, this contribution elucidates the nature of cooperation in urban planning. In other words, is cooperation perceived as real or only declarative? More precisely, the following will be examined: the main cooperative mechanisms undertaken; major bottlenecks in achieving effective cooperation; the main allies and key opponents; and the ways of identifying compromise. Critical analysis of the contemporary planning practice offers some general directions for tweaking the mainstream planning approach to address spatial complexity.

Keywords: neoliberalism, densification, cooperative planning, Zurich

ASSESSMENT OF URBAN PLANNING AND DESIGN GUIDELINES FOR CREATING CHILD-FRIENDLY ENVIRONMENTS: WHAT CAN WE LEARN FROM CHILDREN? (876)

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The concept of Child Friendly City (CFC), supported by internationally agreed documents such as the United Nations Convention on the Rights of the Child (UNCRC) and Agenda 21, involves a commitment to create places that promote children's health and well-being. Although these documents were ratified by all member states of the UN including Turkey, much remains to be done by governments and researchers to create better environments for children. For example, a review of the literature in Turkey shows that there is only one recently published document aimed at guiding municipalities in creating child-friendly environments in accordance with the binding national and international laws. While such guidelines are certainly necessary and helpful, less is known whether they respond to the problems experienced by children at the local level. To address this gap in the literature, this research asked two major questions: What problems do children define in their neighborhoods? And, to what extent do the existing urban planning and design guidelines which were prepared at the local level for creating child-friendly environments respond to the local problems experienced by children? In order to respond to the first question, an empirical research study was conducted with 9-12-year-old children living in four neighborhoods in Ankara, Turkey. Data were obtained from participatory map-based focus groups (also called participatory mapping) conducted with 234 children. The child participants were asked to define and discuss the problems in their near-home environments and mark the problematic places on the satellite images of their neighborhoods through stickers. Discussions were noted on a map legend, which were then analyzed by using a thematic content analysis. To respond to the second question, the existing urban planning and design guideline aimed at guiding the local governments in Turkey for creating child-friendly environments was content analyzed. Thereafter, the results from this analysis were compared with the response to the former question to discuss the possible rooms for improvement if necessary. This study, which takes a child-centered approach, adds to the scant body of knowledge about how children perceive particular environmental features during their everyday travel (or experiences). Our findings demonstrate the limitations of local CFC standards and provide new insights to drive specific neighborhood-level indices aimed at making cities more child-friendly. These results provide evidence-base to inform practitioners and policy-makers on how to apply more effective behavior change interventions that encourage active behavior among children.

Keywords: child-friendly planning guidelines, children's everyday experiences, participatory mapping, built environment, neighborhood

Funding:

This work was supported by the British Academy (BA) Humanities and Social Sciences Tackling Global Challenges Programme 2020, grant number TGC\200140. The authors thank all children

and parents who took part in this study and Derya Karadak, Ezgi Turgut and Berk Gok for assisting with data collection.

COMPARING METHODS FOR NEIGHBORHOOD MAPPING WITH CHILDREN IN THE CONTEXT OF TÜRKİYE (879)

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It is important to involve children in urban research to serve the overarching purpose of urban planning to produce inclusive policies and create livable urban spaces for all. Based on this purpose, this study focuses on how to gather data about children's experiences, perceptions, and views on their everyday places outside home. While previous studies suggest that children can express themselves better by drawing rather than answering survey questions, this study investigates and discusses the effects of using screen-based tools (here, geographic information systems, GIS) and auxiliary visuals to develop child surveys aiming to map children's neighborhood experiences. The aim of the study is to compare the results of the survey methods with writing and drawing activity, and the proposed visually assisted and GIS-based mapping methods. Furthermore, we argue that these methods may have different results between the neighborhoods with high and low education levels, used as a proxy for income levels in Türkiye. Within the scope of the study, a total of 210 children between the ages of 9 and 12 living in Aliağa and Menemen, two districts of İzmir metropolitan area in Türkiye, are included. Permission was obtained from the Ministry of National Education to conduct both methods face-to-face with children at the classrooms of local schools. Focused on children's activities and daily places at their home and school environments, survey questions at both methods ask children about their neighborhood (physical, natural, and people) attributes and the places they like, dislike, and spend more time outside home and school. The first method requires children to write or draw their responses. In the second method, an example of participatory and qualitative GIS approaches, children were asked to map their neighborhood environments by using the visually supported tools of GIS environment with the guidance of the researchers. None of the children were even slightly familiar with GIS. They needed to give their responses by selecting and then locating a feature among provided visuals (on paper and on screen) at the appropriate places on their neighborhood's street map at GIS. The results of the study present a comparison of these two methods in terms of the number of items used by children in neighborhood mapping and the variety of materials on their self-expression. The discussions ask which methods motivate young children to talk "more" about physical, natural, and social elements in their daily life and, thus, help the researchers to grasp these children's spatial orientations in and perception of their neighborhood. Also, in the case of two neighborhoods, the study discusses the results about how children's self-expression and mapping skills may relate to the income levels of their household and neighborhood. The results of the study have potentials to contribute to the planning practices exploring about how to include children in plan making processes and how children express the physical, natural, and social qualities of their daily spaces.

Keywords: Children, neighborhoods, mapping, methods for child studies, geographic information systems

CITIES WE CHOOSE TO LIVE IN: WORKING WITH UKRAINIAN REFUGEES IN SPAIN AND SWEDEN (885)

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This study explores the perspectives and needs of Ukrainian refugees in Spain and Sweden, in the context of urban sustainability and liveability, with the aim of contributing to the development of more inclusive and sustainable urban planning and design practices. The study uses the Max-Neef framework for quality-of-life measurement, combining qualitative and quantitative methods to gather data from refugees. Participatory workshops, including visual methods and alternative methods, are used to help refugees communicate their perspectives and experiences. The study aims to inform policy and decision-making in the context of urban reconstruction in Ukraine and migration in the EU, and to ensure that the urban reconstruction in Ukraine and reintegration process in the EU are inclusive and meets the needs of all affected populations.

Keywords: Max-Neef, post-conflict reconstruction, urban reintegration, migration

COLLABORATIVE HOUSING AND YOUTH IN HOSTILE CONTEXTS: THEORETICAL AND METHODOLOGICAL INSIGHTS FROM MULTI-CASE CO-RESEARCH IN ITALY AND THE USA (905)

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In recent years, studies in Collaborative Housing have spread in the face of emerging problems and challenges (Lang, Carriou & Czischke 2020). The so-called affordability crisis, the poor condition of the 20th-century housing stock, and the vulnerability of residents to COVID-19 fostered a renewed interest in housing both in Europe and the United States. Despite the growing interest in collaborative housing, scholars argue that collaborative housing is not the solution to structural deficiencies and housing problems, especially considering the dramatic effects of the welfare retreat in recent decades.

However, collaboration and support in the housing sector have helped to foster innovation and inclusion, developing emergency solutions in case of extreme events (pandemics, winter storms, heat waves, etc.) or widespread building problems (condemnation, obsolescence, etc.). Unfortunately, the potential of collaborative efforts and networks in youth housing is underestimated, due to a lack of comprehensive analysis and quantification of aggregate effects. As a result, collaborative housing is predominantly and erroneously associated with intentional communities and purposeful and affluent social groups.

This contribution starts from the long-term work I am conducting with collaborative housing communities (Fromm, 1991, 2012) and residents in Italy (since the summer of 2019) and the United States (since fall 2022), within different housing models (public housing, temporary housing, cooperative housing, and private housing). This work aims to complement analyses based on housing models with analysis of self-produced services and everyday actions in different housing models. It elaborates on the heuristic role of Collaborative Housing networks and practices with a specific focus on young people, with research tools and processes that are relational, multiscalar, and action-oriented.

Drawing on insurgent planning (Miraftab, 2009, 2017) and more recently theorized pluriversal planning scholarship (Vasudevan & Novoa, 2022), I have co-developed alternative narratives of networks in Collaborative Housing under the name 'alternative housing stories'. The work has been conducted at the intersection of collaborative housing studies and insurgent and pluriversal planning scholarship, to analyze the hidden political role of networks in public, cooperative, temporary, and private housing; how they make the daily life of young people possible in hostile contexts; the effects for young people in different contexts of vulnerability and exclusion. The tool development process, e.g. archives, co-research tools, protocols, etc., shows that empirical investigation and methodological research for inclusion in research processes are inseparable components in the study of networks in Collaborative Housing.

This work contributes to the self-production and self-management of housing and their interaction with institutional policies; housing policy and planning, and neighborhood design. The ultimate goal of this ongoing long-term work is to develop a specific framework for analyzing the

multiscalar potential of collaborative housing for young people beyond so-called intentional communities.

The Italian case studies (in East Naples) developed in the European project “PuSH - Public Space in European Social Housing 2019-2022”, HERA Joint Research Programme European Public Space, Culture and Integration. The extension of the PuSH project in a non-European context has been developed in the USA thanks to the Fulbright Visiting Scholar Program 2022-2023.

Keywords: Housing; Collaborative Housing; Pluriversal Planning; Insurgent Planning; Youth engagement

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HIGHLIGHTING HEALTH AND WELLBEING DIMENSIONS WITHIN PUBLIC ENGAGEMENT PRACTICES: LEARNING FROM A CASE STUDY IN BRISTOL, UK (908)

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INTRO: It is important to engage communities in urban planning to create inclusive places that respond to the health needs of local people. However, the remit and scope of engagement activities to generate more inclusive, healthier and democratic forms of design and development can be problematic and unclear, for both local authorities and the public. In 2013, the transfer of public health services to local government in the UK, in theory, created greater opportunities to involve the public in people-centred principles of healthy design to influence planning and development in local neighbourhoods. However, the urban development process is complex, characterised by a plurality of actors, decisions and competing priorities that affect the integration of health and wellbeing. Beyond the identification of local needs and wants, decision-making capacity for the public may be limited and considered a tick box exercise. At the same time, austerity measures across local governments have resulted in restrictions in available funding, limiting resources for engagement activities.

We seek to explore perceptions of early-stage public involvement in urban regeneration and examine how concepts of health and wellbeing can be integrated into public participation strategies. We also aim to understand how to support effective public engagement, to meet the needs of local government and the public and create healthier places.

METHODS: We focus on the case of a local government regeneration project, in Bristol, UK, where a spatial regeneration framework is being developed. This has involved early-stage public engagement activities to guide a set of development principles for future development in a deprived area of the city. A Researcher-in-Residence worked part-time (Oct 2020 – present) and supported a co-design approach for this project.

We synthesised findings from multiple research methods: descriptive statistics from a survey of people living near to the regeneration area (n=108); content analysis of semi-structured interviews with local government engagement stakeholders (n=10); thematic analysis of focus groups with members of the public who attended local government engagement activities (n=4) and researcher observations, including by the Researcher-in-Residence, at public engagement workshops and during local government planning meetings.

RESULTS: We identified a range of beliefs which demonstrate potential areas of conflict about public opinion and healthy places e.g. evidence showing health outcomes associated with car dominant environments may not align with public aspirations and concerns about car parking and ease of driving. Also, there can be tensions between what the public want and what both the public and council may be able to influence for urban development. In the case study, early engagement led to the creation of community-led 'place principles', which relate to the wider determinants of health, however, this was not explicit. We identified multiple barriers to enacting full public agency and limitations in local government resourcing resulted in ambitious

engagement activities not always materialising, despite its value being recognised. Perceived purposes of engagement were found to vary across stakeholders, holding potential long-term implications for community expectations and outcomes of the process. The survey identified differing satisfaction with the way views were collected for members of the public, which highlighted differences across demographic groups, e.g. men reported preferring in-person events, whereas women preferred remote methods. Qualitative findings identified multiple approaches to engagement being important, with recommendations of avoiding over-reliance on online methods to improve inclusivity

CONC: Aspirations for meaningful engagement can be challenging in resource constrained local government settings and necessary compromises may impact the effectiveness of engagement activities. However, a greater clarity about the purpose of engagement could help to prioritise activities and lead to greater sensitivity for public engagement. Our findings are relevant for concepts of 'whole- of-society' approaches to achieving healthy communities.

URBAN PERIPHERALITY: KEY ASPECTS AND MECHANISMS (912)

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Cities have always been very contrasting areas - people of very different social status have lived together in densely populated areas. Even today, processes of gentrification, marginalisation or exclusion are still taking place in cities. It is also increasingly pointed out that the phenomenon of peripherality (so far referred to the regional scale) is also becoming apparent at the urban scale (De Falco et al. 2019). On the other hand, it is also pointed out that there are clear interdependencies between aspects of peripherality that, by driving each other, worsen the situation of the peripheral area (Copus et al. 2017).

This article presents research to show the interdependencies between the different aspects of peripherality. Economic (e.g. accessibility to services, real estate supply), geographical (remoteness from the centre, transport accessibility), social (local identity) and spatial (public spaces, green areas) issues were taken into account. Using a simulation model, an overall picture of urban peripherality was created on the example of selected districts of Wrocław (Poland). It was examined which aspects of peripherality are crucial and have the greatest impact on the others. The extent to which urban peripherality differs from local peripherality (which factors are common to both scales and which are different) was also analysed. The research leads to a consideration of the differences between urban peripherality and related concepts (marginalisation or polarisation) and an attempt to answer the question of whether it is legitimate to distinguish the term urban peripherality from other phenomena.

Keywords: urban peripherality, marginalisation, polarisation

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URBANISMO CON ÑEQ'E: LA PAZ—A CITY SHAPED BY STRENGTH AND PERSEVERANCE (956)

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Con ñeq'e means with strength. Con is Spanish for with and *ñeq'e* means strength in Quechua, an indigenous language of the South American Andes region. *Con ñeq'e* is a colloquial term often used in Bolivia to emphatically describe attributes of strength, passion, or endurance in someone or something. For instance, 'es una persona con ñeq'e' means she is a person of great perseverance. The term inspired the slogan 'La Paz con fuerza | La Paz con ñeq'e' introduced by the municipal government of La Paz 2015–2021 as a slogan for municipal programmes and action plans. The slogan stands for a city that is shaped by the strength and perseverance of its multicultural community. Nothing could better describe the peculiar urban dynamics of the La Paz metropolitan area, which are driven by constant social struggles and political conflicts (Fig. 1). Thus, the term *con ñeq'e* is used as a lens to explore the emergence of Bolivia's largest and most culturally diverse urban agglomeration based on qualitative fieldwork in 2020 and 2022 and a review of journalistic and academic literature. However, as motivating as the term may be, the intention is not to romanticise bottom-up struggle or to criticise top-down regulation. The intention is to understand the emergence of urban agglomerations as the result of complex social interactions driven by politically conflicting interests. The term is understood as a political narrative and, as such, enjoyed carefully.



Fig. 1: The metropolitan area of La Paz: topographically challenging, climatically harsh and politically contested. Source: Author (2020)

Since the 1950s, Bolivia has experienced a sharp increase in its urban population, leading to the metropolisation of its three major cities. Moreover, since the early 2000s, Bolivia has undergone a political transition from a neoliberal to a socialist-oriented national government led by indigenous people emerging from grassroots movements. This has further encouraged urbanisation. The process of change stands for socially inclusive, economically diverse, and environmentally sensitive development, and has been negotiated mainly in La Paz between different levels of government, local and national associations and syndicates, and civil society. However, the negotiations have not always been peaceful as there are politically conflicting interests between the actors and approaches involved. Furthermore, corruption and institutional instability have obstructed the operationalisation of well-intentioned programmes and action plans. And there are still high levels of poverty and inadequate housing and infrastructure conditions endured in peripheral areas. Against this background, informality, driven by everyday practices but guided by government narratives, is identified as the main mode of urbanisation in La Paz. Thus, the notion of *urbanismo con ñeq'e* is conceptualised. The concept refers to a mode of urbanisation based on the resolution of conflicts between social groups, the inclusion of different perspectives, and on joint bottom-up and top-down action. The main argument of this contribution is that informal metropolitan governance arrangements in La Paz have been more responsive to such dynamics, whereas the increasingly autocratic national approach made it rather difficult to achieve the goals outlined above. This contribution, therefore, reflects on the success and failures of Bolivia's political transition in the context of urbanisation and outlines key fields for future action.

Keywords: urbanisation, informality, multiculturalism, bottom-up, top-down

TRACING SOCIAL RIGHTS ON THE GROUND: INSTITUTING PRACTICES IN THE PERIPHERY OF NAPLES (1986)

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Solidarity, equality, inclusion, cohesion, justice: these principles are written in the Italian Constitution, which is the supreme law of the legal system, despite the fact that it often remains unimplemented. To go beyond the declaration of fine words and operationalize these values, a reflection is proposed based on a threefold relationship between collective spaces, grassroots practices, and constitutionally recognized social rights. This relationship is explored through welfare infrastructure, and community practices in the case-study of Ponticelli, a district in the periphery of Naples.

Urban standards are established through a regulatory device (1444/68 Decree) that in Italy has made it mandatory to build collective spaces such as schools and parks, health and sports facilities, theaters, and civic centers. They are a pillar of 20th-century Italian urban planning, the most important spatial legacy of welfare policies in Italy (Secchi, 2005), a simple, sometimes ineffective welfare redistribution tool. This device, which has been the bearer of universalist issues, now clashes with the contemporary need for a pluralism of much broader, complex, and fluid uses and needs, with ever-changing and increasingly fragmented demands. The collective infrastructure of standards on the one hand has represented "a minimum of urban civilization" (Astengo, 1967), which put a brake on post-World War II building speculation; but on the other hand, today it represents a tool that manifests territorial inequalities in Italy. These spaces are intended as a guaranteed tool, and a claiming rights instrument when community practices that go on stage in these places are able to foster social and spatial emancipation.

Starting from urban standards, one can thus read the contemporary collective city, which marks the transition from the 'city for people' to 'the city with people'. Talking about collective spaces as social rights shifts the attention away from property rights – proper to the urban planning field – and focuses on the spatialization of other rights, such as education, culture, sports, health, and ecology. If the neoliberal attitude exacerbates and mythologizes individual and private intervention as solving collective problems and needs, social rights re-propose and actualize a reflection on the collective realm, considered a more important dimension, higher than the sum of the individual parts.

The case-study of Ponticelli represents an anomaly for a southern city, and for the city of Naples specifically, due to both the presence and absence of collective facilities: in this periphery there are abundant welfare spaces, but abandoned and vandalized, not perceived as spaces that improve the quality of life.

A frame of Constitutional interpretation allows for the emancipation of those spaces understood as multi-semantic tanks of rights, through that "new anthropology" (Rodotà, 2012) of grassroots movements that determine a phenomenology of the unexpected. The exploration of the caring community actions that reactivate spaces and functions has made it possible to create a 'catalog of minimal narratives' that shed light on minimal spaces and practices, and are identified as those

"instituting practices" mentioned by the philosopher Roberto Esposito (2021), allowing forms of emancipation not only of people and uses, but in general for urbanism itself in complex contexts of turbulence, questioning and seeking new tools for local governance.

The Constitutional paradigm is shown as a still relevant framework for a universal value system in the pluralization of contemporary and future needs, and territory is the main field for highlighting socio-spatial (in)justice.^[L]^[SEP] Recovering some principles of democracy such as dignity and solidarity (before equality and freedom) shows a *modus operandi* that, through reflection on urban standards, can invest the approach to the urban planning field: defining and guaranteeing principles instead of regulating categories and functions.

Keywords: collective welfare infrastructure, grassroots practices, social rights

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REASSEMBLING THE CITY: THE ROLE OF THE GREEN ROUTE IN SOCIO-URBAN INCLUSION (996)

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In a rapidly urbanizing world, the individual's experience and relation to the urban environment have changed. According to previous research, urban development in residential districts threatens the stability of the community that is known for stronger neighboring relations and social commitment to the place. Trekanten, a vulnerable neighborhood known for its rate of criminality in the city of Holstebro in Denmark has since 2015 undergoing urban regeneration to comply with the ghetto law which aims to eradicate ghettos and parallel societies in Denmark by 2030. However, very differently from previous urban interventions, the neighborhood is currently undergoing urban development that will promote its accessibility and inclusion via a network of cycling paths and recreational rooms. The research starts by investigating the ghetto law and both the history and development of parallel societies in Denmark. Then it presents the case: the neighborhood Trekanten in the city of Holstebro with a socio-urban contextualization. The theoretical framework will at a third point draw correlations between urban regeneration, criminality, mobility and social cohesion for social sustainability. The analysis will cover the current urban development known for the green route taking place in the neighborhood, subject of the research to identify first the social impacts that urban development and renovation activities have on the residents, second the effect of promoting accessibility and opening up the area via recreational rooms on the criminality. The paper investigates the extent to which urban interventions while perturbing the local identity, can enhance the image of the neighborhood for a better integration and socio-urban inclusion. Methodologically, the research will be essentially ethnographic with daily observations and informal interviews with both stakeholders and the locals. The results are expected to reveal lack of communication and potential issues in the planning process. The hope with this research is to introduce more socially sustainable approaches to urban development projects on a neighborhood level.

Keywords: The green route, Trekanten, criminality, mobility, inclusion

TRENDS AND GAPS IN HOUSING INEQUALITY RESEARCH: A BIBLIOMETRIC AND CONTENT ANALYSIS (1014)

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Housing inequality, in which the wealthy own more and better homes than the rest of society, is a global concern. Due to the Covid-19 pandemic, this problem has been brought into sharp relief and has drawn the attention of researchers. However, the research gap in housing inequality is an issue that has not yet been addressed. The present article seeks to analyze the current status of the research and specify the main gaps and the directions for future research in housing inequality. Accordingly, a total of 113 papers published in the last 38 years, available on the Scopus were analyzed. A bibliometric analysis was employed to indicate the research trend and most influential articles. Furthermore, to identify the research gaps and recommend the direction for future studies, a content analysis was used. The findings indicate that gaps in the area of housing inequalities remain particularly in relation to vulnerable population, case studies, the micro- and meso-scales, neighbourhood characteristics and policies.

Keywords: Housing inequality, COVID-19, Bibliometric analysis, Content analysis

TRACK 10: INTERDISCIPLINARY PLANNING EDUCATION: CHALLENGES, DIALOGUES, INNOVATIONS

VALUES IN PLANNING: LEARNING FROM ORTHODOX AND HETERODOX EPISTEMOLOGIES (76)

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Among the values conceptualising and measuring planning processes and outcomes, two play a prominent role in liberal democracies: legal and economic. However, the current conceptions and approaches framing these values show limits, as they contribute to increase inequalities and transgress planetary boundaries. Responding to such social and environmental threats questions how these values they may be re-framed to better take social and environmental aspects into consideration. To do so, the paper suggests reconsidering use and relational values within planning processes through the lens of the three modern components of property: *usus*, *fructus*, and *abusus*. Drawing upon philosophical re-conceptualisations of these components, the paper sketches the epistemological and institutional implications of these re-conceptualisations and discusses their insertion into planning theory and practice. It concludes outlining obtuse and visionary scenarios of institutional change and thus aims at fostering discussion and experimentation in (trans)disciplinary perspectives.

Keywords: planning, epistemology, institutions

BECOMING A PLANNER IN A COLONISED COUNTRY (100)

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Planning in Australia takes place on land that has been occupied and cared for by Aboriginal and Torres Strait Island people for at least 60,00 years. Planning in contemporary Australia is, therefore, a product *inter alia* of various settler-colonial assumptions and ideologies. There is growing scholarship about planning's historical role in processes of colonisation, and considerable debate about its capacity now to recognise and properly incorporate Indigenous concerns and principles into planning policy and practice, including whether and how planning might play a de-colonising role in planning in and for contemporary Australia.

The Planning Institute of Australia (PIA) accredits university degree programs that prepare students for subsequent careers as professional planners and in 2017 it introduced a revised policy on what is expected of accredited programs and those who graduate from them. This review introduced a strengthened requirement for programs to introduce planning students to Indigenous cultures, knowledge systems and world views; to increase their competency in engaging appropriately with Aboriginal and Torres Strait Island people in planning; and understanding relevant legislation such as the Native Title Act, 1993.

This paper reviews the progress made over the last five years in implementing these new requirements and presents a selection of new courses etc developed by Australian universities as part of their accredited planning programs. It also explores some of the theoretical and political debates about post-colonial and decolonising practices in planning and cognate fields of practice and considers the challenges faced by programs in trying to reflect these in what they teach planning students. The paper draws on my experience as a planning educator and as a member of the National Education Committee of PIA (which reviewed and revised the accreditation policy in 2017), and as chair of the Education Sub-Committee of the Queensland Division of PIA.

The paper/presentation concludes with a set of broader reflections on the ways in which university-based professional education programs combine the development of practical skills and competencies with the exploration and application of moral and political principles.

Keywords: Planning education, Colonisation, Decolonisation, Indigenous Australia

THE BEAUTY OF TRANSITION: AESTHETICS AND BEAUTY IN STRATEGIC URBAN TRANSITION. INSIGHTS FROM AN EXPERIMENT IN PLANNING EDUCATION (128)

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The challenge of transition to a new more resilient and sustainable urban age is huge (Habitat, 2020). Collectively, in our modern lifestyle as 'urbanites' (Brenner and Schmid, 2015) we consume environmental services to an extent which matches several planets in scale (United Nations, 2014). In diverse institutional settings, these challenges are constantly debated and looked at, with a view to possible solutions. Most of this, still, stays on the level of paper, which often 'is cheap'. But how do we generate the urgently needed actions and changes? Especially, how do we evoke the individual energy and commitment as the basis of a potential system change? Is it necessary to 'make big plans', as the then (in)famous quote by Daniel Burnham demands, or are 'beautiful' plans, projects, ideas also an option to steer the blood of citizens?

This paper explores some possible dimensions of beauty and aesthetics in spatial planning, the latter is used here in a comprehensive manner, from urban design to town and country planning and beyond. The paper will (1) provide some conceptual reflections on issues, which we consider relevant when discussing beauty and aesthetics in planning, or rather, which we want to suggest as relevant in the context of planning, building amongst others on the work by Tursić (2019). We will (2) intermittently, use examples from a master course organised at the Radboud University, Nijmegen. With that, we present some results from a teaching experiment under two perspectives, first a collection of examples which can be discussed from a perspective of beauty and aesthetics, second a set of dimensions which young future professionals consider relevant in the context of transition strategies. (3) Further, some conceptual aspects will be added. The paper will propose actions towards 'beautiful' plans and planning, certainly aware about a possible critique against 'beautification' of cities, and how to reflect this in teaching. This part will be done also in view of the New European Bauhaus (see also Ban et al., 2021) launched by the European Commission at the beginning of 2021: "The New European Bauhaus is a creative and interdisciplinary initiative, convening a space of encounter to design future ways of living, situated at the crossroads between art, culture, social inclusion, science and technology. *It brings the Green Deal to our living places and calls for a collective effort to imagine and build a future that is sustainable, inclusive and beautiful for our minds and for our souls.*" (https://europa.eu/new-european-bauhaus/index_en). What does this entail in terms of educating coming generations of planning professionals?

Keywords: aesthetics, transition, New European Bauhaus, education, theory and concepts

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REAL-LIFE CASE STUDIES: CRITICAL PEDAGOGY THROUGH EBD EDUCATION (137)

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This paper evaluates the experience of using ‘real-life’ case studies in design education delivered in collaboration between academic researchers, professionals and students taking part in three online intensive training workshops during the first year of the Knowledge Alliance for Evidence-Based Urban Practices (KAEBUP) project. One of the project’s pathways to evidence-based urban practice is “innovating learning and teaching through knowledge exchange and skills development working on real-life urban projects”. The aim is to address the need in architectural education of strengthening learners’ experience of the professional world by working on real-life urban projects, enabling students and researchers to address contemporary issues on authentic case studies characterized by industry, political and marketing demands. The workshops were designed to cover multiple, interrelated disciplines aiming towards sustainable design through research, specifically urban morphology, spatial analytical techniques, environmental design and urbanistic analysis. The case study was common to all workshops: the city of Riyadh and, specifically, the MoMRA Headquarters building designed by Schiattarella Associati. The designers’ approach was the development of a contextually and culturally sensitive style reflecting the local culture whilst critically producing and supporting the formation of a contemporary Saudi style. The designers were involved in the workshops as presenters of the case study, as research subjects and as commentators on the students’ work; the production of research findings and critical assessment of the sustainability and social value of the design by the students was the objective of the workshops beyond their educational aims. The outcome was the development of a critical investigation into the development, questioning planning, social and environmental practices through the analysis of the design and its context at different scales (from the spatial layout of the building and the accessibility of the site to its relationship to the urban tissue, block structure and town plan of Riyadh).

Keywords: critical pedagogy, evidence-based design, architectural education, case studies

“... IN MY POINT OF VIEW, PLANNERS ARE SOCIETY'S HUMANISERS” (POSTGRADUATE STUDENT). FINDINGS FROM AN EXTENSIVE STUDY OF STUDENT MOTIVATION FOR ENTERING PLANNING EDUCATION IN THE UK/IRELAND (157)

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Research, debate and curriculum development in planning education tackles issues of preparing planners for professional work in spatial development, whilst encouraging students to think creatively and critically in their emerging practice to shape more equitable and sustainable futures. However, a key and often overlooked question in this is what the rationale and motivations are of the students entering planning education.

This paper draws on findings from a large-scale research project into the motivations of students entering planning education in the UK/Ireland's accredited schools between 2019 and 2022. It presents findings from a three-year longitudinal survey of new entry students (postgraduate and undergraduate, 'home'(UK) and international) which showcase the motivations and aspirations held by this cohort.

The findings demonstrate that, overwhelmingly, students come to planning courses with a desire to 'make the world a better' place: holding environmental and social justice goals above those of individual career fulfilment or money making, and within this the overwhelming focus on achieving positive environmental change was striking. They have strong ideas about planning values ranging from values associated with professional practice such as integrity and honesty, to ideas around the public interest and the promotion of balanced and sustainable development. Many respondents also chose to study planning because of an evident enthusiasm for the subject, particularly its inter-disciplinary nature, and for its role in improving places, most notably cities and urban areas. The majority of respondents also described their levels of 'optimism' about the ability of planning to make a difference as 'somewhat optimistic', suggesting a degree of circumspection about the contribution that planning can and will make.

However, an understanding of *how* their education will enable this is not explored, rather there is an assumption that this is axiomatically part of becoming a planner. This in itself is interesting, as it indicates that 'the idea of planning' (Campbell, 2012), poorly and partially articulated as it may be, is still something present and aspired to in the thinking of students beginning planning courses. The data from this research provides an important contribution to understanding planning education in itself, and also serves as a starting point for debate about the relationship between education and practice.

Keywords: students, motivation, education, longitudinal data

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INTERNATIONAL IN-PERSON LEARNING: TEN YEARS OF THE TRANS-ATLANTIC SEMINAR (TAS) (186)

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Urban and regional planning students in Germany as well as in the United States mostly focus in their planning education on learning how to conduct spatial planning in the relevant national context. An inter- and transdisciplinary approach is implemented through projects and seminars where students work together as a group, with the participation of practitioners and planning based on concrete practical examples. In-person and practice-oriented collaboration are essential success factors in planning education programs that allow the necessary conceptual skills (cf. Krüger, 2021 and Hengstermann, Hartmann, 2021) to be developed in students. How can this also work well in international exchange?

The Trans-Atlantic Seminar brings together students in Urban and Regional Planning at the University of Kaiserslautern, Germany, and Virginia Commonwealth University, Richmond, USA. This usually means that they jointly work together intensively for one week each in Germany and America. During these two weeks they also discuss with various urban and regional stakeholders depending on the topic and go together on field trips. Previously, they do subject-related preparation and subsequently, they prepare the results in reports and plans.

This collaborative international in-person learning seems to be beneficial to students. The goal of this article is not to prove that this approach is better than others, but to show that it produces benefits that other approaches of international exchanges in learning not produce, and that these benefits are well worth the effort that this approach requires.

A series of questions will be answered by an analysis of the TAS of the last ten years:

- What are the perceived benefits of collaborative, international, in-person seminars as learning tools for students of urban and regional planning?
- What are the costs in time and resources of creating and engaging in these initiatives?
- How does in-person collaboration compare with other forms of international collaboration, such as Collaborative Online International Learning?
- What are the lessons learned from the experience of organizing and conducting collaborative in-person learning experiences over the course of ten years?
- On balance, how strong is the case for pursuing this approach to student learning in urban and regional planning?
- How should we expect these learning outcomes to affect the student's later practice as a professional?

Various topics were the subject of the seminars. The results are diverse and show the possibilities of this approach. A systematic reflection with former participants of TAS will show the benefits of this approach. It will no scientific claim be made to the generalizability of this case, but to show

the benefits and challenges that other urban and regional planning programs may face if they carry out collaborative international in-person learning.

From 10 years of experience, the following assessment can be made: especially the intense discussions with various stakeholders in the U.S. and in Germany and the subsequent personal exchange about it also in informal contexts between the students leads to a deeper understanding of both their own cultural environment (e.g. politically, planning policy) and legal framework and that of the respective other country. This leads to a deeper professional reflection of both planning contexts and may lead to innovative approaches in changing times.

Keywords: international planning education, collaborative teaching and learning, in-person learning

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LEAVING THE LECTURE HALL BEHIND: THE POTENTIAL OF PODCASTS IN PLANNING EDUCATION FOR STUDENTS AND PRACTITIONERS (215)

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Planning educators continuously seek to improve their pedagogies and liaise them with societal developments, for which digital technologies provide potential. Examples include online courses and degrees, GIS-based applications, and ‘flipped classrooms’. Digital technologies could improve teacher-student interactions, offer new methods of inquiry, and complement new epistemologies to existing curricula. In this article, we focus on podcasting as a promising digital technology for planning education. Podcasts are audio files that can be played on-demand via streaming services like Spotify and Apple Music. Podcasts are hailed for their flexibility and accessibility, because they can be listened to on-demand. Simultaneously, they can provide depth, since podcasts typically target dedicated audiences. The costs of developing are relatively low. Accordingly, they can cover both mainstream and niche topics, giving voice to established and less-heard voices.

Although a first systematic overview on podcasting for planning education has recently been published (Moore, 2022), there is hardly any empirical work published on the usefulness of podcasting for planning education. We still know relatively little of the value of podcasts in academic planning education for students, professionals and lecturers. Consequently, this article aims to provide first-hand insights and reflections on the development of the *Onder Planologen* podcast created for undergraduate students enrolled in introduction courses to spatial planning at the University of Amsterdam and Utrecht University (The Netherlands). *Onder Planologen* (‘Among planners’) is a chat show with prominent planning practitioners and researchers discussing in each episode one specific theme of Dutch planning history. The podcast is publicly available on Spotify and other streaming devices. Our research question is: *How is the podcast ‘Onder Planologen’ used as a learning device by planning students, practitioners and lecturers?* The insights derived from students, professionals and lecturers will help to refine the potential of podcasting in planning education.

Our case study demonstrates that podcasts can become valuable, supplementary materials in planning courses. In line with existing theories, the podcast can empower students to access educational content not bound to time and place. It also gives voice to less-heard voices in planning curricula (diversification of knowledge) and creates new lecturer-student interactions. This full potential can only be reached when the podcast is fully integrated in the course design. Our case study also reveals an additional and unexpected potential for educational podcasting: the podcast can be utilized as a means to connect students with the professional field and *vice versa*. To illustrate, our freely available podcast was picked up by practitioners who saw it as a way to deepen their knowledge as well as to contribute to the ‘discipline building’ of the field of planning.

The major implication for planning education is that *podcasting brings practice to the classroom, but equally brings the classroom to practice*. Learning becomes less confined to traditional lecture

halls, which requires us to reconsider the role of the student. Students become critical agents assessing independently different course materials. Moreover, the podcast functioned as learning devices for practitioners, such as civil servants, consultants, and architects. As such, the lecturer can potentially kill two birds with one stone. While the potential number of learners could grow, staging a podcast in such an open way might lead to new challenges for lecturers. They are becoming public figures, operating outside the safe environment of university campuses. Podcasting thus leads to different relationships with the professional field. We argue that this is a relevant potential for a practice-oriented field like planning and that this potential could be utilized by universities to demonstrate its value to society.

Keywords: planning education; podcast; technology; planning practice

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CAPACITY BUILDING FOR RESILIENT URBAN DEVELOPMENT IN SOUTH EAST ASIA: JOINT TRAINING COURSES AND A DUAL PHD (231)

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Beyond planning education in BSc. and MSc. programs, this contribution addresses post-graduate planning related PhD-programs and professional trainings. Focus is on resilient urban development and disaster risk management (DRM) in Southeast Asia in a European-Asian cooperation.

Disasters in cities can arise from natural processes, geophysical hazards and from human actions. Understanding disaster risks is important not only for disaster risk reduction but also for effective adaptation strategies (Winsemius, et al., 2016). Since 2015, it became obvious to ensure that DRM and climate change resilience are coherent, as highlighted in The Sendai Framework of Disaster Risk Reduction, the Paris Agreement's Adaptation Goal, the SDGs and the New Urban Agenda (Sandholz et al., 2020). Urban and regional planning can play an important role in climate change adaptation and DRM by proactively reduce risk (ADB 2016; Greiving 2016).

As poorly managed urbanisation in the Global South is a major driver of disaster risk (Hossain et al. 2017) and poor people are often severely affected by disasters (UNISDR 2017), it is imperative to introduce risk-informed planning (UN 2017) in informal settlements where residents face limited risk-reducing infrastructure and limited capacity to cope (IPCC 2014, Revi et al. 2014).

However, urban risk governance and risk-based land use planning to reduce vulnerability and enhance adaptive capacity for resilience is not well-established in planning. The German BMBF funded research project LIRLAP (Linking disaster risk governance and land-use planning: the case of informal settlements in hazard prone areas, 2018-2025) thus attempts to integrate sustainable spatial development and risk management in Manila, Bangkok and Hanoi. LIRLAP is co-producing climate-adapted upgrading and retreat approaches to elevate livelihoods and integrating resilience planning via capacity building.

Hypothesis is that resilient upgrading of informal settlements can only be successful and sustainable, if it is accompanied by capacity building at professional and academic levels. Therefore, LIRLAP conducts training programmes for local practitioners and decision-makers and establish a Dual PhD programme on urban planning and resilience, urban governance, and DRM in a cooperation of planning faculties at TU Dortmund and the University of the Philippines.

The first online course on the Integration of Community Resilience in Urban Shelter Planning and Management was a 30 hours training course in early 2022 with 46 participants from government agencies in the Philippines, Thailand, and Vietnam, Local Government Units; Settler Groups; Housing Practitioners; NGOs, Community Leaders; and Academia. The second 20 hours training course in autumn 2022 was on Smart Urban Governance for Settlements Development Planning and Management with 57 participants from the same groups. Further training courses will be on Resilient Financing Shelter Planning and Monitoring and Evaluation. A transfer of the training course to Thailand and Vietnam is in preparation, with the need for translation and adjustments to the different government systems.

The joint PhD is a fundamental step in academic cooperation. Target group are qualified candidates from the Philippines, Thailand, Vietnam, and the ASEAN region on topics of LIRLAP. The structure and courses of the dual PhD programme have been jointly designed. The program was approved by TU Dortmund University and UP SURP after two years of discussions to examine legal issues in December 2022 as a Cotutelle program. Two PhD candidates have already started the programme at SURP, supervised from both universities. First PhD seminars have been conducted online in 2022.

The presentation will reflect on challenges and pre-condition to design and conduct professional training courses and international Dual PhD programs, discusses pros and cons, different academic and administrative cultures, success factors and obstacles and will display options for similar programs.

Keywords: resilient urban development, disaster risk management, Dual PhD, training courses, international academic cooperation

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DEVELOPING REFLECTIVE PRACTITIONERS IN PARTNERSHIP WITH PRACTICE (263)

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In 2019/20 several English planning schools established a new degree pathway the Chartered Town Planning Degree Apprenticeship. In contrast to more conventional part-time study routes - this scheme has universities and employers form a partnership and support apprentices to work and study at the same time. This pathway leads to a professionally accredited Planning degree and Chartership of the national professional body (Royal Town Planning Institute, aka RTPI) in 3-4 years.

Academic study contributes in part to the development of the diverse set of required knowledge, skills and attitude competencies; however, this has to be complemented by additional training and learning selected by the apprentice outside of their normal job role. Further to academic assessment, progress of each apprentice in acquiring competencies is checked in quarterly tripartite meetings at which the employer, apprentice and academic review the reflective learning logs.

This structure differs significantly from other approaches of part-time degree programmes or work-based learning opportunities which have made a renaissance in planning education over the last 3 decades in the form of short-term placements, internships or entire year-in-practice, as core, option or extracurricular degree element. Research has revealed the added value of work-based, experiential learning for budding planners complementing academic theoretical knowledge acquisition (Brooks et al 2002; Freestone et al 2006; Rosier 1999; Baldwin and Rosier 2017) although some have also warned of the pitfalls of work-based learning in HE (Friedmann, 1996).

In this paper we critically evaluate the experiences of this new pathway from the viewpoint of employers and apprentices to deepen understanding of how the programme of learning contributes to professional and personal development of apprentices, how skills are developed, and how planning practice profits and contributes to learning. The research seeks to deepen understanding of the relationship between reflective learning, knowledge generation and skill development and whether taking a step back improves apprentices practice and enhances their professional agency (Trede and Jackson, 2021). Early empirical results indicate amongst other things that the requirement for apprentices to log their learning continuously fosters a sustained reflection between theoretical concepts and day-to-day practice which comes close to emulating Schoen's (1983) Reflective Practitioner model of professionalism.

Keywords: Planning Education, work-integrated learning, university-practice partnership, reflection, cooperative education

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A REVIEW ON THE TEACHER-STUDENT CO-CREATION IN PLANNING EDUCATION IN THE CONTEXT OF COMMUNITY ENGAGEMENT (286)

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In recent years, teachers in higher education have taken different approaches in terms of curriculum arrangement and initiated pedagogical experiments for more active and integrated learning. How students, at the center of the experiment, responded to these new types of teacher-student interaction has generated academic attention. One particular approach, Co-creation of learning, is based on the process of collaborative learning with students as partners in teaching. Student-as-partner concept argues that student participation can improve student learning and teaching performance. Student-centered learning and collaborative learning theory can strengthen the experience and ability of students in the education process and try to create an interdisciplinary educational environment and a new type of classroom interaction.

This co-creation approach to learning is not new in planning education. Through studios, this pedagogy has been a tradition in spatial planning. In the past few decades, the participatory trend and community engagement through service learning or other project-based learning have expanded the horizon of co-creation from teachers and students to professionals and stakeholders in society. Students majoring in planning also become essential participants while entering the community and play a crucial co-creation role in collaboration. Past research has also shown that the co-creation of learning methods between teachers and students can benefit teachers, students, and related participants. How this co-creation process in planning education different from higher education in general in the community context is the central question of this research.

This paper aims to gain an overall research trend in this subject to compare the goals, theoretical concepts, research methodologies, and pedagogies associated with teacher-student co-creation between higher education and planning education in the context of community engagement. Through document analysis, this research uses EBSCO and Web of Science, and other search engines to select relevant literature and create literature maps. Suggestions for future research directions in planning education are proposed to understand the teacher-student interactions in the community-related context. In particular, we want to emphasize the potential gap in student perspective during this learning process.

Keywords: Planning Education, Higher Education, Student As Partner, Co-creation Of Learning, Collaborative Learning, Literature Review, Community Engagement

COMPARING ONLINE AND FACE-TO-FACE BASIC DESIGN EDUCATION (313)

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The first year of city and regional planning discipline education is based on one-on-one and face-to-face basic design education and is implemented generally through planning studios I-II. Different assignments are given to freshmen to form their urban design knowledge and perspectives and to develop their design thinking, creative thinking, and design judgments. Due to the COVID-19 pandemic, online education became obligatory in many universities. Education methodologies, materials, and course contents had to be amended when deemed necessary. The aims and objectives of design courses were fulfilled through different digitalized learning systems and programs. Parallel to these, the quality of the design products differed.

Accordingly, this study aims to compare students' basic design outputs of 2020-2021 online and 2022-2023 face-to-face spring term planning studios of the Süleyman Demirel University, Isparta Turkey. Different studies, which are both designed during the online courses are compared to face-to-face courses in this study to assess the impacts of online education on students' learning and creativity. It is exploratory research implementing a comparative analysis of final term assignments.

The research presented that there is an increase in the design quality of assignments in face-to-face education in terms of enhancing course requirements, the interactive character of the courses, and changing implementation processes. The level of interaction with students and their efforts to learn and to participate in the course also accelerated. The outcomes of this research can lead lecturers and academic staff enrolled in the first-year planning studios in the development of course curricula, methodologies, and preparation and delivery of design education.

Keywords: City planning, Basic Design education, online education, face-to-face education, COVID-19

DOES URBAN DESIGN STILL MATTER IN PLANNING EDUCATION IN POLAND? (346)

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The variety of approaches and models adopted in spatial planning education reflects its inevitably interdisciplinary nature. In Poland, the planning model and, respectively, the planning education have radically changed during three passing decades. After 1989, Polish planning originally rooted in architectural and urbanism tradition on one hand and (from 1945) in economic central planning on the other hand to be adapted to the new reality, when Poland underwent drastic socioeconomic shift towards democracy and market-oriented economy.

In 1991 two Polish universities launched first master courses in planning (also known as spatial management or urban economics, pl. *gospodarka przestrzenna*). One of them represented the scientific field of geography (Adam Mickiewicz University in Poznań) and the other – architecture within the engineering and technical sciences (Wrocław University of Science and Technology). Over the last three decades, planning education has gained a substantial increase of interest and is currently offered by many environmental, human, economic, and technical universities across the country. It had been dispersed between various disciplines; however, in 2018, spatial planning has been recognised for the first time as an autonomous scientific discipline classified with social and economic geography within the social sciences domain. This caused some turbulences in nongeography-oriented universities that offer the master education in planning. It strongly accentuated the separation of planning from design-oriented concepts and at the same time raised the question of whether understanding of spatial composition, beauty, or harmony, as well as possessing urban design skills, should still remain a part of planning education in Poland. In this paper, the authors investigate this question.

The foundation and starting point for this will be our recent research in which we detected the position of urban design across various disciplines taught in Polish universities (see: Belof and Kryczka, 2021). For current research, we will deepen the picture of the planning education formula, paying special attention to urban design and other three-dimensional aspects of space perception and creation. We will present the quantitative results (subjects taught, hours of teaching, equalisation of the academic staff, etc.) but also the results based on a survey conducted among faculties members engaged in planning education in Poland. Our research will provide new insights into the current understanding of planning education in Poland, with a special focus on the role of design-oriented subjects, in particular urban design. Our study aims to open the discussion on planning education in a broader European context.

Keywords: planning education, spatial planning, planning system, urban design, academic education in planning

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TRANSDISCIPLINARY AND STUDENT COMMUNITY PARTICIPATION IN URBAN PLANNING EDUCATION: A CHALLENGE-BASED APPROACH INCORPORATING CRITICAL PEDAGOGIES (423)

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In this presentation, we will share our experiences designing a challenge-based learning (CBL) educational module and exercise in the context of urban planning education. The focus of the module and exercise, which lasted for two months, was on investigating the urban quality of life and community well-being of international students. Informed by critical pedagogies approaches, we aimed to foster transdisciplinary collaboration with the active participation of the community of university students (the students themselves and their associations) during an urban planning elective. We will discuss how we incorporated the participation of student associations, the underlying rationale, and how we supported students reflecting on their processes and positionality. We also will show the results of the first round of the CBL approach conducted during Covid-19 restrictions and will present some of our lessons learned.

The focus of the CBL on quality of life and well-being emerged from the results of our university's well-being survey. Similar to other international studies, it found that students were experiencing feelings of loneliness and were concerned -among other aspects- about housing and study places available on campus. At the same time, in the urban planning elective course, our students learned that to improve urban quality of life conditions and livability, we need to rely on the expertise of different disciplines and be empathic with, and incorporate, community knowledge. Therefore, in the design of the CBL module and exercise, we incorporated a critical pedagogy approach and aimed for collaborative forms of learning, including collaboration between groups. The latter was an alternative approach to the original CBL focus on competition as one of the central values. The main postulate of our teaching team was that actionable and transformative solutions could only emerge from empathic, collaborative, and critical forms of teaching and learning. We put these as our central pedagogical values.

One of the key instruments we designed was a reflective diary to promote critical thinking. Each student carried a diary to reflect on their group work, observations, challenges, strategies, methods, and discipline contributions as part of understanding their positionality. Guided by mentoring principles from liberation pedagogy, we encouraged and recognised the first-hand experiences of our students. Students are a part of the community that is the focus of the study, they are residents of the city where the research is taking place, and they also experience challenges across different domains of life. We recognised and encouraged personal narratives. We prompted and guided students with socially just critical questions to promote critical thinking and empathy. We asked, for example, "Who is most affected by this problem?", "Where is this problem more severe? "Who holds the power to change this quality of life condition?", "Who

might be accountable for this?" or "What might happen if...?" "What experiences and whose voices are being included in the exercise?"

Working with representatives from the student community helped the students and the UT community at large to better understand the level of satisfaction of international students with certain aspects of life, particularly housing. By utilising critical pedagogy approaches, we transformed the challenge into a more actionable and socially relevant tool. The presentation will also provide insights into how the assignment enhanced reflective practices and collaboration and how it can inform future urban planning courses.

Keywords: planning education, transdisciplinary, critical pedagogies, challenge-based learning, quality of life, reflective thinking.

LITERARY TOURISM AND BEYOND: THE CASE OF SARMEDE (432)

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Rural areas cover approximately 80% of the European Union's (EU) territory and host almost 30% of its population (European Commission, 2021b). Rural areas are very diverse, and in real-life, the territory cannot easily be divided into the urban-rural dichotomy. However, rural areas can be identified as sparsely populated territories, and many of these have been facing everyday challenges, like depopulation, ageing of the population, as well as erosion or lack of services and infrastructures for decades.

At the political level, the European Commission Long-term vision for the EU's rural areas sees rural areas stronger, connected, resilient and prosperous by 2040 and recognises, even if not prominently, that cultural heritage can be an innovative asset for revitalisation (European Commission 2021a).

This research explores if literary and more in general artistic heritage, and literary and artistic tourism, as subcategories of cultural tourism, can trigger rural regeneration.

Indeed, literature can generate tourism (Benigni, 2018). More in general, the places associated with writers¹, artists, musicians, or famous people (places where they lived or which relate to their works), can become attractive touristic destinations when 'visitors attach meaning and it is the value of this meaning to them which draws them there' (Herbert, 1996). This potential is well understood in France, where the Ministry of Culture published a guide that gathers, in one book, several houses and studios of notorious people spread across the country (Ministère de la culture - France, 2021). Following the French example, the Italian region of Emilia-Romagna promulgated a law in 2022 that aims to preserve and promote the houses and studios of its illustrious people. Several publications exist that connect places with books, authors, or artists (e.g. Sutherland, 2018; Baxter, 2019; Russell, 2019; Touring Club italiano, 2021) and a limited number of these destinations are located in rural areas².

To understand how a literary and artistic place can lead to rural regeneration, a case study has been selected: Sarmede.

Sarmede, the fairytale village, is a small municipality of around 3000 inhabitants in the Veneto region (Italy). The village is internationally known for its artistic and literary value as it runs since 1983 the International Children's Illustration Exhibition, today known as *Fantasy images (Immagini della Fantasia)*. This village is fascinating as its development strategy started from the presence of an illustrious inhabitant: Štěpán Zavřel. Thanks to the presence of the Czech painter, fresco creator, illustrator, and writer (dead in 1999) and a small group of people who believed in his art and saw the potential of children's literature³, Sarmede is known not only for the yearly exhibition which celebrates 40 years but also for its International Illustration School and the *Theatre fairs (Fiere del teatro)* a festival of artists that perform in the streets of the village. In November 2022, a survey was launched to understand who are the tourists that visit Sarmede. Preliminary results show that almost 60% of the people that went to Sarmede were motivated primarily to visit the *Immagini della Fantasia* exhibition. 57% of the respondents agreed with the

fact that they went to Sarmede to know more about Štěpán Zavřel or to connect with the atmosphere he experienced, demonstrating that his presence is still an attractive element, and finally, 95% of the visitors declared that they have been to Sarmede more than three times, suggesting that this village's cultural offer continues to innovate

Keywords: literary tourism, artistic tourism, rural areas, Sarmede

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GOVERNING ECONOMIC VALUE? RETHINKING THE ROLE AND TOOLS OF PLANNERS WITHIN TODAY'S FINANCIALIZED CITIES (460)

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Planning systems can instrumentally shape development and investment within built urban environments. Yet planning policy often struggles to instrumentally intervene in today's increasingly financialized cities. Undoubtedly, real estate investors and developers see the city as a space to extract, securitize and multiply economic value through future rents and growing asset prices. Yet, within these increasingly financialised urban environments, planning literature frequently depicts the role of planners as those who work to capture, redistribute, and even economic values within narrow geographies, where the role of governing the financial flows and real estate investor within cities is often left to macro-financial regulators. In response to these traditional roles, this article suggests that planning literature should aim less toward redistributing economic values across narrow geographies – but rather, carefully work to establish frameworks that help planners monitor capital flows and actor landscapes in relationship to the needs and demands of citizens within geographies that planners are tasked to regulate. In doing so, planners might be better equipped to intervene within the unrelenting extraction of economic value from the cities that they are tasked with governing.

Ultimately, after establishing the position of planners vis-à-vis macro-financial regulators who govern real estate investment and development, the article charts value capture interventions within contemporary planning literature. Within this approach, contemporary value capture interventions aim to stimulate public good by evening or redistributing excess value from real estate development or investment across specific geographies. But at the same time, value capture interventions generally have narrow geographical footprints, endure based on conditions at development, and treat real estate actors as bad-faith actors within the context of city-building. In response to these limits, the article urges planning scholars to systematically develop frameworks to help planners establish interventions that respond to local capital flow and actor landscapes. Within this approach, planners are first tasked with charting capital flows and mapping actor landscapes, and, in consultation with local values, needs, and demands, planners can design empirically sensitive interventions that respond to local capital flows and actor landscapes.

Within this approach, interventions are contextual and interact with empirically verifiable capital flows and actor landscapes that configure the cities that planners are tasked with governing. Moreover, by approaching the built urban environment from the point of capital flows and actor landscapes, we can more systematic interrogate underlying just normative frames that are widespread within contemporary planning literature. Here, it is increasingly possible to imagine future interventions that rely less on principles of redistributive justice, as opposed to normative frames such as sustainability or risk, that property market actors also prioritize within their decision-making. And ultimately, within this understanding of cities, value capture interventions

morph into a particular response in a pluralistic toolkit of planning interventions that can respond to different capital-actor arrangements that we find within our cities.

Keywords: value capture, real estate, investment, financialisation, justice

PEDAGOGIES FOR INTERDISCIPLINARY AND INTEGRATIVE PLANNING EDUCATION THROUGH METABOLIC AND CIRCULAR-CITY APPROACHES (465)

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The metabolic or flows-based approach provides a highly interdisciplinary lens to analyze, envision and plan the city. Material, water, waste, energy, and people's flows intersect all the elements, functions, and activities in the urban space and can inform the development of more sustainable and circular cities. Based on these premises, it becomes necessary to study how planning education can better incorporate metabolic approaches and how these approaches can promote multidisciplinary learning with a special emphasis on the development of integrative urban knowledge and soft skills needed to deal with complex urban challenges. This research question was investigated through a blended, intensive, and challenge-based course (Circu City Summer School 2022) and was answered by combining different research methods: (1) pre and post-course surveys to let the students evaluate the potential of different types of learning activities (lectures, seminars, hands-on work, etc.) and to self-evaluate their knowledge and soft skills before and after the course; (2) teachers' observations during the course; and (3) teachers' evaluation of a pre and post course exercise and of the outcomes produced by the students. Teachers' observations and evaluations were based on a set of rubrics, that specifically described different levels for the studied parameters (interdisciplinary and integrative knowledge, and soft skills). The course was attended by 25 students from five European universities with different backgrounds (planning and architecture, chemistry, environmental sciences, engineering, economics, and geography). The teachers also displayed a similar international and multidisciplinary background and conducted their activity either as online lecturers or mentors or as onsite lecturers and tutors. The course structure included a preliminary online phase in which the students worked in monothematic groups and made an analysis and strategic proposals for the selected site (Muide-Meulestede) and the assigned topic. In the onsite phase, the monothematic groups were merged, and the students worked in highly multidisciplinary groups. During this second phase, the students developed highly integrative visions and proposals for the same site. These proposals explored the circular city concept and tried to maximize the levels of circularity for each metabolic flow and the positive synergies between them. Through the conducted pedagogical study, the course provided valuable data about the potential that different learning methods might have in interdisciplinary and integrative planning education, how the gain of knowledge for different topics took place in the course, and which soft skills were further developed. In addition, potential correlations between learning methods, gains of knowledge, and development of soft skills were revealed, and the possible influence of the students' background was investigated. Preliminary results reveal the importance that case-based, problem-based, or challenge-based education might have to signify the learning process and connect theory and practice. In this regard, the inclusion of crosscutting frameworks and concepts such as 'urban circularity', 'urban metabolism', and 'interdisciplinary planning and codesign' proves to be essential to let students explore the limits of their disciplinary knowledge

and find connections with other disciplines. Interestingly, all types of teaching methods were found useful as long as they were able to respond to the heterogeneous composition of the class and catch the interest of the participants. The gain of knowledge took place mainly in the intersections between knowledge, as was expected from an introductory and interdisciplinary course like the one organized in the Circu-City summer school. Finally, the development of soft skills was limited by the short duration of the course but revealed the importance that exposure to other ways of thinking and working might have in the students. Overall, the results are expected to offer new insights and evidence to teachers for the design and implementation of intensive, blended, and interdisciplinary planning courses.

Keywords: urban planning, circular city, planning pedagogy, urban metabolism, blended and intensive education, integrative urban planning, interdisciplinary education

WHAT DOES IT MEAN TO BE A 'TRANSFORMATIVE AGENT'? A REFLECTION ON MULTIPLE DIMENSIONS OF PARTICIPATION IN TRANSFORMATIVE RESEARCH IN MEDIUM-SIZED CITIES IN GERMANY (486)

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We live in an era full of fundamental change processes effecting every area of life. Planners as well as researchers are challenged to better understand, contribute to and even shape transformation processes on all levels of scale. Instead of keeping and advancing knowledge in their respective domain, it is essential that both set-up and improve cooperation and coproduction to better face extensive transformation processes. Transformative research puts the researcher in the field on eye-level with a bunch of partners from very different domains to not only observe and understand, but to also initiate and give impulses in a field of practice (Förster, 2022).

With regards to regional, national, or even global socio-ecological transformation perspectives much attention is paid both on large cities and their agglomerations and on rural areas with their small towns. In contrast, academic and planning discourse draw less appreciation on the challenges, roles, and competencies of medium-sized cities as partners for these transformation strategies. Around one third of Germany's population lives in 624 medium-sized cities of 20.000 up to 100.000 inhabitants (Adam et al., 2019): a ratio that is not represented in urban research, although especially smaller municipalities are highly affected by global challenges and risks. A lack of personal and financial resources as well as fewer compensation-possibilities make it more difficult for these cities to reach a sufficient level of urban resilience.

In view of this gap of attention and knowledge the Robert Bosch Stiftung initiated a graduate school on small medium-sized cities in Germany. In 2020, a team of six professors and 12 PhD students from three universities (RWTH Aachen University, University of Potsdam, University of Stuttgart) set up the transformative graduate school *Medium-Sized Cities as Co-Participation Cities*. A network of 40 medium-sized cities was founded to foster the exchange of knowledge and mutual learning on transformative strategies. Ranging from design disciplines such as architecture and landscape architecture to urban and regional planning and social and administrative sciences, each of the PhD candidates follows a specific disciplinary focus, but also benefits from the interdisciplinary exchange and complementary perspectives within the research group. The school follows a transformative research approach and shares the normative goal to support communities towards a socio-ecologic transformation. Consequently, the PhD students involve themselves in the cities as 'agents' and use different established as well as newly developed participative methods that bridge research and practice (Graduiertenkolleg MaM, 2022).

The paper attempts the evaluation of two years of graduate school action (2021-2022). More specifically, the aim is to evaluate the format of the transdisciplinary research group and its transformative research approach in the context of the socio-ecologic transformation on the scale of medium-sized cities. For this purpose, the developed transformative research processes of the

graduated students – each of them including an individual mix – will be reviewed and compared along the different participatory methods, changing perspectives of the researchers and the levels of impact of the approaches in the respective medium-sized cities. This paper will present a cross-comparative reflection on the transformative research approaches and processes within the graduate school and thus shape and improve the understanding of the concept ‘participation for transformation’.

Keywords: transformative research design, multi-perspectivity of participation, medium-sized cities, socio-ecological transformation, doctoral training between academia and practice

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A TEMPORARY UNIVERSITY AS OPEN(ING) LEARNING PROCESS FOR REGIONAL TRANSFORMATION (536)

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By 2030, the lignite coal phase-out should be completed in Europe's largest lignite mining region according to German law (Deutscher Bundestag 2020). Therefore, the three opencast mines of the Rhenish lignite mining area will be left to ongoing structural change. This fallow land must be returned to the region and its citizens in a fair way and by meeting future challenges of sustainable and resilient social, ecological and economic development (Matern *et al.* 2022).

Planners, administrators and the owner, the energy producer RWE, are faced with a highly complex task. The existing plan envisages flooding, like in many other lignite mining regions in the past. Although this design produces a strong landscape and recreational imagery, this approach reduces the highly complex problem in an insufficient way. How can the upcoming profound structural change be shaped despite deep seated conflicts between different parties both within and outside the region? And how can new learning formats contribute to reducing tensions between social, political, and economic expectations and bridge the gap between knowledge, goals and action?

Researchers from RWTH Aachen University – an institution of education and research within the region – have founded the transformation platform REVIERa to create a forum around the lignite phase-out and to link up knowledge and activities, both inside the University and with regional partners and residents (Förster *et al.* 2022). In summer 2022 REVIERa set-up a cooperation with Neuland Hambach, that is an intermunicipal planning and development association around the open mine pit Hambach. During a creative workshop in summer 2022 that involved a broad variety of regional stakeholders, the idea of a temporary university as an open learning format for transformation was born.

This idea is now being implemented. In June 2023, the Temporary University Hambach (TUH) will host more than 50 activities within 9 days in the vacant village Morschenich next to the mine. The TUH is not a usual academic institution, but it questions the concept of the university itself (Gilliard 2020). Just like the region under transformation, its bodies and institutions are challenged to transform themselves and their cooperation and governance patterns.

The paper will present and discuss the co-creation process of the TUH and its expected effects in the region. The programme will be set-up by a broad range of different initiatives, organizations, and institutions from the region, who are supposed to be participants and contributors at the same time. The TUH wants to be an honest broker for the stakeholders from the educational landscape, researchers and economic players, artists and creatives, the local population, and students from different backgrounds. These different groups have shared but also conflicting perspectives and interests. Despite the great importance of substantial issues such as energy, mobility, or landscape, it has become more and more apparent, that regional transformation must be shaped hand in hand with social transformation (Scoones *et al.* 2020).

The TUH aims to create a social space for dialogue and comprehension, “transmute” misunderstandings and network in a playful manner by involving arts and culture. In addition to lectures, presentations and workshops, “softer” formats of moderation, mediation and interaction will be arranged that allow for the encounters and exchange between specialist, contextual and everyday knowledge bearers (Mezirow 2018). The TUH is supposed to support the transformation of the region by combining “researching”, “shaping” and “enabling” in close interrelation (Letmathe *et al.* forthcoming). However, the TUH will not be able to fulfil all accumulated expectations and need for open exchange within one week. Rather, the temporary format opens further perspectives on how to shape a learning and tangible region under transformation in the coming years.

Keywords: lignite mining region, structural change, transformative learning, third mission of universities

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STORYTELLING IN PLANNING EDUCATION: EXPLORING THE RELATIONSHIP BETWEEN PLANNING AND SYSTEMIC RACISM THROUGH ORAL HISTORY (663)

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Oral history cannot only provide new information (in the sense of ‘facts’ or ‘data’), but it also brings to the fore different socio-spatial positions, identities and (power) relations that are negotiated through stories (Trofanenko, 2017). Stories may provide planners with deeper insights into local situations, reflect on their own (personal or professional) positionality and raise awareness for voices that often remain unheard (Sandercock, 2003). It can therefore be an important education method for planning students.

This contribution reflects on the embodied experience of doing oral history in the sense of storytelling (Hydén, 2013) and its value for teaching urban planners, community planners and future architects. Based on the participation in a summer course on “Race, Gentrification and Redevelopment” at the Future Histories Lab at the University of California Berkeley, by Lynne Horiuchi (Ph.D., Art History, Modern Architecture and Urbanism) this contribution reflects on the pedagogical value of oral history for collaboratively educating urban planners.

The main goal of the course was to reverse the normative development planning process and its power relations and to teach students about systemic racism. By introducing students to a deep understanding of historical racism in architecture and the built environment through an experiential approach, the course aimed to refocus their thinking about their relationship and subjectivity to communities of color. The course aimed to provide students with a clear understanding of what it means to create a development project within a minority community.

Following a brief description of the context, this contribution focuses on the use and potential of oral history relationally between students and participants in urban planning but also as embodied practice involving socio-spatial positions, identity and power. In this process, oral history was not only a method of elicitation, but also a tool for the collaborative production of stories as embodied knowledge. Hence, because oral history is also a social practice, the researcher or student encounters ethical and epistemological contradictions. Self-reflexivity and clarification of the way power, trust and bodies permeate the situation should therefore be an important part of oral history. This contribution gives insights into the learning effect through the student’s weekly self-reflexive essays.

However, this article also reflects critically on this course and on the fact that racism is still present in university structures and in the urban planning process. This article is therefore not intended to provide a solution, but to be a small part of an ongoing learning process.

Keywords: Education, Oral History, California, Structural Racism, Storytelling

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EDUCATING THE NEXT GENERATION OF PLANNING PROFESSIONALS FOR THE TRANSFORMATION TOWARDS SUSTAINABLE CITIES AND REGIONS: EXPERIENCES, CHALLENGES AND IMPLICATIONS (687)

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The need to transform our cities and regions towards a more sustainable, if not even, carbon-free future is a central endeavour now and the years to come. This transformation has a number of analytical as well as normative implications, as it involves different dimensions (e.g. political, social, technological, and institutional) as well as sectoral issue-areas (Patterson et al., 2017; Schreuder and Horlings, 2022). Similarly, in recent years, the academic discourse in the spatial planning domain has focused on the potentialities and implications of smart technologies, social innovations and changed values as well as assessed experimental forms of governance, for instance. Since spatial planning involves setting up a series of temporal, spatial and institutional connections (Madanipour, 2010), planning professionals are often assigned to holding a key role to manage, if not even to advocate, the desired sustainable, but complex and conflictual, transformation of cities and regions (von Wirth et al., 2019). Yet the concrete agency of planning and planners is dependent on a number of context-related institutional and cultural conditions (Reimer 2013) as well as opportunities for co-creation in a ‘sea of actors’ (Rooij and Frank, 2016). However, one critical question is whether academic educational programmes in spatial planning keep pace with such demands and expectations, namely to convey becoming planning professionals with the essential expertise for their role as agents of change for sustainable transformation (Hölscher and Frantzeskaki, 2021).

In this paper, we shed light on this question by drawing upon results of interviews with programme directors and involved academic teachers representing eight planning schools across Europe and their respective master programmes. The results show how our interviewees reflect upon the potentials and difficulties to integrate aspects of transformative sustainable planning in their respective programmes. In view of preparing the next generation of planning professionals, our results clearly demonstrate that the sought transformation of cities and regions does not only require adjustments in terms of technical knowledge and methodological skills, but also to revisit ethical aspects as well as the handling of normativity and attributed roles of planners.

Keywords: sustainable transformation, planning education, curricula, expertise, agency

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APPROACHING COMPLEX REAL-LIFE PLANNING CHALLENGES THROUGH INTERDISCIPLINARY EDUCATION: THE CASE OF CHALLENGE@POLITO (705)

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To deal with the inherent complexity of real-life planning challenges, it is necessary to abandon the traditional silo mentality that too often characterises the pedagogical environment, in favour of integrated approaches that combine knowledge and methods from different scientific fields, in so doing allowing to unfold, understand and manage multiple phenomena and their interaction through a more holistic perspective (Geppert and Cotella, 2011). As a matter of fact, interdisciplinarity is the essence of planning, which cannot be considered as a core discipline of either social, technical or environmental sciences, but is rooted in all, hence being in the ideal position to build bridges between them. This is even more so if one considers the deep embeddedness of planning theory and education in the practice realm: planners are intrinsically engaged with the real world, as the latter manifests as a consequence of natural and social processes and dynamics. Therefore, planning is required to approach and deal with wicked challenges positioned at the interfaces between disciplines, hence requiring to bring together professionals from different knowledge areas.

However, working across disciplines is not easy, due to epistemological challenges and institutional barriers (Davoudi, 2010). To prepare future planning professionals to collaborate with multiple stakeholders from diverse disciplinary backgrounds, planning education requires learning environments that support students to develop their boundary-crossing skills (Oonk, Gulikers and Mulder, 2016). Spatial planning education degrees have a long tradition of integrating experiential learning opportunities (workshops, studios, internships, etc.) in efforts to facilitate interdisciplinary learning. At the same time, instituting such interdisciplinary approaches involves challenges of different disciplinary expectations, different subject-specific pedagogies and traditions, as well as tendencies of rationalisation and bureaucratisation of higher education (Rooij and Frank, 2016; Staricco and Vitale Brovarone, 2018).

To favour interdisciplinarity, offer innovative learning experiences and promote entrepreneurial education, the Politecnico di Torino launched in 2019 a challenge-based program for students enrolled in different Master's Degree, that goes under the label *Challenge@Polito* (Colombelli *et al.*, 2022). Every year a number of Challenges are proposed either by students or by external partners (private companies, public administrations, etc.). Each of these Challenges lasts a semester and involves around 30 Master students, selected through an open call from all the Master of Science programmers active at Politecnico. The students are grouped into multidisciplinary teams characterised by a large heterogeneity in scientific backgrounds, and required to identify common ground for the interaction of the differential knowledge that they bring to the table, and to generate added value in this process, in so doing approaching the proposed challenge from one or more innovative standpoints.

Aiming at shed light on the potentials of this approach, as well as on its limitations, the paper presents and reflects upon the experience of the authors as coordinators of one

Challenge@Polito titled “Enhanced mobility for sustainable rural tourism” and promoted by the Langhe Monferrato Roero Tourism board. Through the discussion of this case study, the paper aims to contribute to the debate on interdisciplinarity and innovation in teaching, as well as on the specificities and potentialities of challenge-based learning in planning education.

Keywords: interdisciplinarity, challenge-based learning, real-life, planning education, innovation, complexity

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OVERCOMING CHALLENGES IN DELIVERING COMMUNITY ENGAGED LEARNING FOR PLANNING STUDENTS IN THIRD-LEVEL EDUCATION (735)

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Planners need to demonstrate their ability to transform understanding into practical and achievable outcomes... Employers want to see more than credentials; they want to see people demonstrating competence. One's ability to do a job depends on knowledge, skills and qualities.'

(Reeves, 2009)

In striving for excellence in the graduate planners' skillset, a number of competencies need rigorous real-world applications. This paper examines the pedagogical development of an integral element of a planner's skillset; working in meaningful partnership with communities and civic groups. The planning school at University College Cork embeds the practice of Community Engaged Learning (CEL) into students' professional training within the Masters in Planning and Sustainable Development. CEL provides real-world learning experiences *"for students to grapple with the complexities of the world... It is a pedagogy that naturally prompts students to be problem solvers, excellent communicators, reflective practitioners and to understand the processes and efforts involved in reaching consensus when working with members of the public. These hard-earned skills and competencies will stand to graduates as they pursue their professional careers"* (Fitzsimons and Hally, 2021).

Delivering CEL has its challenges: it is time consuming, involves liaison with many stakeholders, and requires preparation and planning. Students can be daunted by the prospect of interacting with stakeholders and engaging in a professional manner with community groups. No longer an abstract exercise in the comfort of the classroom, the student must embody the attributes of a planner in a real-world setting. McCarthy *et al.* (2010) discuss the value of using real-world problems in the classroom:

'The richer the course is in such illustrations, the more likely students are able to identify with the discipline and see themselves as practitioners who will be able to transfer their knowledge and understanding from the university to the world of employment and the community as a whole' (The Teaching- Research Nexus, 2008) (McCarthy *et al.*, 2010, p.7)

Students feel the responsibility of representing the profession, the university and themselves, and this poses a significant but rewarding challenge. Preparation is key: unmarked or formative exercises remove assessment pressure and students can openly discuss realistic scenarios, role-play, undertake preparatory meetings with stakeholders, and carry out site visits/data collection to develop a bias-free deep understanding of the area. It is imperative that the students enter the engagement open-minded.

Real-life projects have long-lasting, impactful outcomes; substantially increasing the quality of student learning. Time constraints and other pressures within third-level education mean that it

is not always practical to expect elaborate organisation of such projects. Having robust, verifiable, and replicable methods to hand can reduce the pressures of applying CEL within university planning programmes. Drawing on case studies where students worked closely with statutory bodies and local representatives, this paper presents evidence of the successful application and recognised impact* of a selection of methods designed to enhance this critical component of planning education. These flexible and effective approaches equip students with a deep appreciation of the importance of the local voice in planning and the need for adaptability in a changing world.

* Highly Commended at the AESOP Excellence in Teaching Awards 2019.

Keywords: Planning Pedagogy, Education, Community Engaged Learning, Civic Engagement, Collaboration

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INTEGRATED PLANNING APPROACHES IN HIGHER EDUCATION: A FIRST OVERVIEW OF INPLANED RESEARCH PROJECT (788)

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The importance of integrated planning approaches for tackling the challenges of climate change and the complex contemporary urban challenges have been highlighted by multiple research outputs (e.g. Anciaes & Jones, 2020; Hull, 2005) and EU/international policy reports - e.g. the topic guide about sustainable urban mobility planning in metropolitan regions (Chinellato & Morfoulaki, 2019), the CIVITAS policy brief (Arnd & Cré, 2018), the UN-Habitat policy brief (UN-Habitat, 2020), and European Commission implementation plan about Climate-Neutral and Smart Cities (European Commission, 2021). However, the presence of integrated approaches in the curriculum of planning-related schools is inadequate, especially under a collaborative, inter-cultural educational structure crucially needed for fulfilling the aspirations and goals of New European Bauhaus, Green New Deal and New Urban Agenda.

In this context, the research project “InPlanEd” aims to develop an innovative educational prototype towards integrated approaches in the planning of inclusive, people-centric and climate-resilient cities. More specifically, InPlanEd utilizes urban planning and urban mobility along with participatory planning and evidence-based planning as an interconnected planning framework crucial for fighting climate change and the contemporary urban challenges. InPlaned is a Higher Education Cooperation Partnership Erasmus+ Project co-funded by the European Union and coordinated by the Department of Geography and Regional Planning at the National Technical University of Athens (NTUA). The project is collaboratively carried out by five organizations in total. Apart from NTUA, the partnership includes the Society and Urban form lab at the University of Cyprus (UCY); commonspace, a collaborative – interdisciplinary planning and design group from Greece; Noumena, a Design & Tech Services from Spain; and AESOP, the European Association of Planning Schools.

The methodological workflow that InPlanEd will follow is comprised of three main stages. First, the research team led by AESOP will develop the competence framework for developing a collaborative international course on integrated planning approaches by exploring the different competency profiles and the corresponding competency gaps found in the diverse field of city planning, as well as by examining the discrepancies between existing academic profiles and the labour market in planning-related disciplines. The second stage refers to the production of didactic material, educational resources, and online educational tools for teaching integrated planning approaches in a collaborative online international format. Based on the findings of the first stage, the research team led by UCY and with the cooperation of NTUA, commonspace and Noumena will produce didactic material and open educational resources regarding urban planning, mobility planning, participatory planning and evidence-based planning as well as an open learning platform (i.e., InPlanEd Open Moodle course) acting as the shared project repository and the virtual learning environment of the InPlanEd virtual exchange. The third and

final stage refers to the development of our educational prototype, meaning a collaborative online international course on integrated approaches in the planning of inclusive, people-centric and climate-resilient cities. In this stage, the research team led by NTUA and with the cooperation of all partners will distil all the work done in the two previous stages to comprehensively development of our course/prototype after two iterations, with a piloting phase and assessment phase in the middle, tailor-made for the varying competency gaps found in the multidisciplinary field of planning.

InPlanEd aims to achieve significant outcomes and, more importantly, a substantial impact not only in terms of higher education but also regarding city planning policy. Since it will provide the much-needed educational framework, resources and pathways for creating an MSc-level collaborative, inter-cultural, online course on integrated planning approaches. Furthermore, its policy impact will be realized because it will highlight the significance of integrated planning approaches to battling climate change for livable and inclusive cities.

Keywords: integrated planning; urban planning; urban mobility planning; participatory planning; evidence-based design and planning

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WALKABOUTS: THE USE OF ADAPTIVE LEARNING MODELS IN URBAN PLANNING UNDERGRADUATE PROGRAMMES ACROSS A SELECT SAMPLE OF EUROPEAN UNIVERSITIES OF APPLIED SCIENCES (825)

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Urban planning education faces unprecedented change. The knowledge base of urban planning is growing, with new specialisations been added every year (Brinkley and Hoch, 2021, p. 81). Entirely new software's are emerging and the use of Artificial Intelligence (AI) as a tool to generate design options is on the rise (Pellegrin, Colnot and Delponte, 2022). The traditional pedagogy of universities is also shifting where teachers become facilitators of knowledge flows rather than originators. Learner needs are increasingly diverse and multi-dimensional. Students enter their first year with; different pre-university education, differentiated prior learning, varying degrees of emotional maturity, a wide spectrum of personality traits, nationalities, personal and cultural backgrounds.

Adaptive learning as a concept is new, to planning education. And may offer an alternative to an changing context. It promises individualised learning pathways taking advantage of blended learning, using both online and offline methods to deliver individualised and group learning experiences. As an answer to self-paced and self-navigational learning the concept has recently been adopted across many applied sciences universities as a way to deal with the shifting landscape of urban planning education. This paper aims to assess the extent to which adaptive learning models have been adopted and implemented across a select sample of applied sciences universities across Europe. Through a series of in-depth interviews this paper explores the extent to which adaptive learning models have been implemented and its qualitative effect on learning-learner experiences.

Keywords: adaptive learning, blending learning, planning education, individualised learning

THE IMPLEMENTATION OF LISP PROGRAMMING LANGUAGE AS AN INNOVATIVE COMPUTATIONAL METHOD TO READ THE HISTORICAL URBAN FABRIC (886)

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It is possible to read the history of each city through urban studies methodology developed in Italy since the 1960s by Muratori and his school based on the hypothesis that the city's history is "written" within its building fabric (Gaube et al., 2018). This paper utilizes urban morphology analytical methods to examine the urban organism's structure and read the stages of urban transformation in Kashan historical city in Iran, starting with the last superimposed layers in the contemporary period and deleting them from the city morphological layers to make progress to the most ancient and initial core of the city. Due to technological improvements, it is possible to examine urban development from a broader perspective, allowing for a fundamentally new approach to reading the historical layers of the urban fabric. The most innovative methodological aspect in the analysis phase may be regarded in the computational stage of interpreting Kashan's urban fabric (Karbalaee Hassani, 2022). The written program in LISP has been produced based on morphological analytical algorithms to be applied in two phases which is a synthesized outcome of the process of developing a technique that may increase the speed of the analysis phase of reading the historical layers of the city at the levels of routes, plots, and the building fabric. The reading phase, which was accelerated by implementing this computational written program, may be divided into two essential stages:

1. Reading the alignments of the morphological layers of the urban fabric
2. Analyzing plots in the urban fabric in terms of regularity and size

Keywords: LISP Programming Language, Urban Morphology, Innovative Computational Method, Kashan

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NEW COMPETENCIES FOR ENGAGED PLANNERS IN THE TERRITORIAL IMPACT OF THE R&D INFRASTRUCTURE: THE CASE OF THE ROME TECHNOPOLE (893)

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Urban and regional planning education is always in front of the contemporary world changes with new issues and challenges. In this framework, the universities' third mission and, more specifically, the public engagement commitment in its deep link with the territory and local development claim to rethink (again and again) the education for future planners (Tasan-Kok, Oranje, 2017).

Moreover, in this current phase, the Next Generation EU and each national implementation offers new challenges connected with the six missions : 1. Digitalisation, innovation, competitiveness, culture and tourism, 2.Green revolution and ecological transition, 3. Infrastructure for sustainable mobility, 4. Education and research, 5. Inclusion and cohesion, 6. Health.

In Italy, the national PNRR-National Recovery and Resilience Plan, within the Education and research mission, financed centres for developing innovation and research such as the Rome Technopole project in which authors are directly involved. In details, this R&D project, shared by public and private universities and EPRs, private stakeholders (business associations industries and enterprises), and local administrations, aims at creating a regional innovation ecosystem in the Lazio Region with a specific focus on three thematic areas: Energy Transition, Digital Transition, and Health & Biopharma.

On one side, Rome Technopole is an empirical example of a R&D structure that aims at the local regional development of the region where it is based. The final goal is transforming Lazio region into a European innovation region (thanks to sustainable development, revitalisation on the industrial sector and smart specialisation) based on the model of the innovation ecosystem in which planners should largely be involved.

On the other side, this innovation centre defines huge opportunities in enhancing links between universities and their external context by connecting local players and stakeholders with a multilevel and long-term perspective. In the paper authors consider that the innovation ecosystem is a concept that has become popular in the last 15 years and widely debated in its conceptual focuses and empirical rigor (Granstrand, Holgersson, 2020) even though competencies and practices on this challenge could be seriously improved.

Moreover, since the Rome Technopole has specific spokes (number 5) oriented to the topic of public engagement, outreach and lifelong learning becomes crucial to produce transformative outcomes and regional impacts. According to this, authors are experiencing that Urban and Regional Planning studies are the fittest to this kind of research and work, but the practitioners capable of working in these fields haven't all the knowledge and expertise needed to master these complex and multileveled actions, mostly within the university public engagement enhanced by the recovery plan's opportunities.

Thus, the paper will present the first outcomes of this project by comparing other similar European infrastructure in order to understand the expertise needed to foster not only business development but also social cohesion and local development, with place-based approaches and with the tools of the university's third mission.

Last but not least, from the comparison with other European and non-European innovation hubs and technopoles (with similar structures and goals), case studies will be analysed to better define the urban and regional planner education structure, in order to better understand, on the field, what kind of knowledge is needed for the planner that aim to work on the relationship between universities and their regional context, but also to define the educational process and the interdisciplinary knowledge needed to be a planner in public engagement practices.

Keywords: Territorial Innovation System, Univerisity Public Engagement, Local Development, Co-production

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PLANNING IN LAGGING TERRITORIES: AN INNOVATIVE METHOD TO DEVELOP PLACE-BASED POLICIES AND INTERVENTIONS (895)

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This paper presents an ongoing planning education experience in the Design Studios of the Integrated Master's Degree in Architecture, University of Coimbra. This experience is part of the project "Back to the countryside or how to reinforce the cohesion of the regional city?" (BACKCOUNTRY). It aims to develop a new methodology to make future architects aware of the territorial imbalances, the regional spatial planning policy programmes, and the role of spatial planning to counteract these imbalances and reinforce territory cohesion.

The growing inequalities between European regions concern researchers, planners and policymakers, fuelled by the EU Territorial Agenda stressing the need to ensure a 'future for all places' (EC 2020). In this context, it is vital to enhance students' competencies to become future planners who understand the theme's complexity and can develop innovative strategies and policies. This action is taking place in Massif of Sicó, a predominantly agroforestry region and a low-density territory that, despite its rich cultural and natural heritage and connection with two middle-sized cities, has not been able to prevent the loss of population and business.

The project's main objective is co-designing interventions in the physical and socio-economic frameworks of a set of villages that make up the Network of Limestone Villages (NLV), aiming to strengthen its attractiveness for tourist visitation and for the installation of activities and services to generate employment and settle people. NLV comprises six villages, each belonging to a different Sicó municipality, and was created in 2019 as a tourism programme by Terras de Sicó (TS), a Local Development Association.

The innovative methodology relies on considering this territory as the 'classroom', i.e. that both the physical space, the people who live in it and the entities that provide employment and those responsible for territorial management are a 'learning space'. Therefore, many activities are immersive experiences to feel and understand the territory actively. To this end, two colloquia, three seminars and nine conferences were organised, both face-to-face and on streaming, focused on sharing knowledge on subjects relevant to the student's research on Sicó massif. In addition to these activities, two one-week study camps were held in the villages of the NLV, allowing direct contact with the spatial context and local communities.

The challenges and learning objectives of BACKCOUNTRY are:

- i) Planning for a new urbanity for the NLV villages, reinforcing the quality of their distinctive characteristics.
- ii) Strength the connection to larger urban centres through Action Plans to prepare these villages for sustainable place-based development.
- iii) Rehabilitating and valuing the vernacular-built heritage and its cultural significance as the differentiating factor of low-density territories.

The intervention proposals are organised through Action Plans, one for each village, proposing the requalification of public space and settling different functional programs through rehabilitating buildings or new buildings.

The direct outcomes of BACKCOUNTRY are academic planning works and architectural projects. However, it is noteworthy that they have a real influence on strengthening the self-esteem of the population in the villages and encouraging them to claim their rights. In addition, the results of BACKCOUNTRY have also influenced some local policy options of the municipalities to strengthen the territorial integration of the villages and are even being taken into account in a new project in the region: the preparation of an application for the inscription of the art of building stone walls in the List of Intangible Cultural Heritage of Humanity.

Keywords: Planning education experience; Territorial Cohesion; lagging territories; Cultural and Natural Heritage; place-based policies

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A METHODOLOGICAL TOOLKIT FOR APPLYING COOPERATIVE STRATEGIC PLANNING IN EDUCATIVE AND APPLICATIVE EXPERIENCES (911)

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Territorial planning is a complex discipline that requires a systemic and interdisciplinary approach capable of combining the quantitative rigour expressed by the regulatory system and the information generated by the hard sciences, with the qualitative perspectives and processes behind the soft sciences. Consequently, the objective analysis carried out through already consolidated practices must be supported by a view of the territory able to systemise stakeholders' perceptions, thus contributing to the communication flow improvement and co-planning process between public administrations and citizens.

The contribution presents a methodology to support and educate territory management and governance mainly aimed at enhancing collaborative planning methods and improving the flow of communication between local and regional authorities, planners and environmental managers, NGOs and citizens. This methodological approach is proposed within the framework of the Erasmus Plus project "Savingscapes: Fostering collaborative knowledge creation and civic engagement in the field of landscape governance" (2020-2022) with the aim of increasing cooperation through the exchange of good practices, the enhancement of collaborative governance and the development of innovative educational methodologies and learning interventions.

In this perspective, the development of a Methodological Toolkit, containing methods and tools to support the construction of collaborative co-planning scenarios, considered as innovative learning processes in higher education, constitutes an efficient solution capable of meeting the needs of interdisciplinarity, cooperation and innovation. The development of co-planning processes through shared scenarios can play an important role in collaborative governance as a procedure that can help practitioners and the public make decisions on how to deal with complex issues and uncertainties of the future, taking into account a wide range of interests and perceptions of actors and stakeholders. More generally, the tools and methods proposed in the Toolkit were selected on the basis of the experience gained during four international Learning Labs involving universities and research institutions with different disciplinary competences, geographically and socially heterogeneous local authorities and the active participation of students of different nationalities and backgrounds.

Keywords: urban planning; collaborative governance; methodological approach; scenario planning

TEACHING A NEW MIXED METHOD IN SPATIAL CASE SELECTION THROUGH DEPOLITICIZE OF PLANNING: CASE STUDY: LESS DEVELOPED REGIONS (945)

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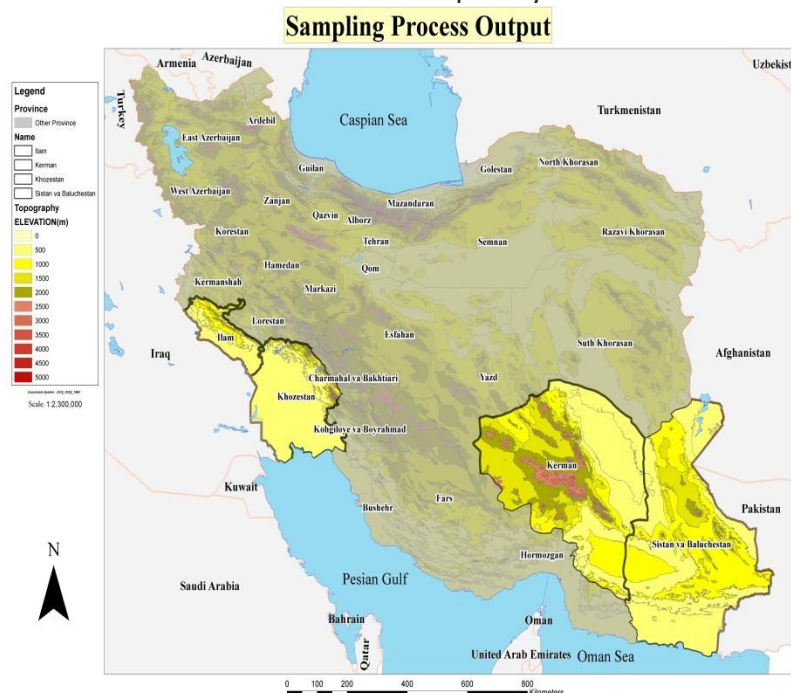
Urban planning is an inherently political activity(Adam, 1994), Therefore, political science approaches are included in it; But this does not always have positive synergistic results of the cooperation of different disciplines in interdisciplinary; Especially in researches that focus on evaluation of plans and in important steps such as sampling, politicians' interventions have a bad effect; Because the quality and correct selection of samples has an undeniable effect on the generalizability of the research. So it should be controlled by the researcher; which is the research area of this article.

There are always tensions over issues such as who (what case), how and under what circumstances is involved (C. White, 1996), because the outcomes of planning processes are always influenced by the interrelationships between a variety of stakeholders and parties (Campbell, 2001). In this regard, continuous efforts have been made to depoliticize development (and what is somehow related to development, such as evaluations and reform policies) in the planning process(Hout, 2008). For example Mössner(2016) explains that how consensus-building appears as a political strategy whose aim is to depoliticize sustainable urban development. On the other hand, due to the fact that less developed regions have a lower score than other regions in the indicators of sustainable development goals, including sustainable urban development (Xu et al. al, 2020) and have often been neglected in the development processes (Moreno Pires et al., 2020). Therefore, in the evaluation of spatial plans, paying attention to these regions has priority; And in that related researches has to choose limited number of cases from less developed regions.

In this research, we will introduce a mixed method in spatial case selection among less developed regions(provinces), while helping to improve the validity and reliability of the research, it will remove the shadow of political interference and bias in sampling. In line with the scope of the research, which is the less developed regions of Iran, sampling has been done. In the first phase, the quantitative technique of cluster analysis has been applied; In this way, according to the basic data, approved by the Council of Ministers, the provinces of Iran are classified into 5 clusters; It is worth mentioning that due to the nature of the clustering technique, the provinces within each cluster are most similar to each other (isotropic) and the least similar to the others(Edwards, 1965). In the second phase, cluster heads were selected as "critical case"; "Critical case" logic has been applied under purposive sampling to make multi-perspective interpretations, liberating, collaborative and deconstructive of published research(Suri, 2011) and prepare positive response to the question that "If it happens there, does it happen elsewhere?"(Etikan et al, 2016); those are suitable spatial cases. These provinces, highlighted in Map1.The sampling results in this research, show that the selected provinces from each cluster promote geographical and spatial contiguity with their previous (less developed) cluster, a matter that was expected to happen due

to the isotropic property of spatial development. A concept that describes similarity in different sciences such as physics, chemistry, economics, and geography; And it can be recognized in urban development and planning and be as a radiant horizon of further research in interdisciplinary planning education field.

In brief since the Depoliticizing of planning is an issue that has been addressed in the current discussions of planning, teaching a Method that can cancel the negative interventions of politicians by relying on scientific evidence can be very useful. Also, introducing of the Isotropic concept in spatial development, which is one of the results of the application of this method, can open the horizon for further interdisciplinary researches in urban planning.



Map1: Spatial proximity of selected samples

Keywords: Interdisciplinary - Depoliticizing planning process- Mix method- Spatial case selection- Less developed regions

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HOW TO BECOME THE INSTRUCTIVE FOOL - SUPERVISING PLANNING STUDENTS AT A PBL UNIVERSITY (948)

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This paper explores how the concept of “the facilitator as a fool” can be used as a guiding principle for supervising planning students at universities adhering to problem-based learning (PBL) pedagogies. PBL ideally is a student driven learning environment, where students take responsibility of own learning and curriculum. At the same time, planning educations want to educate planners with certain competences and knowledge. For this reason, students are paired with a researcher/educator whose job is to supervise students in the chosen topic. This setup potentially creates a dilemma for the supervisor, who is supporting the students in their process of self-directed learning. The supervisor is placed between sticking to the PBL ideal, of student directed learning, and pursuing educational aims by steering students in specific directions that the supervisor know will satisfy the educational requirements. This paper therefore deals with the research question: How to supervise someone who is responsible for their own learning and should essentially be free to choose their own path? Luckily, PBL literature provides different suggestions to deal with this question. The paper explores the nature of planning education and conceptualizes the “facilitator as a fool” supervision approach, as a means to overcome the dilemma of how free-ranging students can be supervised to become good planners. Essentially, the paper argues that planning students should learn how to face wicked problems and therefore students should learn how to become reflective practitioners. For this purpose, the paper proposes that supervisors act as “fools” in their conversations with students, mimicking a reflective practice. This approach also allows students to learn on their own and the supervisor to guide students through the needed learning path. The paper reflects on how this concept fears when applied to a real-life situation of supervising planning students at both Bachelor and Master’s level at Aalborg University in Denmark. In the end, the paper concludes that the applied concept can work to a certain degree, but it also requires a supervisor that is familiar with the theoretical and methodological “landscape” that students need to navigate in, and through, to become professional and reflective planners.

Keywords: reflective learning, liminal tunnels, assemblage, reflective planning

IS IT WORTH TO TEACH CITY MANAGEMENT? (967)

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The number of people living in cities now exceeds half of the world's population and is still growing. This trend is mostly observed in the world's poorest regions and in the poorest parts of cities. People flee from the countryside to the cities mainly in search of work and better living conditions. The inability to control the process of urban growth and its dynamics in the last half-century meant that the development of cities is not and cannot be harmonious. The problems of cities and their inhabitants have been present in economic thought since its beginnings, however, in the mainstream of economics, the discussion of the distribution of resources, work and benefits between the countryside and the city was discussed, and later also the spatial nature of external effects. However, urban economics grew primarily from the theory of location, land use and public sector economics, which explain the mechanisms shaping the urban economy. Knowledge of the economic foundations of the functioning of the city should therefore be a prerequisite for its efficient and effective management.

Polish cities, like other European cities, struggle with many problems. There are no slums in Poland, although there are districts of exclusion and poverty. There are no abandoned city centres and suburbanization is still moderately intense. Poland's advantage is its cultural heritage, which is unique on a global scale, including a polycentric network of historical cities. There is no concept of managing these areas, not only in relation to small complexes, but also UNESCO World Heritage Sites.

At the same time, in subsequent programming documents of the European Union (Rotterdam Acquis, Bristol Accord, Leipzig Charter for sustainable urban development), calls for a holistic and integrated approach to urban development are repeated. Applying such an approach requires appropriately educated staff in both the public and private sectors.

The public sector should be defined in this case as public administration at all levels rather than just municipal authorities. Regardless of the specific competences assigned, an independent employee of the city office or regional authorities should make decisions based on the same criteria as the manager in the company, striving to rationally spend public funds and implement the mission of his organizational unit, i.e. the implementation of the public interest. They should also be able to communicate with a private entrepreneur or a non-governmental organization in order to carry out tasks which, due to limited resources or lack of specific competences, they cannot undertake, and which are in the public interest. They should also be able to plan their activities, going beyond annual plans, as well as be able to integrate their activities with the work of other organizational units and possible private and social partners.

Representatives of the private sector and NGOs also need knowledge related to city management. This knowledge should include, above all, the scope of activities and competences of individual public administration bodies in the field of public service provision, legally permitted forms of cooperation between the public sector and other entities.

The above-mentioned competences are crucial from the point of view of efficient management of the city by the public sector and the participation of the private and social sectors in it as equal and desirable partners. However, it should not be forgotten that efficient management is not only knowledge of the structure, rules and procedures of functioning in an organization, but above all knowledge of the economic mechanisms behind. The difficulty of creating the proposed curriculum lies precisely in the appropriate balance of the theoretical foundations of city management, specialist knowledge and practical skills.

This specific curriculum requires a detailed analysis, especially when the universities already have a substantial didactic offer at both the undergraduate and graduate levels in architecture, public economics and management. It is worth then answering the following questions:

- what determines the degree of diversification of the didactic offer on city management at European universities,
- to whom universities direct their didactic offer - defining the profile of the graduate,
- what kind of study program would be complete and attractive from the perspective of new challenges facing the young generation.

The presentation responds to this and interrelated questions.

Keywords: city management, public administration, education, adaptive learning, blending learning, planning education, individualised learning

THE IMPACT OF COVID-19 PANDEMIC ON PLANNING EDUCATION IN THE UK (1003)

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When Times Higher Education surveyed leaders of prominent global universities in 2018, the 200 respondents – from 45 countries across six continents – were emphatic on one point: online higher education would never match the real thing. Although 63 percent expected established, prestigious universities to be offering full degrees online by 2030, only 24 percent thought that the online versions would be more popular than traditional campus-based degrees. However, the Covid-19 pandemic has put us in an experimental environment to examine the situations that we would not otherwise have experienced. A particular situation has been the urgent transition for previously face-to-face university courses to be taught online. In this vein, teaching some courses have been more challenging than the others. Those courses that need hands on and practice-based teaching would face more challenges than the others. This paper reviews the history of online teaching for planning courses in the UK, investigates the experience of online teaching during this pandemic, and discusses the future of online teaching for planning course in the UK.

Keywords: Planning Education, Distance Learning, Online Teaching, Pedagogy, COVID19 Pandemic

TRACK 11: TURBULENT URBAN FUTURES: UNCERTAINTY AND ADAPTABILITY

DISTRIBUTION, CAUSES AND GOVERNANCE OF URBAN SHRINKAGE IN CHINA (52)

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The spatial distribution of shrinking cities shows a trend of spreading from local to global, and shrinking has gradually become the new normal of urban spatial evolution. In this context, the distribution characteristics of urban shrinkage in China are analyzed. From 2000-2010 to 2010-2020, the agglomeration area of urban shrinkage in China migrates from the central region to the northeast, and the population spillover of shrinking towns decreases in a circular pattern. By collecting the data of the last three population censuses and using qualitative, quantitative and questionnaire interview methods, we find out the factors closely related to the phenomenon of urban shrinkage, such as geographical location, population structure, city type, employment positions, public service supply, etc. In response to geographical location and population structure factors, governance strategies are put forward from the perspective of rational formulation of population development policies. According to the factors of city types and employment positions, the governance strategies are put forward from the perspective of absorbing innovative talents and realizing regeneration. In response to demographic structure and public service supply factors, governance measures for public service are proposed from the perspective of accurate allocation of education and elderly care facilities.

Keywords: Urban Shrinkage; Population Distribution; Causes of Shrinkage; Governance Strategies.

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IDENTIFYING INDOOR AIR CONTAMINATION DUE TO USAGE OF CONVENTIONAL BUILDING MATERIALS IN URBAN HOUSING SCENARIO (56)

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At present significant Urban growth is noticed across many cities/ megacities of the world. This growth rate is also being fueled by migration from rural/countryside. But, the so-called "Urban" environment is not keeping pace with the growing pollution levels. While there is some consciousness in the urban population about outdoor pollution, there exists very little care about Indoor Air Quality (IAQ). It is necessary to generate awareness about growing indoor pollution & sick building syndrome in urban housing around the world. Increased use of synthetics as building materials, cleaning/ renovation of buildings, constructing airtight buildings, etc. is further adding to this phenomenon. Studies reveal that people spent approximately 80% of their time indoors in a typical day. The present use of basic & finishing materials in housing interiors imparts major negative impacts on occupants (The Danish Twin Apartment Study, 1989). The chemical & microbiological pollution in the interiors of residences arising out of extensive use of artificial materials, which constitute about 70% of current building materials, viz., concrete, plastics, steel, aluminum, chemically treated wood, synthetic floor, toxic paints, insulation, and furniture, etc. Congested housing developed with toxic materials/ PVC/ Preservatives is proving harmful to human health. Many of these chemicals fall under the carcinogenic/ mutagenic category. Many can create dizziness, stress, migraine, memory loss, respiratory difficulties and allergies of all kinds, and disturbances in biological functions (Sanyal D., 1997). Volatile Organic Compounds (VOCs) are ubiquitous in the indoor air and by far the largest group of pollutants. Their major health effects are Eczema, Hyper-reactivity, Dermatitis, and irritation of mucous membranes. Indoor air pollution is a combination of continuous/ discontinuous emissions from different sources. The microbiological pollution of buildings may occur as a result of contamination of incoming air, and building materials themselves and may even arise from the occupants through person-to-person contact. The types of diseases produced in human beings by microbiological pollution include infectious diseases, and allergic and toxic reactions (Sanyal D., 2000). It is recommended that pollutants originating mostly indoors such as radon, formaldehyde, pesticides, and heavy metals be controlled drastically. Housing should be developed as harmonious with nature and the environment (Schmid, P. 1994). Further, various sources of non-renewable energy sources/fossil fuels are used in the procurement/ transportation & processing of conventional building materials, sometimes several of them are used at once. The major building materials are termed high-energy materials, because of the quantum of energy required for their manufacturing processes.

Keywords: Environmental impacts, indoor air pollution, building materials, Urban housing interiors, Embodied Energy, GHG emission.

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EVALUATION OF URBAN TYPOLOGIES SURROUNDING CORE CITY IN KOLKATA URBAN AGGLOMERATION (57)

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Increased cultural understanding and more inclusive city design are two ways to improve the health and well-being of the urban population. Studies in urban planning at the mesoscale have not received as much attention as those at the macroscale, where urban forms have typically been dense, diversified, and multilayered. This is especially true in a nation like India. Despite the country's significant gaps in social stratification, built space quality, and infrastructural amenities, India's economy is the fifth biggest in the world. The cultural landscape of India is quite varied. As a result, there is a wide variety of disparity across the nation regarding per-capita income. Within the scope of this research, an examination of the urban typologies of three prominent municipalities located on the southern edge of the Kolkata Urban Agglomeration was carried out (KUA). The neighbourhoods of Thakurpukur-Maheshtala and Rajpur Sonarpur are located next to the central city, while Budge Budge is an industrial town located to the south of the inner city along the Hooghly river. Comparisons were made between them utilizing visual analysis and a reconnaissance survey of five distinct urban typologies found throughout the study areas. The major typologies identified include ancient preliminary settlements located near an old water body, slums located along suburban railway network and near older industries, industrial zones along the river or on the agricultural lands of urban fringes, and housing complexes in the outer peripheries or peri-urban areas of the emerging urban centres, to facilitate urban growth and expansion. Each of these urban typologies influences the total built and unbuilt space features. According to the findings, the population's economic features are significantly dissimilar compared to those of the core city, notably in terms of distinctiveness and variety. These differences are a direct consequence of the regions observed having very different approaches to urban planning and socioeconomic histories. As a result, the study investigates the various urban typologies and socioeconomic structures in KUA and compares them to one another as they move farther out from the central city. It was discovered that residents' capacity to purchase housing improved with increasing distance from the city's central business district. Therefore, the study contributes to the knowledge of the urban form conditions in areas surrounding the core city in KUA, providing valuable insights for sustainable urban management policies, approaches, and initiatives to policymakers, engineers, urban designers, and planners. Additionally, the study contributes to the knowledge of the urban form conditions in areas surrounding the core city in KUA, which is one of the highest urbanizing regions in the global south. It will facilitate the planning and management of emerging urban centres in developing nations with climatically vulnerable and eco-sensitive zones.

Keywords: Land prices, Socioeconomic segregation, Urban typologies, Urbanization

ANALYSIS OF RESEARCH HOTSPOTS AND TRENDS OF RESILIENT CITIES AT HOME AND ABROAD SINCE THE NEW CENTURY WITH KNOWLEDGE GRAPH (71)

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Taking CNKI and Web of Science databases as data sources, using Citespace6.1.R2 software to draw a knowledge map, so as to analyze the research hotspots and trends of resilient cities at home and abroad since the new century. The research found that: (1) From 2000 to 2022, the number of published papers at home and abroad has experienced the germination period (2000-2010), the rapid growth period (2011-2019), and the rapid outbreak period (2020-2022), among which the number of published papers abroad was large, and the rates of growth of domestic literature was faster; (2) domestic and foreign literature authors and research institutions have basically formed a cooperation network system with major architectural universities as the main body. (3) Key words and keyword clustering analysis show that research on resilient cities at home and abroad has long focused on the three major areas of "climate change, stormwater management, and infrastructure planning"; (4) Research on resilient cities can be divided into three stages according to development time, with different research hotspots in each stage. At present, foreign research hotspots are "green infrastructure, smart cities, and biodiversity", while domestic research hotspots are "epidemic prevention and control, urban renewal, and community governance." European and American countries and scholars have laid the foundation for this field. China started late but developed rapidly. Through comparative studies at home and abroad, we will explore the research hotspots and trends of resilient cities since the new century, looking forward to providing reference for China's future research on resilient cities.

Keywords: knowledge map; new century; resilient city; hotspots and trends

ENVISIONING AND PLANNING FOR PLANETARY LIVEABILITY: BREAKING THE SPELL OF PLANNING FOR A WRONG WORLD (74)

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We are facing a polycrisis. There is a substantial body of literature on the tremendous challenges of, for example, climate change, ecological degradation, planetary boundaries, social injustice that are changing the realm of planning. Time is running out (IPCC, 2022). Rapid and unprecedented changes are needed to slow down the current development. Futures need to be envisioned within the boundaries set by these changes. Consequently, cities and nations have set ambitious targets, but the transition is still marked by a lack of ambition (UN-Habitat, 2022). Nonetheless, cities provide one of the right scales to implement actions in response to the change needs. Planning as a future-driven practice has a potentiality of envisioning the needed transformation.

To cope with the challenges, an urgent transformation in our understanding of the finiteness of the world is needed in planning. The illusion of an infinite world is not consistent with what we now know of the state of the world but has been and is still manifested in the currently mainstream planning practices. However, the mainstream planning has been criticized for lacking transformative potential (Albrechts, 2015) and the challenges of a finite planet are being continuously reproduced. In a finite world, planning cannot anymore have a solely anthropocentric focus. Consequently, a reconceptualization of planning through the lens of planetary liveability is needed. With planetary liveability we mean a world in which planetary systems are in balance to provide liveability not only for human beings, but also for other species and ecosystems. In essence, we ought to plan for survival. Still, established practices for balancing these perspectives in planning are still largely missing.

The aim of the paper is to open discussion of the potential mismatches between planetary liveability and the current institutional, procedural and methodological practices of planning.

Conceptually, acknowledging the need for a more planetary-bound understanding of liveability, we draw on the conceptual model of 'the four planes of social being' as a framework (Bhaskar, 2008) to contextualize the implications of planetary liveability for planning. The model suggests that every social being exists on four interconnected planes: (1) material transactions with nature, (2) social interactions between people, (3) social structure, and (4) embodied personality/intra-subjectivity. The discussion is based on a critical realist approach and presumes intrinsic relationality of the world. This corresponds well to the finity of the planet and to how planning should relate to it: planning should respect the boundary of the nature (1), to pursue equity within its limits (2), but is conditioned by existing social structures (3) and planning agency can make an impact (4).

Empirically, we use the planning practice for carbon-negativity in Helsinki (Finland) as an example and ask: How do the current institutional, procedural, and methodological practices of planning enable or disable the identified four prerequisites of planning for planetary liveability. With the

example, the paper demonstrates ways of how to apply the framework when planning for planetary liveability within the boundaries set by the planetary system.

As a conclusion, the paper then suggests that the current integrative practices of planning are not enough when the integrated perspectives are founded on the false premises of infinity of the world.

Keywords: planetary liveability, planning practice, planetary boundaries

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SPATIAL LOCATION OF FLOOD RISK FROM CLIMATE CHANGE AND URBAN DEVELOPMENT: A CASE STUDY OF TAIPEI CITY, TAIWAN (126)

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Recently, climate change has intensified and extreme rainfall events have been reported frequently, making flooding one of the most important issues facing us today. According to International Strategy for Disaster Reduction (UNISDR), the chance of water-related disasters is as high as 40%, and floods are considered the most costly and destructive of all-natural disasters worldwide. This is an issue of great concern in developed and developing countries, and many international organizations have begun to work together to address the severity of the flooding challenge. According to many studies, the phenomena of "climate change" and "urban development" may change the severity of floods and affect the decision-making process of flood management, and the impact of different driving forces on floods may reflect not only the long-term but also the short-term relationships. However, vulnerability to environmental change is already a sustainable development issue in the context of environmental and socio-economic issues. What's worse, future flooding conflicts will be even more pronounced, necessitating understanding their respective flooding impacts. Therefore, this study will attempt to clarify the spatial location of flood impacts caused by the different driving forces of climate change and urban development, and then investigate the flood prevention strategies that can be applied to address the different impacts.

This study takes Taipei City, the most urbanized county in Taiwan, as the scope of this study. First, we review the literature to understand the pathways and impacts of flooding caused by two key drivers in the process of climate change and urban development, and then understand the actual meaning of disaster risk and the impacts of different levels of drivers from the perspective of flood risk management. In addition, this study uses the land use change model and the SOBEK hydrological model to validate and simulate the model using 2006, 2015, and 2021 national land use surveys and past large floods. Besides, this study also uses calibration data to simulate the growth of built-up land and the range of flooding potential in 2050. The study focuses on the predicted inundation due to surface runoff within the city, without considering the difference in flood risk due to the existence and ineffectiveness of flood control projects, and therefore may overestimate the actual inundation. However, the overall value of this study is that it differs from the previous mixed thinking on flood control strategies, and shifts the disaster environment to a sustainable development perspective. By clarifying the scope of different driving forces, we can effectively limit the development of less vulnerable land or formulate a more appropriate flood control strategy, which is expected to provide a reference for future flood system policies and related spatial planning.

Keywords: Urban Flooding Risk, Climate Change, Urban Development, Land Use Change, Flood Potential

SHRINKING REGIONS UNDER PRESSURE: A REGIONAL APPROACH TO JOINTLY PROVIDING HIGHER QUALITY GOODS AND SERVICES AT THE EXAMPLE OF THE HARZ REGION, GERMANY (179)

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In combination with ongoing urbanisation processes, demographic change is leading to shrinkage in many rural regions. In shrinking regions, cities often fear a downward spiral (in social, economic, spatial terms, etc.) in which population development is no longer merely a consequence of regional conditions or global trends, but becomes a dominant characteristic itself (Weiß & Petrick, 2011). This also applies to the Harz region in Eastern Germany. There, the provision of public and private infrastructures and their capacity are increasingly under pressure as a result of population decline. Due to the insufficient (public) transport connections, impending deficits can not be compensated by the existing provision of infrastructures in larger surrounding cities. Therefore three medium-sized cities in the Harz region face the challenge of supplying the needs of their own population and the population in their catchment area with higher-quality or specialised goods and services. To secure this supply and to strengthen the region's development capacity, it needs a paradigm shift from reactive and municipal towards proactive and inter-municipal approaches to the functional and structural division of responsibilities and labour. In this context, the question arises as to how the Harz region and its cities can strategically position themselves to become fit for the future and competitive with the help of an inter-municipal coordinated and viable provision of essential public services.

Embedded in a real-world lab approach (see e.g. Schöpke et al., 2018), the IMPULS research project initiated a largely exclusive strategy development process that involves not only the traditional actors from politics and administration but also from business to enable a cooperative form of strategic spatial development with the necessary legitimacy and power to act. In the course of the strategy development process, we used various methods, including a SWOT analysis, which enables synoptic planning with broad development goals and comprehensive measures (Wiechmann, 2008), a participatory future workshop, and a multi-criteria analysis for the ex-ante evaluation of strategies.

This presentation traces the inter-municipal strategy development process in the shrinking Harz region to secure and strengthen the provision of essential public services through cooperation. In this context, we focus on the following fields of action: accessibility and mobility, administration and legal services, education and research, large scale retail trade, and specialised medical care. The goal is to achieve a cooperative function division between the three mid-sized cities to jointly assume a high-order central function for the region (in the sense of the central-place system, see Christaller, 1933). The elaboration of a function division on a conceptual and organisational level, embedded in a contractual model and based on regional policies would be a nationwide first. We discuss our applied methodological approaches with regard to their transferability to other shrinking regions and provide insights into suitable strategies for the different fields of action.

Keywords: Strategic planning, strategic development, multi-criteria analysis

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A REAL OPTIONS APPROACH TO TRANSPORTATION PROJECT EVALUATION IN SITUATIONS OF UNCERTAINTY AND FLEXIBILITY: THE NEW CROSSING CASE STUDY (199)

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Large-scale public projects such as transportation infrastructure are characterized by high complexity and uncertainty, which makes it difficult to forecast future project costs and societal benefits. Traditional predict-and-planning approaches remain dominated by a technical rationale (Davoudi, 2021), and projects are too often perceived as now-or-never and all-or-nothing decisions. Tools used for ex-ante project evaluation such as a societal cost-benefit analysis (SCBA) use forecasts based on extrapolations of the past, ignoring uncertainties and emerging opportunities, which could result in decisions that waste public budgets (Rauws, 2017, Machiels et al., 2021a). Traditional planning approaches work well in situations of stability and certainty, traits not found in the planning context of large-scale projects that are characterized by turbulence, uncertainty, and change.

In response to increasing calls for adaptive planning approaches and empirical research on coping with uncertainty through flexibility in planning (Skrimizea et al., 2019, Machiels et al., 2021a, Nadin et al., 2021), we propose the use of real options theory (ROT) to incorporate uncertainty and flexibility in the ex-ante evaluation of projects. ROT is a financial and economic approach that considers uncertainty as something positive rather than negative, because uncertainty makes flexibility valuable. ROT uses quantitative modelling techniques to value flexibility, and has recently been proposed as a tool for adaptive planning (Coppens et al., 2021, Machiels et al., 2021b). The use of real options in planning practice is currently inhibited by its mathematical complexity, a lack of empirical examples, and a lack of real option approaches adapted to the specific needs of (infrastructure) planners and decision makers (Machiels et al., 2021b).

To address these gaps, we developed a real options analysis model in Excel that avoids complex mathematics and extends the traditional net present value (NPV) technique that is widely used in (infrastructure) planning and SCBAs. We apply the model to New Crossing, an actual early phase multibillion rail infrastructure project in the San Francisco Bay Area. Societal benefit uncertainty is included based on empirical data from three future scenarios that were developed as part of a large-scale planning vision for the San Francisco Bay Area. Investment cost uncertainty is simulated based on research data about cost overrun in US rail infrastructure projects. Flexibility options are incorporated with a decision tree based on input received during interviews with project team members. The empirical results show that considering emerging opportunities (flexibility options) under changing conditions (uncertainty) increases project value and leads to different decisions compared with a traditional predict-and-planning NPV analysis.

This research is the result of an interdisciplinary collaboration between researchers in planning and economics, and practitioners involved in New Crossing. Our main audience are

(infrastructure) planning researchers, practitioners, and policy makers. We will present the approach and results in an accessible way for planners to advance adaptive planning research and practice. New Crossing is exemplary for many large-scale infrastructure projects and contemporary planning situations around the world, representing the difficulty of planning and decision making for a future that will be influenced many different factors beyond our control.

Keywords: real options theory, megaproject, scenario planning, decision tree, adaptive planning

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STUDY OF IMPROVED FRAMEWORK OF UNINTENDED EFFECTS: FOCUSING ON THE UNINTENDED EFFECTS OF URBAN PLANNING AND POLICIES (214)

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Urban planning and policies have been carried out with the aim of achieving socioeconomic sustainability and have evaluated the success of policies based on the achievement of goals. However, with the complex and variable nature of reality and bounded rationality, unintended effects occur in the course of policy implementation, which can act positively or negatively on achieving policy goals. Analysis of unintended effects can supplement the planning and policy-making process that increases the effectiveness of policies. However, regardless of importance, the definition and framework of unintended effects are still ambiguous. This study synthesized the concept and classification criteria of unintended effects presented in the existing literature through systematic review methodology and redefined the framework of intended effects and unintended effects. We searched the database of 'web of science' for literature from 1930 to 2022 related to undefined effects, undefined sequences, and typology of undefined effects. A total of 241 papers were found, 52 of which were selected for the systematic literature review.

As a result of analyzing the selected 52 papers, knowledgeability, Consequence, and Value were generally used as the main classification criteria in the use of unintended effects. However, the knowledgeability dimension requires a standard that can clearly distinguish whether or not the impact is anticipated and when it is anticipated, and since the 2010s, there has been a trend not to utilize the concept of unanticipated effect. The consequence dimension also has the disadvantage of not being able to accurately analyze the relationship with the previously set policy effects. There is a limitation in that the value dimension classified according to whether the initial intention set by the actor has been achieved cannot be evaluated for the effect itself that is not related to the initial intention. Therefore, this study proposes a new system consisting of knowledgeability, value, and distribution by complementing the existing classification characteristics. The classification criteria for the knowledgeability dimension were specifically constructed, and the value dimension was based on whether the effect itself was positive or negative, not on the relationship with the initial goal. In addition, the suitability of the effect was evaluated by covering not only actors but also targets and systems affected by the unintended effect.

The proposed framework of unintended effects can clearly distinguish the unintended effects that appear in urban planning and understand the process by which planning and policies. Through this, it is possible to establish an urban planning to respond to the unintended effects that appear in a complex and variable social environment. In addition, the contrast with the proposed framework can analyze the types of unintended effects overlooked in current urban planning to derive the effects that should be considered significantly in the planning process. This can contribute to reducing side-effects caused by unintended effects due to the improvement of the current urban planning process and forming a sustainable urban space.

Keywords: Unintended effects, Systematic review, Unintended consequences

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Funding:

This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2020S1A3A2A01095064)

SMALL-AREA POPULATION FORECASTING OF SHRINKING CITIES IN SOUTH KOREA: USING SHAP (SHAPLEY ADDITIVE EXPLANATIONS) ALGORITHM (219)

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Since the population is an essential element to establishing public policy, population forecasts are widely used for various purposes in the planning sector. In particular, small-area population forecasting can be used as useful information for public policy or local government. The rationality of policies and plans at national and regional levels depends on good predictions of the future population. However, most of the population estimates published by the national and statistical offices do not clearly predict the population distribution in small areas and have the problem of overestimating the population in small areas. Since over-estimation of the population causes social losses such as inefficient allocation of resources, it is necessary to develop a model that can clearly predict the population structure of small areas.

The purpose of this study is to identify the utility of XAI in forecasting small-area forecasting. This study was conducted between 2010 and 2040 in the local districts of Korea. This study compared the research results by additionally performing traditional statistical models and general machine learning techniques. The explanatory variables of the regression equation used in this study are largely divided into demographic characteristics, socio-economic characteristics, transportation characteristics, and natural environment characteristics. Demographic characteristics include population density, youth population ratio, elderly population ratio, and fertile women ratio. Socio-economic characteristics include the percentage of high school graduates, the percentage of bachelor's graduates, the percentage of manufacturing workers, the percentage of agricultural workers, the percentage of service workers, the percentage of old houses, unemployment, and average household income. Transportation characteristics include the percentage of commuters on public transportation and the degree of proximity to work. Natural environment characteristics are the proportion of green spaces in the park. We used the grid unit population index of the National Geographic Information Institute of Korea.

The SHAP (XAI) model estimates the nonlinear dynamics between variables, and increases the explanatory power of the model by presenting contributions between each variable. As a result of the analysis, it was found that household income, the ratio of old houses, and the ratio of park green areas showed a high contribution to accurate prediction of the population in small areas. This result can be interpreted as the rate of increase or decrease in the population of a small area is greatly affected by the socioeconomic and natural environmental characteristics of the region. The XAI model showed the lowest MAPE value which was performed to evaluate the accuracy of the population prediction results. Based on the results, we can present the following urban planning implications. In Korea, where the population is constantly decreasing, it is helpful to create a green infrastructure in the region to recover the population growth rate. Building a positive image of the region through community-driven regional redevelopment projects will also contribute to mitigating the population migration rate.

Keywords: Small-area population, Machine learning, Forecasting

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Funding:

This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2020S1A3A2A01095064).

DATA-DRIVEN INSIGHTS FOR EFFECTIVE MUNICIPAL CARBON ABATEMENT (253)

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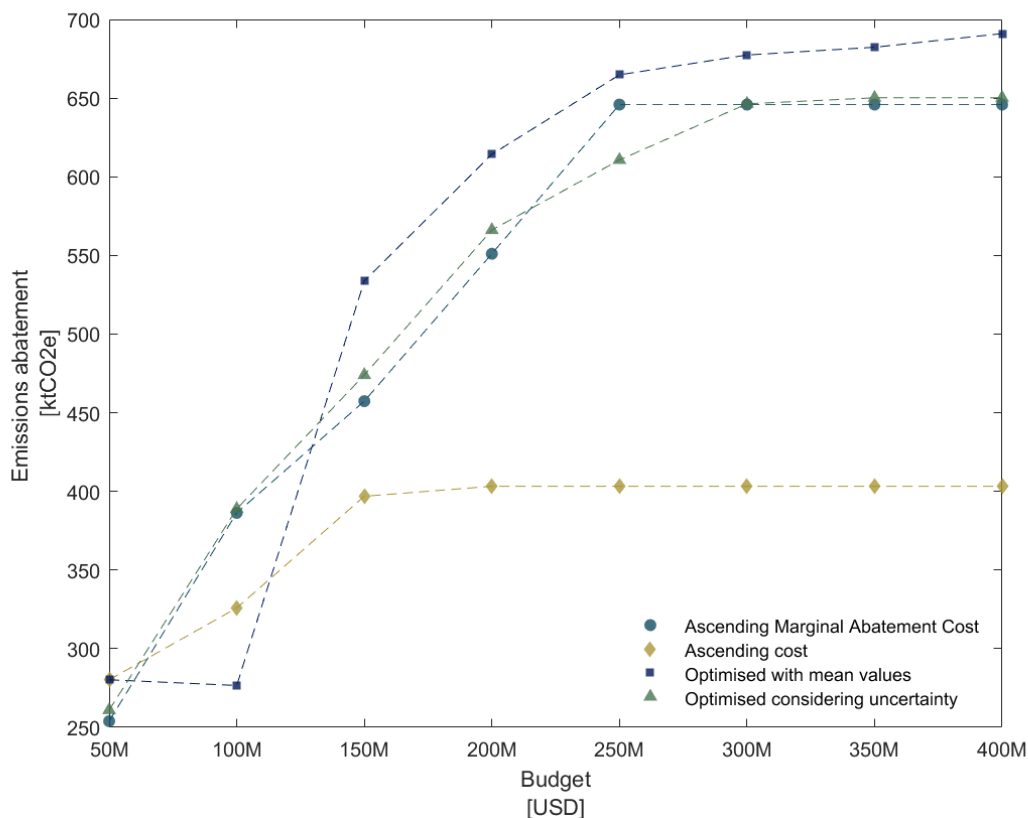
Cities are increasingly seeking to establish “climate action plans” to reduce local carbon emissions and mitigate nefarious impacts of climate change. Municipal abatement planning, like all abatement planning, is faced with great uncertainty in terms of abatement potential and costs but is also subject to different challenges as compared to higher levels of planning. For instance, the limited institutional capacity of municipalities can increase the ability to collecting data and identifying effective potential abatement actions (Reckien et al., 2015). Municipal planners must content with many other responsibilities, like economic development, housing, reducing pollution, and fostering more just societies. These objectives can be addressed within climate action plans but also affect which projects are most desirable in comparison to an abatement-only perspective. Finally, although municipalities can create abatement plans, realising the plans often relies on external actors, who may provide financial support or be responsible participating in the proposed programs (CDP, 2022; REN21, 2021). The decision-making support to support abatement planning is lacking (C40 Cities, 2020; Woodruff and Stults, 2016), is not always applicable to the municipal scale (IPCC, 2022), or inherently flawed (Kesicki and Ekins, 2012), resulting in municipal carbon abatement plans derived through idiosyncratic processes which may poorly realise the climate objectives.

Here, we study how data-driven optimisation can support more effective climate plans. The benefit of data-drive optimisation is that it can account for planning under uncertainty, competing objectives, and coherency constraints, like whether projects must be implemented in a specific sequence. Using data from actual carbon abatement plans, we compare the actual emissions abatement plans suggested by different scheduling mechanisms (Table 1). Overall, we find that heuristic decision-making methods are up to 40% less effective at reducing emissions as compared to optimization-based planning methods, though the exact difference depends highly on the available budget (Fig. 1). The magnitude of the gap also holds when considering uncertainty in project abatement potential and cost and is consistent with previous findings (Lonergan and Sansavini, 2022). We also find consistent empirical evidence for a multi-sectoral approach to emissions abatement, including “no regret” projects from the buildings, waste, energy, and transportation sectors.

Table 1. Overview of scheduling methods considered. (Kesicki and Ekins, 2012; Nesbitt et al., 2021). Marginal abatement cost is the cost per unit of emissions abated, e.g., \$/tCO_{2e}.

| Method class | Method | Uncertainty considered? | Intuition |
|--------------|--|-------------------------|--|
| Heuristic | Schedule projects from “low-to-high” cost basis | No | Prioritise “low-hanging” fruit |
| | Schedule projects based on Marginal Abatement costs | No | Prioritise both emissions abatement and cost |
| Optimised | Maximise abatement | No | Prioritise emissions abatement |
| | Maximise abatement considering uncertainty in project abatement and cost | Yes | Prioritise emissions abatement given range of possible future outcomes |

Figure 1. Summary of emissions abatement by planning method and budget.



While it is unrealistic that all climate plans are derived purely from technocratic methods (IPCC, 2022), our results do lead to two practical recommendations. First, optimisation-based plans can serve as a guide for municipal planners, either as a first draft of a climate plan or to evaluate the effectiveness of plans proposed in heuristic settings. These steps can increase the effectiveness of climate action plans and minimize the risk that the plans are “climate” plans in namesake only. Second, municipal governments have an important role in coordinating and mobilising external actors. This role can also help leverage external technical expertise and overcome institutional capacity limits faced by the municipality itself.

Keywords: Emissions abatement, decision-making, optimisation, uncertainty, cities

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COMPARING THE EFFECTIVENESS OF HYBRID NATURE-BASED SOLUTIONS IN DIFFERENT CITIES: A CASE STUDY OF TWO CITY, TAIWAN (268)

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In 2022, the IPCC mentioned the impact of climate change on ecology and society, and Nature-based solutions (NBS) are regarded as a new way for human beings to connect with ecology. According to the Glasgow Climate Pact proposed by COP26, NBS is an important means of restoring nature. In the report on Nature-based solutions for climate change mitigation, it is pointed out that there is an opportunity to reduce 10-18 billion tons of carbon dioxide by 2050 through NBS. At present, there are more and more studies on urban planning based on the concept of NBS, such as updating infrastructure through NBS to improve urban ecological resilience or using NBS to explore the balance between ecological systems and social benefits. However, most studies focus on the benefit discussion of a single NBS case, and there are relatively few discussions on NBS as policy, planning and governance. However, recent studies have begun to compare the benefits of single-type and mixed-type NBS in adapting to climate change in cities.

According to some studies, regardless of whether a single type or a mixed type of NBS is fully implemented in the city, different scenario simulations have different aspects of maximum benefit potential, which will produce different effects according to different locations, scales, and application methods. The implementation strategy includes setting green roofs, increasing urban park planting, planting street trees, rainwater storage, increasing permeable pavement and closing parking spaces, etc., and analyzing the effect of implementing NBS on infrastructure through relevant indicators and calculations, such as observing urban heat dissipation and evaluating reduction Stormwater runoff capacity, calculating carbon stocks, understanding potential for biodiversity, overall greenness, etc. However, as mentioned above, according to different NBS simulations and different urban conditions, the effects on mitigating and adapting to climate change are also different. The specific benefits need to be discussed one by one, especially in limited urban space. Land use should be effectively planned. Therefore, this study will select two cities in Taiwan as the research case, and simulate four NBS implementation scenarios, and try to explore the effects of single-type and mixed-type NBS applied to cities one by one without greatly adjusting the current urban type, including Increasing urban park planting, planting street trees, increasing permeable pavement, etc., and the benefits of combining the three strategies. It is hoped that through the simulation of different scenarios in this study, the appropriate NBS guidelines for two cities can be summarized to help planners design targeted NBS to improve the city's ability to adapt to climate change.

Keywords: Nature-based Solutions, Climate Change, Urban Resilience, City Simulation, Climate Adaptation

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A STUDY OF FUNCTIONAL REGENERATION STRATEGIES FOR ULTRA-HIGH-DENSITY CITIES SUPPORTED BY MULTI-SOURCE DATA: THE CASE OF HONG KONG (278)

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There are many ultra-high-density metropolises in Asia, all of which have experienced explosive population clustering, rapid economic development, and continuous urban expansion. However, these cities face problems with functionality, such as disorganized functions, the low performance of integrated spatial utilization, and poor synergy among functional elements. Therefore, it is necessary to bring new development opportunities and stimulate new vitality through the renewal of urban functions. Traditional analysis methods are difficult to accurately identify the functional structure of cities and the organization patterns among functional elements. Meanwhile, the rising use of big data has provided possibilities to analyze spatial distribution characteristics of functional features as well as their types and intensity characteristics. The study establishes a multi-source database, such as POIs, building blocks, and road networks, for accessing urban functional features; it clarifies the identification and analysis paths of functional types, intensities, and areas at the spatial level. As a representative of ultra-high-density cities, Hong Kong is facing an urgent need for functional regeneration. Its experience in corresponding regeneration planning strategies can provide a reference for similar cities. The study finds that: i) the distribution of functional areas in Hong Kong has a "circle structure" with a high degree of mixed functions; ii) the distribution of functional intensity shows a trend of gradually decreasing from the core area to peripheral areas; iii) according to the results of the combination of functional type and functional intensity, the number of single functional areas with high-intensity is relatively absent, while the number of high-intensity mixed-functional areas is smaller and their distribution is more scattered. Based on this, the study suggests it is necessary to further transform the regeneration development in Hong Kong from single function to mixed functions and from low-intensity value to the highest-intensity value. Finally, taking two new towns, Tsuen Wan and Sha Tin, as examples, the study explores the specific functional regeneration strategies and spatial design approaches under the overall future functional regeneration goals and framework of Hong Kong. The study aims to evaluate urban functional characteristics from different dimensions and provide references in functional regeneration strategies and specific implementation plans for similar cities.

Keywords: Ultra high density; Functional Regeneration; Multi-source Data; Hong Kong

IMPORTANCE OF INTEGRATED APPROACH IN URBAN METABOLISM STUDIES, THROUGH A PRISM OF MULTI-FUNCTIONAL LAND-USE (316)

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Human society fulfils its needs and secures existence and progress by using and adapting nature through more or less planned activities, and nowhere is this alteration more visible than in cities. However, these activities are more often than not unadjusted to the capacity of the planetary ecosystem, causing serious challenges and unfavourable development trends. Due to high concentrations of people, activities and goods, urban systems have been recognised as the greatest obstacle, and at the same time, the biggest potential in achieving sustainability (Kennedy *et al.*, 2010). To facilitate progress towards this goal, numerous concepts and models have developed to explain the functioning of cities and to solve complex problems that accompany life in them. One of them is the concept of urban metabolism (UM) that considers certain features of a city as that of living organisms (Wolman, 1965). The aim of this paper is to present the concept in more detail and to emphasize importance of an integrated approach in UM studies, through an example of multi-functional land use.

If a city is to be considered to depict certain properties of living organisms, it must be observed as a complex system, which was emphasized more than half a century ago by Christopher Alexander and Jane Jacobs. A city is also an anthropogenic system, created by humans with specific purpose: to facilitate fulfilment of human needs. It is also spatial and organisational result of a society (Lefebvre, 1991), shaped by socio-economic, cultural and political factors over long period of time. Hence, three interdependent aspects of a city can be distinguished: function, metabolism and form. Urban functions i.e. the activities that occur in a city are initiated by the needs of its inhabitants and are main driver of all change within it (Shaw, 2021). Human activities require resources in order to take place; stocks and flows of UM ensure that. At the end, activities have a spatial implication, which we call urban form (Kropf, 2017). Better understanding of three aspects and of their relations can enable more efficient planning and development of cities. Yet, they are often observed individually. Step forward in understanding dynamics of the city implies integrated approach – connecting these aspects, understanding how they perform as a system and how they shape each other (Weinstock, 2011).

An approach that emphasizes the interrelation of function, metabolism and form is multi-functional land use, which implies combination of multiple urban functions in a determined place in a certain period of time. Intertwining of different functions in a particular space is more efficient if certain characteristics of urban form are present. Specific urban form also has direct implications for the UM performance, i.e. on intensity of consumption of energy and materials (Pinho *et al.*, 2011).

Keywords: urban metabolism, multi-functional land-use, integrated approach

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MEASURING THE SPATIAL DISTRIBUTION OF AGEING COMMUNITIES: A CASE STUDY IN HONG KONG (330)

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Population ageing is becoming a global issue with its unprecedented impact on various sectors. Given the dynamic of population mobility and the diversity of urban forms, using a single index, such as the ageing population ratio or ageing population density, can hardly interpret the types and locations of ageing communities appropriately. The inaccuracy of geographical measurement hinders us from understanding the pattern of ageing population distribution, bringing troubles to urban planning, public services allocation, and relevant decision-making. Inspired by Shiode's team's study from Japan, this study aims to investigate whether the two commonly used indices, ageing population ratio and ageing population density, can consistently detect the geographical pattern of ageing communities by using choropleth mapping and correlation analysis. Moreover, the study explores the location of different types of ageing communities by combining the two indices by bivariate local spatial autocorrelation. The study finds that these two indices are positively related to each other in Hong Kong in general, in contrast to the finding from Japan. Nevertheless, the correlation is not consistent in different spatial scales when it comes to the metropolitan area, suggesting potential bias in the single use of each index. Results from the bivariate local Moran's statistics provide more detailed information and show an advantage in detecting different types of ageing communities. The different findings from Japan and Hong Kong case imply that differences in context should be considered in applying age-friendly strategies. The study also calls for developing a finer grid-shape census unit and further comparative study among regions.

Keywords: Population ageing, urban planning, bivariate local Moran's statistic analysis

STUDY OF CARBON REDUCTION STRATEGIES IN URBAN AREAS - BASE ON THE SYNERGIES AND TRADE-OFFS PERSPECTIVE (348)

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The United Nations Intergovernmental Panel on Climate Change (IPCC) released the Sixth Assessment Report (AR6) in 2021, assessing global carbon reduction technologies, trends, and mitigation pathways, also discussed the science evidence and key findings of the technology, environment, and society under the trend of the climate change. The report states that if governments propose carbon reduction schedules and pathways actively in order to decrease the greenhouse gas emissions by 50% before 2030 and complete net-zero emissions by 2050, then we still can limit the increase of global mean surface temperature increases to 1.5 degrees Celsius. Under the trend of impact of climate change, cities have become high-risk areas facing various disaster. However, when the carbon footprint is highly concentrated in urban areas, local governments can take more actual measures to formulate environmental strategies. Therefore, regardless of the conditions of economy or environment, it is necessary and important to implement strategies for carbon reduction.

Faced with the impact of climate change, IPCC (2007) proposed the concept of synergy and trade-off as a method to examine the interaction between policies and effect under the impact of climate change. Based on this concept, this study will find out the carbon reduction strategies proposed and implemented in the past. Then establish a framework for analyzing the synergies and trade-offs of relevant plans in the research area. In this study, we use the impact matrix to standardize the data for carbon reduction performance then convert it into impact correlation to realize the synergy and trade-off relationship of implementation of the plan. By comprehensive evaluate the impact of development plans or strategies on reducing carbon emissions in the research area, so as to provide reference for future carbon reduction policy formulation and spatial planning.

Keywords: Climate change, Net Zero Emissions, Impact matrix, Synergy, Trade-off

A SYSTEM DYNAMICS APPROACH FOR THE IMPACT OF TRANSIT-ORIENTED-DEVELOPMENT AND COVID-19 ON KAOHSIUNG MASS RAPID TRANSIT RIDERSHIP (375)

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Nowadays Transit-Oriented-Development (TOD) becomes one of the most favorable strategies for promoting sustainable urban transport policy in Taiwan, especially for enhancing the financial feasibility for expensive rapid transit projects. Through the 5D principles, i.e., Density, Diversity, Design, Distance, and Destination, we learned that TOD is an integrated process for urban and transport planning. However, the effectiveness of TOD strategies has never been justified due to the fact that TOD was introduced for only a decade. One of the major advantages for system dynamics is that all the urban systems, i.e., housing, industry, population, and transport are interacted over time. Consequently, we apply system dynamics approach based on these interaction equations to simulate future urban development around three types of rapid transit stations, i.e., downtown or commercial stations, suburb or local center stations, and residential stations. In the simulation we apply GIS technique to acquire all information within a diamond shape areas 600 meters away from the station. The information includes the number of residents as Density, a land use mix index as Diversity, the number of intersections, the length of sidewalk, and the number of shared-bikes as Design, the number of hotspots as Destination, and the number of bus stops as Distance. In addition, we also include the impact of Covid-19 in our simulations. From these simulations we find that two TOD strategies, i.e., Density and Design, will enhance the residential housing and ridership for the suburb stations and commercial stations, while Diversity and Design will increase the ridership for residential stations. The typical strategies for Density should be increasing the housing supply, such as social housing, or enhancing the floor-area ratios for urban renewal projects. The most effective approach for improving Design should be creating pedestrian-friendly environment around these stations. And the most commonly used strategy for Diversity should be encouraging mixed land use for the neighborhood of residential stations. Meanwhile, the number of firms drops significantly during the Covid-19 period, then it also slowly declines. These findings are helpful for designing the development strategies for various types of stations so as to make sure that TOD will work for sustainable urban development.

Keywords: System Dynamics, Transit-Oriented-Development, Covid-19, MRT Ridership

INTERACTIVE DATA VISUALIZATION IN CLIMATE ADAPTATION PRACTICE (386)

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Due to the consequences of climate change, not only climate mitigation but also climate adaptation is of central importance to preserve cities and regions as livable spaces. The project Evolving Regions aims to support the adaptation process of seven regions in North-Rhine Westphalia (NRW), Germany, empowering various actors to increase local and regional resilience in times of an uncertain future. Climate Impact Analysis (CIA), based on which particularly affected areas can be identified and suitable adaptation measures can be developed, play a central role in this process. In addition to the development of the CIA, the project focuses on the interactive processing of the results using the visualization software Tableau in order to make the results usable for the daily work of local planning actors.

The communication of knowledge through visualization tools has so far found little application in the field of climate adaptation (Weaver et al., 2013). However, visualization tools have the potential to close the gap between knowledge generation in science and use of this knowledge in practice (Goudine, 2021; Grainger et al., 2016). Compared to static maps and GIS systems, interactive data visualizations (IDV) make the depth of CIA data accessible to a wide range of stakeholders, allow a clear and easy presentation of the results, and encourage interest in engaging with the data through an interactive, "game-like" approach (Goudine, 2021). It therefore leads to added value to local actors' planning practices and decision-making processes related to climate adaptation.

The practicality of the IDV of the CIA in Tableau is tested throughout the project in close cooperation with local actors. The methodological approach consist of: a) creation of the CIA through geographical analyses b) IDV of the analyses in Tableau c) conducting a survey on the practicality of the IDV d) conducting feedback formats with local actors e) revision of the CIA and IDV preparation based on the feedback and survey f) conducting a survey to record changes in practicality.

The surveys and feedback formats examine which contents as well as functions visualization tools need to provide IDV that are considered useful in the daily planning routine of local actors. The relevance for planning practice is furthermore prioritised by the aim to figure out which specific information is relevant in which task area of climate adaptation planning. The project therefore explores how IDV can effectively support planners in their decision-making processes in the area of climate adaptation.

Keywords: interactive data visualizations, climate impact analysis, risk communication, adaptation

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DETERMINING SPATIAL DISPARITIES AND LINKS IN HEAT EXPOSURE, GREEN SUPPLY, AND SOCIAL STRUCTURE OF URBAN AREAS - A MULTI-CITY STUDY AT THE DISTRICT LEVEL IN THE RUHR REGION, GERMANY (401)

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Excess heat in urban areas, urbanization, land scarcity, and demographic changes make cities places where the negative impacts of global climate change on society are becoming increasingly evident. While urbanization is considered to induce vulnerability and exposure and, in combination with climate change hazards, drives urban risk and impacts, the most rapid population growth takes place in areas with low adaptive capacity. Thus, economically and socially marginalized groups are most threatened by adverse climate change impacts (IPCC, 2022). Not only concerning climate change and urban heat, studies have shown the connection between environmental (multiple) stresses and the respective social situation of urban dwellers (cf. Hsu et al., 2021; Jafry et al., 2019; Osberghaus and Abeling, 2022). The spatial concentration of environmental burdens like heat, noise, air pollutants, lack of green spaces, or poor housing conditions correspond with socially disadvantaged urban neighborhoods. Characteristic is both the increased level of pathogenic (e.g., air pollutants) and the lack of salutogenic (e.g., green spaces) environmental factors in such neighborhoods, which further increases the social vulnerability of residents and affects their general health (Bunge and Rehling, 2020). To counteract the increasing heat stress in cities, utilizing the thermally dampening potential of green and water areas is a crucial intervention option (Pamukcu-Albers et al., 2021).

Knowledge about the spatial patterns of heat hazards in form of urban heat islands (UHI), urban heat drivers or inhibitors, and urbanites exposed to heat is crucial when it comes to addressing these issues from the planning side. Regarding the characteristics of people potentially at risk, it is important to determine the existence of climate injustice in cities. The objective of this study is to interrelate urban heat, vegetation cover, and socio-demographic/economic factors by examining and analyzing spatial disparities and co-occurrences to inform spatial and urban planning for resilient and just cities.

Our study area comprises eight cities of the historically highly segregated Ruhr region in Western Germany, which is one of the largest metropolitan areas in Europe and moreover densely populated. Its structure is polycentric with a heterogeneous distribution of socio-spatial problems, economic potential, heat, and green infrastructures.

We use land surface temperatures (LST) derived from Landsat 8 data, data on green provision (normalized difference vegetation index (NDVI) as proxy), and social indicators such as age (under 6, over 65), share of non-German population, and SGB II (social security) quotas to reveal the relationships between UHI, green provision, and social structure at district level (n = 275). After elaborating on the unequal distribution of these factors, we determine correlations between them and finally conduct a cluster analysis to disclose the degree to which the chosen variables co-occur and interact in various similar clusters.

Our results show distinct disparities in heat exposure, green availability, and social status in-between districts of the study area. Less green districts are often inhabited by socially weaker populations and are more threatened by heat. The proportion of urban green and social status show clear negative correlations with UHI intensity. The cluster analysis furthermore visualizes districts of similar characteristics regarding the researched components. Thus, we can discern a certain climate injustice in the cities of the Ruhr region, which will have to be addressed by the administration and planning side in the future. Awareness for such spatial patterns and interactions is crucial for customized future urban planning and climate adaptation. For livable, resilient, and just cities, the integration in planning tools such as heat action plans addressing climate injustices is essential.

Keywords: urban heat islands (UHI), socio-spatial correlations, climate injustice, climate adaptation, resilience

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ORGANIZATIONAL FUTURE ORIENTATION AS A TOOL FOR NAVIGATING UNCERTAIN FUTURE: CASE STUDY ON A STRATEGIC URBAN DEVELOPMENT PROJECT TRIPLA IN HELSINKI, FINLAND (402)

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Urban development projects are complex by nature and require input from various stakeholders, which makes them challenging for decision making. Furthermore, decisions made during zoning and real estate development processes tend to have long-lasting effects on built environment and have vast economic, environmental, and social impact. These challenges are especially pronounced in strategic urban development projects that have a long lifespan, major impacts decades into future, and are often developed in project organizations that bring together several actors, such as public planning organizations and private real estate developers (Gil et al., 2017).

Capacity to consider future impacts of decisions made by planning and real estate development systems is greatly affected by the processes and organizational environment where the decisions are made. Developing organizational future orientation and foresight capabilities of planning and real estate development systems could increase this capacity. Organizational future orientation consists of individuals that have different levels of futures consciousness (Ahvenharju et al., 2021) but also of other factors such as organization of foresight activities, organizational culture, utilized foresight methods, and available networks (Rohrbeck, 2010).

While the topic has been studied in futures and management studies literature, the application of this knowledge to planning has been scarce. Developing organizational future orientation and foresight capabilities of planning and real estate development systems could help actors align their views on planning solutions, increase strategic and adaptive capacity of planning, decrease the risk of harmful path dependencies, and create space for adjusting to changing circumstances (Pierson, 2000; Giezen, 2013; Giezen, Bertolini and Salet, 2015).

This paper will investigate future orientation and foresight capacity of planning and real estate development projects through a case study of large-scale strategic urban development process in Helsinki, Finland. Research interests include how organizational future orientation of strategic urban development projects can be analyzed, what are the critical junctures of planning and decision making, and what are the roles of different stakeholders in making futures related decisions. Methods include literature review combining sources from real estate, spatial planning, and futures research, document analysis, and interviews of case projects' stakeholders. The study will increase understanding on how organizational future orientation can be researched and utilized in planning context.

Keywords: foresight; future orientation; futures consciousness; spatial planning; real estate development

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SOIL MANAGEMENT WITHIN URBAN PLANNING STRATEGIES AND POLICIES IN THE PERSPECTIVE OF AN ECOLOGICAL TRANSITION: THE CASE OF THE MUNICIPALITY OF VENICE (425)

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Despite the growing scarcity of natural resources, cities continue to grow in an unsustainable way. The dynamics of urban transformation and the spread of settlements are strongly related with the rapid growth of the population, the adoption of linear economic systems based on the exploitation of virgin resources, climate change, the alteration of ecosystems and the increase in inequality, which constitute the main challenges of contemporary society and territories. (Moraci *et al.*, 2020)

The progressive and almost total artificialization of the settlement system is characterized by a total inattention (fuelled by technological optimism and the unlimited use of resources) towards the long-term effects on the physical environment and landscapes (Magnaghi, 2020). The compromise of the system, the increase in vulnerability and the progressive impoverishment of the territory and the natural capital are increasingly evident, with significant repercussions on urban areas, such as places most affected and exposed to intense and extreme events and phenomena, and causing the deterioration of human health and well-being (Tobias *et al.*, 2018)

Therefore, in this context, the need arises to define rules of the appropriateness of the settlement and to establish limits and boundaries for the quantitative and qualitative use of natural resources and the consumption of energy, for the consequent improvement of the well-being in urban context, the reduction of their ecological footprint and their resilience to climate change.

In this perspective of green transition, particular importance can be attributed to the soil, as a resource capable of ensuring both ecological, economic and social functions, as well as to its ability to provide ecosystem services (procurement, regulation and support) necessary for the sustenance of urban contexts (Millennium Ecosystem Assessment, 2005; European Commission, 2006). At the same time, the soil is a fragile resource that is often considered with little awareness and reduced attention in the evaluation of the effects deriving from the loss of its functions and services. In urban contexts, maintaining the porosity and permeability of the soil makes possible to mitigate the effects of climate change, and to preserve biodiversity conditions, while at the same time it allows for resilient urban green spaces with high ecosystem performance able to increase urban adaptability (Ferreira, Walsh and Ferreira, 2018).

In this sense, this research aims to investigate in the field of territorial and urban planning that face current challenges, useful for understanding whether the administrations and the governments have the useful tools, processes and governance structures suitable for managing the soil resource in a "Turbulent Urban Futures". This occurs thanks to an analysis of the case study of the Municipality of Venice, aimed at comparing processes and policies, plans and initiatives in the field of soil management. In detail, the Veneto regional law n. 14/2019 (the so-called "Veneto law 2050") for zero soil consumption by 2050, the report on soil consumption annually implemented by the National Environmental Protection System Institute (SNPA), the recently adopted municipal adaptation plan to climate change and Sustainable Energy and

Climate Action Plans (SECAP) in addition to other coherent planning tools are investigated to evaluate the effective ability to contribute to face these challenges through the soil management. In parallel with the instrumentation referred to, some strategic European directives such as the European Green Deal have also given a strong stimulus to the principle of "Do Not Significant Harm" (DNSH), so it seems interesting to investigate how this evaluation system takes into consideration the soil resource, as well as other fundamental aspects.

Keywords: urban adaptability, soil management, urban planning tools, public policies, ecosystem services

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THE APPROACH TO UNCERTAINTY IN CHINA AND ITS IMPACT ON CITY PLANNING (440)

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The research explores the particular meaning that the idea of uncertainty has in China and its impact on city planning.

Our time seems dominated by uncertainty, but uncertainty is rare in Chinese official discourses; the uncertainty that is a reaction to past determinism and disenchantment towards systemic and defined statements (Secchi, 2001) is not emphasized. The hypothesis is that uncertainty is not a popular or useful concept in China and this is reflected in the city planning discipline for at least two reasons.

The topics discussed in China about city and city planning are given by the national government in its Guidelines and 5-year Development Plans. With few exceptions, the disciplinary discourse is defined by the agenda of the national government, which is reflected in the agendas of the local governments and is further discussed in the Academia (Wu, Xu, Yeh, 2006). The government engages all social actors and stakeholders through active guidance, multi-party cooperation, propaganda and other means.

This leaves little space for uncertainty about the right instruments, processes, and governance structures. The specific condition of state-driven debate and fixed development goals gives a different meaning to the idea of future and to the concept of uncertainty about the future than in Europe. In China ‘harmony’ is the word that would be counterposed to the idea of turbulent futures: a pacifier single narrative of a better future is radically different than the multiple often conflictual narratives in the West.

The second reason is that the actual praxis of urban development in China is often short-term. Beyond the main long-term goal – to become the first economy of the world – and the medium-term goal – to get everyone to be moderately prosperous (Xi, 2017) – China’s government adapts to current conditions or new interpretations of issues and reacts quickly with ad-hoc policies and actions. This has been true in city planning regulations: since 2014-’15 several documents have been released about how the city should be, at the regional scale as well as at the neighborhood scale, and shifts can be recorded mostly for the environmental emergency and the upgrade of the industrial structure (Xu, 2016). This constant revision process is due to a chase for modernity and a rapidly changing market-oriented economy and has an unintended byproduct: struggle and uncertainty. The short-term approach has been a feature of society and entrepreneurs since the Reform at the end of the 70s and the basic “take the money and run” prevails.

Given these premises, the paper will trace the nuances of uncertainty in China and address the following research questions: how is uncertainty discussed in the academic articles on urbanism produced by Chinese scholars? As the future urban dynamics are decided by the government, are different scenarios of development being drafted and compared? Is there the effort to define proactive steps towards different futures?

Keywords: uncertainty, China, scenario, city planning

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THE CROSS-BORDER INNOVATIVE COOPERATION BETWEEN SHANGHAI AND SUZHOU: BASED ON PATENT APPLICATION DATA (447)

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Innovation has become the main battlefield of competition among countries in the world and the key support for improving comprehensive national strength (Kresl et al., 2005). Under the new development pattern of “dual circulation economy”, the driving force of China's economic growth is changing from investment-driven to innovation-driven (Zheng et al., 2019). With the in-depth development of innovation, the scale of the departments involved is constantly expanding, the technological complexity and the depth of division of labor are also increasing (Cooke P, 1992), and innovation activities begin to break through municipal boundaries, provincial boundaries and even national boundaries to participate in international competition (Méndez R, 2011). Innovation cluster is an industrial cluster characterized by technological innovation, spatial agglomeration and cooperation. the cooperation of innovation activities promotes the exchange of knowledge and technology, thus giving birth to a higher level of innovation and plays a positive role in innovation.

Shanghai and Suzhou are the two core cities in the Yangtze River Delta region of China, and also the highlands of regional innovation. The cross-border cooperation of the innovation clusters is of great significance for the promotion of regional innovation level. however, due to the existence of policies and administrative boundaries of industrial concentration areas, the spontaneity and cross-border cooperation of innovation activities have been restrained to a certain extent. With the transformation to innovation-driven development, the cooperation of innovation activities are of particularly importance. Therefore, it is necessary to explore the characteristics and evolution mechanism of cross-border agglomeration and cooperation of innovation activities. The spatial agglomeration characteristics of innovation activities in Shanghai-Suzhou region from 2000 to 2020 were identified by DBSCAN (Density-Based Spatial Clustering of Applications with Noise) method (Fig.1 & Fig.2). It is found that the growth of innovation output in the central urban areas of the two cities continued to decrease, and the total amount and density of innovation output clusters in the peripheral areas continued to increase. The innovation activities gradually extended to the border, distributing along major traffic lines. Then the innovation clusters nearby the boundary begin to expand from both sides, and finally emerge into larger ones.

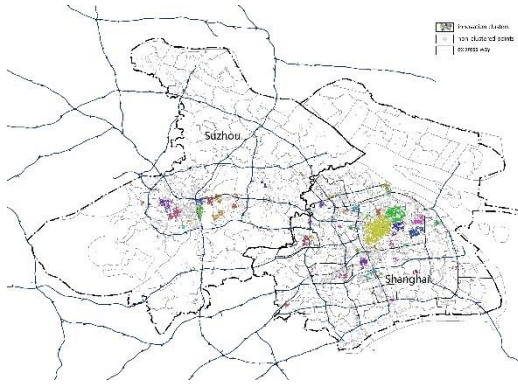


Fig.1 Innovation cluster identification results(2005)

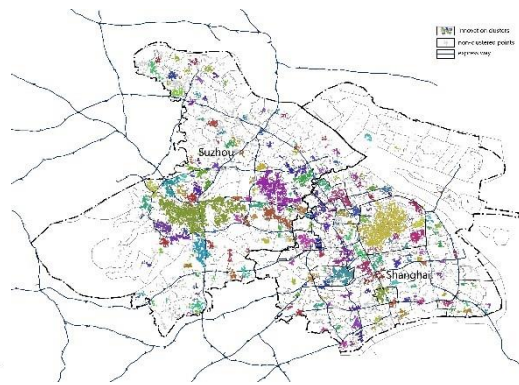


Fig.2 Innovation cluster identification results(2020)

Further, through the network analysis method, we explored the cross-border cooperation characteristics of Shanghai-Suzhou innovation clusters(Fig.3). In the initial stage, the cooperation between clusters tend to be relatively long-distanced. The participating subjects of innovation activities tend to be gathered in space, which is mainly due to policy factors. Innovative enterprises are guided to concentrate in the industrial park, rather than spontaneous organized. The connection between them is weak, which can not be called a real innovation cluster. With the continuous development of innovation, cooperative links begin to appear within the innovation clusters, and this cooperative link is constantly strengthened. The innovation cluster in the cross-border area between Shanghai and Suzhou is becoming more and more powerful and mature, breaking through the administrative boundary.

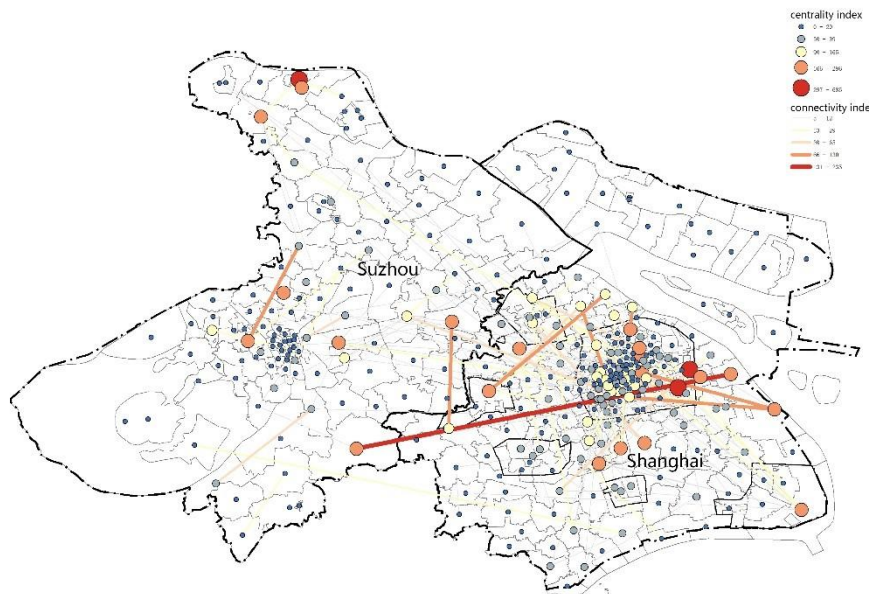


Fig.3 Characteristics of innovation cooperation network (2020)

Based on the research results, this paper puts forward the planning strategy of regional innovation under the trend of cross-border cooperation of “Shanghai-Suzhou” innovation clusters.

Keywords: innovation cluster; innovation network; cross-border cooperation; spatial characteristic; DBSCAN

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AN ANALYSIS OF URBAN STRUCTURAL CHARACTERISTICS IN THE CENTER FOR POPULATION DENSITY MANAGEMENT: THROUGH A COMPARATIVE ANALYSIS OF THE NATURAL ORIGIN AND THE PLANNING CENTERS (489)

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Urban roads play an important role in urban space as a space where daily life and various activities take place. However, in this space, population density management is important in terms of infectious disease management and urban revitalization at the same time as areas where large populations are active. By comparing actual urban user data (POI), urban structural space characteristics, and population data, we intend to derive the characteristics of the urban space where actual users are active. The above study is of important significance in urban risk management by studying the relationship between the morphological structure of urban streets and urban centers.

In addition, spatial analysis was adopted for urban spatial structure analysis. Among the POI-intensive areas, Eulji-ro was the naturally occurring city, and Seolleung was selected as the planning center.

This study is basically based on multiple regression analysis. By setting the indicators of spatial syntax as major independent variables and setting POI-related variables as dependent variables. Therefore, as independent variables, space integration, control, and connection will be used, which can be collected on a road-by-road basis in space. As a dependent variable, it can be utilized as the density of POI. At this time, variables related to spatial syntax are expressed by road units, and POI is expressed by point vectors on space, which are divided into road units and applied.

The ranges of 800m and 1000m were investigated for the two target sites, respectively, and segment analysis, which analyzes both roads as separate elements based on the intersection, was used. In the next step, t-test was verified through t-test by classifying roads where statistical POI is located and roads where statistical POI is not located.

As a result, many POIs were located in areas with high integration and connectivity, and rear streets were found to be POI-intensive areas. The degree of integration of the naturally occurring area (Eulji-ro) was correlated with the degree of integration only in 800M units, and the degree of integration and connection was found to be a POI-intensive area with a low degree of integration and high degree of connection compared to the center.

Through this study, an analysis framework for urban planning or location selection in the center of a compact city is provided. In addition, the planning effect was proved through an empirical analysis between the urban center and the pedestrian-centered urban plan.

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AN ANALYSIS OF STRESS INDUCED ON DRAINAGE SYSTEM IN MUMBAI (510)

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This research paper aims to analyze the impact of urban density on stormwater management and flooding in Mumbai, India. The city's challenges in terms of stormwater management include its topography, high tides, lack of percolation of water into the ground, varied weather patterns, encroachment on natural systems, and rapid urbanization. These challenges align with several of the United Nations' Sustainable Development Goals (SDGs), specifically SDG 3 (good health and well-being), SDG 6 (clean water and sanitation), and SDG 7 (access to affordable and clean energy).

The research paper examines the current state, analysis review, and evaluation of the effectiveness of stormwater management and drainage systems in Mumbai. It also analyzes best practices and innovative solutions for designing resilient drainage systems, focusing on sustainable and low-impact approaches.

The research process includes an on-grid-based method involving different neighborhoods, which involves Gini's coefficient, Moran's I Law, Entropy Index, and Stormwater Management Model, as well as the Pressure-State-Response (PSR) Model. These tools are used to construct a UI resilience assessment system, which reflects dynamic and process characteristics of the resilience level of infrastructure in Mumbai. This research paper will demonstrate the impact of urban density on stormwater runoff and the effectiveness of drainage systems in Mumbai, and will provide recommendations for improving the city's stormwater management and drainage systems.

Keywords: Urban Density, Stormwater management, Drainage system

TRANSNATIONAL URBANISM IN PLACE: UNCERTAINTIES, REFLECTIONS AND RESEARCH PERSPECTIVES (519)

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In the last three decades, cities have become increasingly connected with ever more information available, influencing how experts and policy makers approach design and urban transformation. Investments, policy ideas, design firms, and planners travel at unprecedented speeds from one city to another, often under the assumptions that international experts know best, that new technologies can make planning and design processes more efficient and accurate, and that adapting similar urban and architectural models will produce similar results across different locales. A narrow transnational group of design experts and multinational firms have emerged and boosted dominant narratives such as the Bilbao Effect, creative cities, smart cities and so on. Waterfront regenerations, cultural districts, smart mobility plans, ecocities and the like have appeared in countless cities of the West and Asian worlds. However, the understanding of how key projects and urban transformation processes connect transnationally and adapt locally remains limited (Olds, 2002). These adaptations may be determinant on practice but are framed as indeterminate in theory, limiting opportunities for improving projects and city development trajectories (Roy and Ong, 2011). With specific reference to such architectural and urban projects, Ponzini (2020) argued that many urban theories fail to advance from generalized findings and are unable to explain how transformation processes borrow technical solutions, homogenize or differentiate approaches in different places. Research has yet to question and study in-depth how transnational firms and local city experts conceive and use contextual features, their effect on the completion and functioning of these transnational projects in place. This contribution draws on past research regarding globalization of urban policies, transnational urbanism, the digitalization of planning and design techniques, and the assemblage of projects. The aim of the paper is to raise new questions to discuss the typical assumptions that permeate today's urban debate and to outline future research paths that cut across different disciplines and that have the potential to mutually reinforce academic knowledge production and practice.

Keywords: Transnational urbanism; urban transformation; planning theory; urban design

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PERSPECTIVES ON RIVERFRONT DEVELOPMENT RESEARCH: A BIBLIOMETRIC ASSESSMENT FOR MORE SUSTAINABLE CITIES (544)

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Considering the historical process of riverside area economic restructuring, it is understood that these urban areas are currently an enormous asset for the requalification of cities, helping them to achieve multiple sustainable development objectives. However, since the 1980s, these spaces have been the focus of different tensions and contradictory developments (Ocejo, 2021; Gotham, 2011; Djukić et al., 2020), which are of particular interest with regard to finding converging paths towards sustainable and resilient urban spaces. The social, urban, and economic impact of the industrial revolution and its consequences throughout much of the 20th century require solutions either to preserve their memory, adapt them to the current economic model, or even allow them to be prepared for a more intense and qualified social appropriation. Furthermore, the environmental and political dimensions in the 21st century have launched new debates on the future of riverside zones (Lang and Rothenberg, 2017), as they represent spaces where many areas of interest overlap, with particular emphasis on metropolitan areas.

It is therefore imperative to investigate how scientific research has dealt with this topic, which is fundamental for the future of cities and their communities, by understanding the dominant perspectives and criticisms that may help to draw up proposals for new urban policies. In this context, the aim of this presentation is to expose, systematise, and highlight the issues and their interrelationships that the literature addresses when referring to riverside areas, both allowing the potential and weaknesses of the scientific knowledge accumulated in the literature to date to be revealed and shedding light on future research. The study also extends to the authors and institutions with the greatest relevance in this area, potentially facilitating new collaborations in the universe of scientists interested in the subject.

The methodology adopted attempts to establish a bibliometric evaluation of the existing literature in two databases: "Scopus" and "Web of Science", later migrating the results to the Biblioshiny software program (Patil, 2020). This method was carried out in two phases. The first phase included a general literature review on "Waterfront Development", "Riverfront Development" and "Riverfront Planning", key concepts most commonly used in riverfront research. In this phase, over 700 separate articles from these two databases were used. In the second phase, metropolitan areas were explored for their importance, as well as their social, economic, and environmental impact. The same method of analysis was applied to the bibliometric analysis, using the keywords "Metropolitan Waterfronts" and "Metropolitan Riverfronts". At this stage, more than 100 different articles were collected. In both phases, the search was restricted to only include English language articles that had undergone a full publication process. At the end of the study, the two analyses were subjected to a process of comparison. As a result of the research, it was observed that there has already been much elaborate work done on the concept of environmental sustainability in the relevant literature on the development of riverside areas. However, the literature on governance, economics, and public space, among other topics, was found to be at a more incipient stage. It was observed that

research on the concept of urban riverfronts is concentrated in certain regions, and that there is a need for new research that includes other countries. Collaborations between countries, publications, and authors are limited to specific topics and regions; in an increasingly globalised world, it is essential that regions identified as missing from the literature also become the subject of new research and collaborations.

Keywords: Bibliometric Analysis, Riverfront Development, Metropolitan Riverfront, Planning Urban Riverfront

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A PRIORI TERRITORIAL DESIGN VERSUS A POSTERIORI TERRITORIAL IMPACT. THE EFFECTS OF ECOLOGICAL RESTORATION PROJECTS IN THE VENICE LAGOON (563)

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Historically, the methodological approach to the Venice Lagoon landscape has been structured in terms of either emergency policies and laws (Legge Speciale per Venezia, 16 Aprile 1973, n. 171) or major engineering interventions (MOSE Modulo Sperimentale Elettromeccanico, 2003-2023) under the aegis of an outmoded “philosophy of engineering” (Vianello, 2021). Therefore, to revolve such a perspective, three propositions are presented to rethink the Venice Lagoon from an Urbanism and Ecological perspective, in light of the current climate, creative and political crisis: the city *versus* the system, pasts and futures *versus* the very present, and *a priori* territorial design *versus a posteriori* territorial impact. The proposed contribution focuses on the third proposition.

“*A priori* territorial design *versus a posteriori* territorial impact” identifies recent ecological restoration projects in the Venice Lagoon that, apparently disconnected, are fostering hope by co-design through the use, maintenance, and care of delicate water landscapes. If well-networked and harmoniously coordinated, these “hopeful environmental stories” (Martin, 2022, p. 16) are implementing a territorial impact *a posteriori*. They share a resistance approach to territorial resilience and adaptability, made of activism and endurance, to shift the perspective on how the Venice Lagoon is read, conceived, and designed. Through the participation and partnership in ecological restoration projects, academia, local associations, NGOs, and municipalities are actively participating in the definition of a “Lagoon Water Community”. Such a community would engage with an under-represented network of people and collectivities, where a shrinking local population and over-tourism define the sociocultural trend.

The proposed contribution focuses on what happens when conventional territorial scale design and planning are not successful. The Venice Lagoon can be read as an inter-territorial landscape *per se*, characterized by complexity, contradiction, and fragility. In this historically contested territory, shaped and regulated by humans, uncountable layers of administrative management and jurisdiction contribute to such complexity. A critical reading of liminal practices from an Urbanism and Ecological perspective is required to assess the impact of site-specific and small-scale Design with Nature projects (McHarg, 1969; Steiner et al., 2019). As Donna Haraway argues in *Staying with the Trouble*, “the task is to make kin in lines of inventive connection as a practice of learning to live and die well with each other in a thick present: our task is to make trouble, to stir up potent response to devastating events, as well as to settle troubled waters and rebuild quiet places” to foster “unexpected collaborations and combinations”. The goal is to understand and potentially identify these testing projects as exercises of survival “on a damaged earth” (Haraway, 2016). A research question is thus hinged on the method of inquiry: *how can diffused micro-projects thrive for a territorial and mindset impact, toward a systemic change? How can they build synergies a posteriori?*

The ongoing study on the Venice Lagoon aims to build on existing narratives to formulate further descriptions and explorations rather than strict definitions. Rather than perpetuating exclusive

and absolute discussions, the research looks for coexistences and, potentially, relational contradictions in the Venice Lagoon landscape.

Keywords: Venice Lagoon, Ecological Restoration, Territorial Impact A Posteriori

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ADDRESSING THE HOUSING SUPPLY ISSUE IN THE GREATER TORONTO AREA (568)

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During the Covid era there has been significant increases in house prices in a number of major North American markets. Housing analysts have found that the lack of housing supply is a major cause of the house price increases. Toronto, and the Province of Ontario, has recognized the affordable housing issue needed to be addressed by creating a Housing Affordability Task Force to advise the government on policies to address the issue. In the Canadian government framework the Federal Government addresses housing policy funding programs through the Canada Mortgage and Housing Agency, but Provincial government creates policy that regulates local land use policy as well as provides funding for infrastructure and some housing programs.

The Task Force identified that 1.5 million new homes needed to be built in the next ten years to address that housing supply issue and proposed a number of recommendations to support the objective. The Provincial government has initiated policies to undertake a number of the recommendations. The objective of this paper is to assess these policies that have been introduced by the Province and municipalities to address the supply issue. This includes assessing recommended policies and actions that have not been pursued.

Some insights may be gained by considering the policies undertaken in other North American jurisdictions as well as some European examples such as Sweden.

Despite market shifts, a cooling off and actual decrease in prices in most North American including Toronto resulting from mortgage rate increases in recent months, it is important to recognize that the lack of supply is a systemic longer-range problem and still must be addressed despite the recent cooling of the market.

In conclusion, recommendations will be made regarding which policies may be most effective, and which additional policies are required in the Ontario context. This will provide insights for other jurisdictions that also face housing supply shortage issues.

Keywords: Housing supply, Regional Housing Policy, Housing Post Covid

URBANITY AND “NEW NORMAL” (574)

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The tensions between different development dynamics of transformative processes in social, economic, and physical environment, between growth and limits of sustainability, between global economic growth and distributive injustice, between globalisation, complexity, development uncertainty and communities` resilience have become objects of broad discussion among planners, academicians as well as policy makers at the turn of centuries.

Worsening the climate change effects, COVID19 pandemics and war in Ukraine act as catalysers of the problems and transformative processes. At the same time they raised awareness about how pressing, complex, and global these problems are, about impossibility to turn back to “normal” as we knew, but necessity to look for “new normal”. The conceptualisation of the “new normal” was the object of the research undertaken at the SPECTRA CE EU at the STU in Bratislava in 2022, the outputs of which are presented in this paper.

In the countries with an innovation-based economy and knowledge-based societal development “urban space” has become a crucial place for overall societal transformation, for developing and disseminating innovations - the places where mobility, flows, networking and all their dynamic interactions take shape in a concentrated and complex fashion of new urbanity.

New contents of urbanity as the main attractor for forthcoming process of global urbanisation brings extension of the urban space beyond the border of built-up areas of the cities into the functional urban areas and at the same time its extension into the virtual space accommodating more and more functions typically settled in urban space. The content of urban space is changing as the demands on its functions and its quality changed. The continuity of physical urban space so important for identification and positioning of individuals and communities in the time and space is confronted with the discontinuity and virtualisation of its use (virtual presence in the space incl.).

Bi-polar parallelism in using urban spaces (presence of one person in two spaces and use of one space by several users in parallel), development of new spacio-temporal structures and fuzzification of spaces extend urban space into new dimensions framing their new dynamics so important for the development of technical, social and environmental innovations, for the development of creative environment.

The prospective of growing urban population just referring to the population living in the settlements with official status of cities is no more correct. Urban population has to be defined as population with urban way of life – the population co-creating and profiting from new affordability of urbanity supported by its partial dematerialisation (independence from the quality of physical environment due the ICTs) and by transformation of rural settlements.

Contemporary city represents new quality going beyond old definition of urbanity. Places and flows in the contemporary city are a point of intersection of the local and global, between the natural and the man-made; intersections between new urban economy, new urban ecology and

new urban society create synergies. So, rethinking the City and its governance, focusing on efficient management of the interplay among social, economic and natural ecosystems, among new urban economies and urban ecosystems providing services relevant for economic progress and of existential importance seems crucial in catalysing transition to a new form of urban socio-ecosystems resilient in the face of global and 'intrinsic' emergencies and crises.

Keywords: Urbanity, new normal, urban economy, urban ecology, organ society

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Funding:

This paper was supported by Slovak Research and Development Agency, project APVV-21-0099.

IN-BETWEEN STABILITY AND ADAPTABILITY: ENACTING INNOVATION PLATFORMS AS LEGITIMATE ACTORS IN URBAN PLANNING AND DEVELOPMENT (586)

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Innovation platforms are new collaborative organizations in the urban development context that aim to support innovation. They both gather different organizations and actors, and act as flexible intermediary links between the same (Parjanen, S. & Rantala, 2021; Hakkarainen & Hyysalo, 2016; Ansell & Gash, 2018). By being intrinsically fluid and flexible and adaptable in form and function, the innovation platform can be seen as an organizational accomplishment, or enactment (Weick, 1995) of adaptive planning. Adaptive planning call urban planning actors to develop the capacity to cope, respond and adapt to change by opening up its processes to other actors (Rauws, 2017; Rauws & de Roo, 2016; Janssen & der Voort 2016). Central to adaptive planning is balancing between organizational flexibility and stability, which also is intrinsic to any public innovation work (Agger & Sørensen, 2018). Public sector innovations are often perceived to require open and experimental trial and error strategies - while their institutional setting simultaneously requires stability, not least in an urban planning context where stability and predictability are related to the legal frameworks and functioning of democratic decision-making bodies (Janssen & der Voort 2016). The aim of this paper is to analyse how individuals working in innovation platforms make sense of their organization in the intersection of flexibility and stability. Based on interviews with key actors as well as desktop studies of 15 innovation platforms in the Nordic countries, and by adopting an organizational and sense-making perspective (Weick, 1995), we analyse how actors in platforms enact their organizations and their environment through processes of belief-, and action driven sense-making. We conclude that despite innovation platforms' strong advocacy - and sense-making - in terms of adaptability and chameleon-like characteristics, stability is enacted through making sense of themselves as a legitimate and necessary position/node in urban development and planning.

Keywords: innovation platforms: urban development; sense-making

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RESPONSIVENESS OF SPATIAL PLANNING ON THE CASE OF URBAN TOURISM IN CENTRAL EUROPE (614)

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The development and growth of urban tourism are both considered as major factors influencing development in contemporary cities. Although tourists and visitors have always been an essential part of cities, their presence has increased significantly in the recent decade. In Europe, cities have been turning towards tourism as a means of economic recovery and reconstruction in the aftermath of the 2008 economic crisis as well as in light of the turn from industry into service-based economy. This was complimented with phenomena like the rise of short-term rentals, low-cost flights, active promotion of urban destination, and development of new digital technologies, which have contributed to urban tourism becoming one of the fastest growing types of tourism. As a result, urban development has become increasingly intertwined with tourism and due to the many spatial impacts tourism has on cities, a response by spatial planning is necessary.

Cities have been promoting development of tourism especially for its multiplicative positive impacts on the economy, but its development comes with specific issues and challenges, as it causes various (positive and negative) environmental, societal and economic impacts, most having a strong spatial dimension. Without appropriate (spatial) management, mitigation and adaptive measures guiding towards responsible and sustainable development of tourism in cities, unregulated growth of this phenomenon can escalate to the appearance of overtourism, gentrification, airbnbisation and other pressures/changes of the urban space. Despite high levels of growth in recent years, only shortly abrupted by the COVID-19 pandemic, urban tourism is still lacking adequate consideration in European spatial and urban planning (Galdini 2007; Nadin et al. 2018), and measures addressing the potential negative impacts of unregulated (over) development of tourism often remain unaddressed.

In this paper, we are aiming to identify the extent of consideration and the approaches guiding urban tourism development in strategic spatial planning policies over the last few decades. This will be done with a historical analysis using the responsiveness theory to look into how well (planning) policies detect and adopt to changes (Salet & Woltjer, 2009; Rauws & De Roo, 2016; Rauws, 2017; Chan et al., 2020; Degner & Leuffen, 2020). The case study will be carried out for four European cities representing different types of spatial planning and tourism development trajectories, i.e. Bratislava (Slovakia), Hamburg (Germany), Ljubljana (Slovenia) and Turin (Italy), for which strategic spatial planning and urban development documents of the last few decades (dependent on the existence and availability of such policies) will be gathered and analysed. Based on the analysis carried out, paper looks into the planning approaches applied in strategic documents as a response to the (potential) social, economic, political, and environmental impacts of tourism on urban development. We will assess the responsiveness (according to the criterion of perception and adaptability to changes in space) of strategic spatial planning types to the development and growth of urban tourism.

Keywords: Responsiveness, Strategic spatial planning, Planning, Urban tourism, Case study

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PLANNING WITH SCENARIO THINKING AS A PRACTICE OF KNOWING (624)

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Strategic spatial planning has a specific commitment to future. It can be regarded as concerned with the future transformation of place and is constantly searching for ways to imagine different futures creatively and collectively (Albrechts, 2005; Hillier, 2011). However, a lot of traditional planning has been about maintaining the existing order rather than challenging and transforming it (Albrechts, 2005). This in combination with the need to address the ‘radical’ uncertainty (Zapata and Kaza, 2015) of the futures, and to account for the diversity of the publics that inherently shape the future (Hajer and Wagenaar, 2003), creates a need for rethinking the praxis of strategic spatial planning (Hillier, 2013). While there is an agreement that strategic spatial planning should be dealing with the uncertainty of the future, there is less clarity about how exactly to deal with such futures.

This paper is focusing on a future thinking approach that could be used to deal with both imperfect foresight as well as with the diversity of the public, all shaping the future, namely scenario thinking. In addition to providing views about possible future outcomes, scenario planning is also defined as a tool for challenging comfortable wisdoms about the future, managing future uncertainties, working with human imagination, and creating plausible stories of the futures (Chermack, 2018). Scenario thinking and strategic spatial planning can be seen in many ways as related. This is due to their evolution from the field of strategic planning, in the theoretical discussions and concerns, borrowing from the same authors, using for example the concept of framing, but worldmaking, as well. They both also deal with futures and working with futures through the elements of stories, increasingly in a collaborative and participatory manner.

While the need to incorporate future thinking methods has been emphasized in strategic spatial planning, there is very little literature that specially adapts scenario thinking and scenario planning techniques to strategic spatial planning context. Scenario thinking techniques need to be actively modified and developed for strategic spatial planning specific tasks and challenges. This would help to link the theoretical need to actual practice.

This paper discusses how scenario thinking can support and be in dialogue with the capabilities and knowledge needed in strategic spatial planning (Davoudi, 2015; Mäntysalo and Grišakov, 2016). The theoretical argument of the paper is further illustrated by four cases that encompass a total of six scenario projects. They all apply scenario methodology to a territorially defined context.

Based on identified research gaps in literature, the paper is exploring three interrelated capabilities that help planners to address the future with authority.

- the capability to critically compare and use scenario planning documents and re-use their output as new input for designing future scenario projects and/or spatial planning activities.

- the capability to design scenario projects in the context of strategic spatial planning, especially focusing on the aspects re-framing, evidence and intuition in the overall process design and different scenario steps.
- the capability to create scenario stories, focusing on how the knowledge collected during the scenario project can be interpreted and mediated as scenario stories and story visuals to support planning process.

Finally, these crucial capabilities are integrated, to discuss how scenario thinking as an iterative process can be linked with the wider practice of knowing in planning. Not exclusively to be used for the purposes strategic framing but also to support reflective planning practice in general.

Keywords: knowledge, scenarios, evidence, uncertainty, strategic spatial planning

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EUROPEAN AND CHINA'S LOCALIZED ANALYSIS ON RURAL TRANSFORMATION THEORY UNDER THE INSTITUTIONAL CHANGE OF THE MULTIFUNCTIONAL AGRICULTURE REGIME (633)

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After World War II, rural in Europe followed a development path from "productivism" to "post-productivism" (Zhang et al., 2014). At present, the focus of China's rural agriculture has gradually changed from agricultural production to the satisfaction of social needs, such as ecosystem services and cultural landscapes (Liu and Liu, 2018). Essentially, the process of agricultural regime transition is complicated and long (Wilson, 2001). The functional gap between traditional agricultural production and new industries, or the perceptual gap between grassroots and higher-level actors, will lead some rural in China to the tragic end of decay or alienation. The European discourse of productivism and post-productivism is important in contemporary China's context, especially for rural living by the traditional agricultural production systems, such as rural at agricultural heritage sites. However, the theory of rural transformation under the institutional change of the Multifunctional Agriculture Regime is almost exclusively in a UK context. It is not suitable for the Chinese scenario. There are two examples. Firstly, rural Europe has entered the post-productivism stage on the stable basis of industrialization and urbanization, while the Chinese rural transformation is pressured by rapid industrialization and urbanization. Secondly, the post-productivism transformation of rural in Europe is gradual, while the transformation of rural in China has abrupt changes because of policy intervention. Therefore, it is necessary to conduct a Chinese localized analysis. Based on the methods of literature review and fieldwork, we compared the important context of rural development in Europe and China. Then we explained the differences in the post-productivism transformation of Europe and China from seven dimensions: ideology, actors, food regimes, agricultural production, agricultural policies, farming techniques and environmental impacts (Wilson, 2001), using cases to support the explanation. It is aimed to put forward a theoretical framework for Chinese rural transformation under the institutional change of the Multifunctional Agriculture Regime.

Keywords: post-productivism, multifunctional agricultural regime, rural transformation, Chinese localization

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ENSURING THE SECURITY OF CRITICAL INFRASTRUCTURES (CIS) IN TURBULENT TIMES: THE “PRECINCT” HORIZON 2020 PROJECT (647)

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Contemporary planning strategies designate Critical Infrastructures (CIs) as the regulatory mechanisms required to organise fundamentally diverse urban territories to achieve social and ecological resilience, gradually becoming the ordering mechanism of the urban field (Waldheim, 2016) and the main parameter of the contemporary urban condition (Graham & Marvin, 2001). However, a variety of risks have the capacity to paralyse these CIs and impact their ability to perform their organisational and regulatory role.

CIs are increasingly vulnerable to the risks posed by extreme natural phenomena and targeted cyber-physical attacks, but also sophisticated hybrid threats. In recent years, these risks have further been exacerbated by the effects of the COVID-19 pandemic causing strains on already stretched first responder agencies and reducing funding available to improve resilience. The security, protection, and preparedness of certain CIs have been the focus of current research leading to the development of novel and innovative solutions. However, managing the impact of cascading effects arising from the interdependencies between different types of CIs towards enabling “rapid recovery” is becoming increasingly pertinent and is highly challenging, especially in the context of delimited urban areas (techtarget, 2020).

In this light, it becomes apparent that society needs to adapt and respond to new and continuously changing realities before we are caught unprepared (Poljansek et al, 2021). When dealing with these threats, an approach complementing the transition from traditional risk management to a vulnerability and resilience management approach is needed (Rod et al., 2020). The European Union (EU) seeks to reduce the impact of disasters within its territory by developing knowledge-based disaster prevention policies at all levels of government, linking the relevant actors and policies throughout the disaster management cycle, as well as improving the effectiveness of existing policy instruments with regard to disaster preparedness and mitigation.

In this light, the “PRECINCT” (Preparedness and Resilience Enforcement for Critical INfrastructure Cascading Cyberphysical Threats) EU co-funded Horizon 2020 project (grant N° 101021668) aims to connect both public and private CIs stakeholders (transportation, telecoms, water) to a common cyber-physical security management approach, yielding a protected territory, both for the infrastructures in question and for the urban context in which they are located. The “PRECINCT” Living Labs (LLs), located in 4 EU cities (Antwerp, Athens, Bologna, and Ljubljana), currently provide measurement-based validation of improvements across multiple axes of instrumentation. Each LL establishes a CIs Coordination Centre and will produce a Blueprint for Standardised Message Exchanges, a generic Digital Twin Architecture, as well as a Serious Games and Cyber Rage-based experiential training environment. In the case of the Athens LL, a metro

line, the tolled highway and the airport build up a system of interlinked transport CIs impacted by a hypothetical bomb attack at a metro station. The cascading effect of an energy blackout degrading metro operations is also investigated. Operational-driven advancements, stakeholder exploitation and adoption, evidence-based policy recommendations and showcases stimulating broader pan-EU take-up will also be driven by LL-linked activities.

This paper attempts to illuminate the challenges encountered and the results achieved in the “PRECINCT” project. By analysing the LL-linked activities, a model-driven, collaborative, and unifying cyber-physical security and resilience management platform is showcased. This enables us to reflect upon the possibilities of upscaling and expanding the project’s solutions.

Keywords: critical infrastructures; urban resilience; cyber-physical security; cascading effects; living labs

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COMMUNITY PLANNER AS AGENT OF STATE FOR URBAN MICRO-REGENERATION DECISION-MAKING: THE CASE STUDY OF SHANGHAI (653)

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In recent years, compared with the large-scale, capital-intensive urban regeneration models, a small-scale, incremental micro-regeneration project (15-minute city), has shown its potential in fostering urban resilience and inclusiveness in the face of environmental, socioeconomic, and political uncertainty (Moreno, Carlos, et al., 2021), especially in metropolis.

Shanghai is the first city in China to explore the "15-minute city". The main purpose of a series of related public policies is to restructure the urban governance by scaling down the state space into community levels through integrated community planning(Wu, Fulong, and Fangzhu Zhang, 2022).

The systematic design of community public open spaces system plays a key role in the 15-minute city which help local community reactions to the uncertainty of environmental, socioeconomic, political, etc. Their transformability and inclusiveness on the community environment make them strategic nodes for acupunctural regeneration with systemic effects(Tong Ming, and Bai Xueyan, 2022). However, a prominent problem exposed in practice is a gap between the incremental, fragmented and networked micro-regeneration theoretical investigation and the need for public administrations to devise feasible solutions, strategy and implement mechanism for integrated planning.

This paper focuses on this mediation, presenting an overview of the decision-making process for the micro-regeneration of the system of community public open spaces in the Caohejing community (Shanghai, China). In this case, an incremental approach and an Action planning method, supported by Community Planner System, have been employed to work as agent of local government for a participatory process through (1) analyzing socio-spatial patterns of urban community fabrics and (2) using the analysis results to recombination workflow of micro-regeneration projects.

At the core of our proposal is the consideration that the community planner is not a prescriptive but dialogic tool; it is a base for collecting and integrating input from different actors in a participatory process that includes researchers, experts, stakeholders, and citizens. Representing the requalification strategy's backbone, for both local and systemic scales.

Keywords: community planner, urban micro-regeneration, 15-minute city

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A CRITICAL REVIEW OF URBAN SPRAWL INDICATORS IN THE CONTEXT OF METROPOLITAN AREAS (682)

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Urban sprawl is a common phenomenon in different cities around the world. It is mostly viewed as a western urban development pattern. It comprises multiple dimensions and has a wide scope, being manifested and defined in several different ways (Yasin et al., 2021). Urban sprawl could be essentially described, by a fast (largely disorganized, mono-functional) expansion of the geographic extent of cities, often characterized by low-density residential housing, scattered urban patterns, discontinuities and increased dependency on private transport.

Measuring sprawl is a challenging task, as there are no universal measurement methods or unique indicators. The latter generally depend on the local context and the available data (Tian et al., 2017). Overall, indicators that emerged first focused on population density, land expansion and job accessibility. In more recent studies, urban sprawl has been conceptualized as a multidimensional phenomenon and several multidimensional indexes have been developed. Some of these measures could include land use growth patterns/rates, urban density, entropy (e.g., dispersed vs. compact), spatial-geometry of urbanized areas like fragmentation and polycentricism, accessibility (e.g. transportation infrastructures), decentralization of population and land resource impact measures, like losses on farmland, habitats or nature wetlands, among others (OECD, 2018). In addition, the use of Geographic Information Systems (GIS) and remotely sensed data could provide alternative frameworks, e.g., determining core, fringe and periphery areas of the cities based on explicit amounts of urban land, land cover densities and standardized ring-buffer sizes. Measures like these could facilitate the comparison of cities within and across nations (Schneider and Woodcock, 2008).

Previous attempts to measure urban sprawl in metropolitan areas have mostly used simple measures, with only one or two variables based on the population density (e.g. *USA Today's sprawl index*, developed by El Nasser and Overberg, 2001). So, there are still major limitations with many proposed methods for sprawl measurement, namely, the use of a high number of indicators, difficulties on their integration and implementation, unreliable metrics and some simplistic characterizations of urban sprawl.

Therefore, this paper aims to offer a critical review of the urban sprawl indicators presented in the scientific literature. A particular focus will be given to metropolitan areas mainly due sprawl being common in those areas. It seeks to contribute to a better understanding of sprawl in metropolitan areas, exploring the range of techniques used to quantify it. Moreover, this review intends to bring an alternative and conceptual perspective, where it will try to identify which indicators and approaches are less or more appropriate for sprawl measurement in the metropolitan context, depending on the type of data available.

Keywords: Urban sprawl; sprawl measurement; Transportation; Metropolitan Areas

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BEYOND ADAPTIVE GOVERNANCE: LEARNING FROM THE SOUTH ON DEALING WITH UNCERTAINTY THROUGH A CONTEXTUALIZED CONTINGENCY PLANNING APPROACH (679)

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Recent decades have witnessed an increase in unprecedented crises due to climate change, financial crises, pandemics, armed conflict and protracted displacement, and the multiple and cascading consequences of such unprecedented crises. The increasing occurrence of such crises in urban areas have resulted in the blurring between spatial planning, development, and humanitarian action, and spatial planners and humanitarian actors are therefore increasingly required to work jointly on issues by involving decision makers at multiple levels, community actors and NGOs to deal with uncertainty in a flexible and adaptable manner. This paper attempts to bridge parts of the gaps in theory and practice regarding planning, decision-making and governance approaches towards uncertainty. The paper builds on previous work undertaken on the same from a spatial planning perspective (Rauws, 2017; Zandvoort et al., 2017; Koshy et al., 2022) to formulate a *contextualized contingency planning approach* to address uncertainty.

To shed light on the same and to recenter planning practice in lesser-known global south developmental contexts (concurring with Robinson (2016)), this paper uses the unprecedented floods that occurred in 2018 and 2019 in Wayanad, a peri-urban, spatially dispersed hill district in Kerala, a coastal province in the south of India as a case study of uncertainty. The empirical findings highlight the need for a proactive planning, decision-making and governance approach wherein the approach takes into account compounded uncertainty, as well as enables the articulation of inherent urban complexities which influences decision-making under short- and long-term uncertainty in developmental contexts. In addition, the findings also point to the need for cross-sectoral and multi-level forms of decision-making arenas to improve governance and institutional responses to uncertainty.

The preliminary literature review finds that the contextualized contingency planning approach has synergies with the normative dimensions of the concept of adaptive governance. Drawing on the empirical findings from the case study, the paper puts forward six principles of adaptive governance that could potentially be of value in developmental contexts while dealing with uncertainties, namely *localized, contingent, fast, flexible, frugal, and incremental*. Furthermore, the article aims to elaborate how a contextualized contingency planning framework could bridge some of the limitations of the adaptive governance framework.

Keywords: Uncertainty, spatial planning, adaptive governance, environmental crises, global south

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ANALYSIS OF RESEARCH HOTSPOTS AND TRENDS OF RESILIENT CITIES AT HOME AND ABROAD SINCE THE NEW CENTURY WITH KNOWLEDGE GRAPH (694)

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Taking CNKI and Web of Science databases as data sources, using Citespace6.1.R2 software to draw a knowledge map, and analyze the research hotspots and trends of resilient cities at home and abroad since the new century. The research found that: (1) From 2000 to 2022, the number of papers published at home and abroad has experienced the budding period (2000-2010), the rapid growth period (2011-2019), and the rapid outbreak period (2020-2022), among which the number of foreign papers is more, the speed of domestic literature is growing faster; (2) domestic and foreign literature authors and research institutions have basically formed a cooperation network system with major architectural universities as the main body. (3) Key words and keyword clustering analysis show that research on resilient cities at home and abroad has long focused on the three major areas of "climate change, stormwater management, and infrastructure planning"; (4) Research on resilient cities can be divided into three categories according to development time. There are three stages, and the research hotspots in each stage are different. The current foreign research hotspots are "green infrastructure, smart cities, and biodiversity", and the domestic research hotspots are "epidemic prevention and control, urban renewal, and community governance." European and American countries and scholars have laid the foundation for this field. China started late but developed rapidly. Through comparative studies at home and abroad, we will explore the research hotspots and trends of resilient cities since the new century, in order to provide reference for China's future research on resilient cities.

Keywords: knowledge map; new century; resilient city; hotspots and trends

THE INCLUSIVE URBAN FUTURE? (703)

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Disney's Zootopia is an imaginary city where animals of all kinds exist peacefully, and accept differences to build a truly inclusive and well functioning society. While watching the movie, one can wonder if humans are capable of living in this seemingly unimaginable utopia. Zootopia in this regard represents the urban future that has been imagined by present-day cities. While city-stakeholders and urban planners chase the ideals of the Global City (Sassen, 1991), addressing the increasing disparities and inequalities often takes a back-seat. Inclusivity thus merely obtains a buzz-word status in urban development because the creation of a truly inclusive city is often thought as a utopian idea fit for animated movies. Nonetheless, renewed national and international attention has now been given to developing the Inclusive City, a place where everyone, regardless of their economic status, gender, race, ethnicity or religion, is enabled and empowered to fully participate in the social, economic and political opportunities that are on offer. (United Nations Centre for Human Settlements, 2000)

Based on the above definition of the Inclusive City, this paper seeks to understand the approach through which the idea of the Inclusive City transforms the vision of the urban future and the present urban space. This is achieved by leveraging a case based analysis of Medellin, Columbia. The paper is divided into six substantive sections; the first section attempts to understand where the need of the Inclusive City is derived from, it throws light upon tools of exclusion and provides an institutional and policy context against which the idea of the Inclusive City was born. The second section assesses the relevant academic theorisations and conceptualisations of the Inclusive City; it highlights the distinct academic narratives and approaches to study the Inclusive City and lays out their points of convergence and divergence. The third section briefly describes the case. The fourth, fifth, and sixth section look at different approaches towards the Inclusive City, how they have transformed Medellin and what potential urban future can these approaches of the Inclusive City offer. Thereafter, concluding reflections are made on how the vision of the Inclusive City affects the urban future and how it has changed urban ideas and structures of the present. Furthermore, based on the case study, the paper points out key practices for transforming the vision of the Inclusive City from an urban utopia to reality.

Keywords: Urbanisation, Future City, Inclusive city, urban adaptation

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DE-GLOBALISE TO GO CIRCULAR? REORIENTING INTERREGIONAL FLOWS TOWARDS CIRCULAR ECONOMY TRANSITIONS (714)

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Major international policy trends, such as the EU Green Deal and recent globalisation shocks like Covid-19, Brexit and the war in Ukraine, will affect the growth and distribution of interregional flows of goods, capital, people, services and knowledge in Europe, which has implications for regional futures. In this paper, we argue that, while creating immediate challenges, these deceleration trends that decouple regions from (some) global flows have the potential to catalyse circular economy transitions. Ideally, these transitions should help regions become more sustainable, but they may also lead to new conflicts, especially regarding spatial organisation and governance.

We contribute to this debate by exploring the case of South Holland, a dense and highly industrialised region where the Port of Rotterdam acts as a key player in global networks. In this region, space is a scarce and contested resource, and organising different interregional flows has implications for land use planning, exacerbating the current spatial tensions. The activities related to these flows compete for and occupy space differently, creating tensions with local needs, such as housing and infrastructure. As these problems gain prominence, circular economy transitions become a timely paradigm in policy discourses, because they entail relocalising material loops and closing them within regions to reduce emissions caused by transport of materials and take advantage of proximity.

Therefore, this paper proposes to move the focus away from tackling the negative effects of potential de-globalisation trends on regions. Instead, we critically explore the challenges and opportunities of seeing these developments as catalysts of the transition towards circular economy, using a spatial approach as a lens to rethink regional futures. The paper's insights can inform spatial planning and regional policy, especially in globally connected regions similar to South Holland, providing lessons on how to turn the ongoing transformations of interregional flows into opportunities.

Keywords: circular economy, interregional flows, spatial competition, spatial governance

FROM TRADITIONAL INDUSTRY AREAS TO MIX USE URBAN CHANGE (741)

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The departure of traditional industry from dense urban areas, is a global phenomenon, affecting the urban economy and the spatial structure of cities. Past considerations for industry location, such as proximity to shipping lanes or energy source such as rivers, become secondary or completely irrelevant (Naveed, 2018). "Push" and "Pull" considerations are changing the ways industry relocate itself. The most dominant considerations are environmental regulation, drop of product demand, and above all- the economic benefits that can be resulted from the re-use of land, in more profitable way (Osman, 2015. Zhu, 2000).

These changes does not happen all at once, and sometimes take few decades. Re-Development of "brown fields" requires investments and risk management by the private market, and support of local authorities (Cappi, 2018). Local authorities are required to manage these intermediate situations, in light of an overall policy so that the desired direction of change – in a public perspective, would be maintained, and the ultimate goal of the policy is fulfilled (Tintera 2010).

The degree of intervention by local authorities matter. It affects the level of certainty, trust and motivation of the different "actors" in the complex process of planning and re-building. Based on comparative study, it appears that the debate regarding the degree of intervention lay on a scale between intervention that is flexible, such as policies and programs, to more rigid action such as putting on binding measures, or statutory urban plans.

Head planners of large cities in Israel, think that two main considerations are most important, when looking on the subject: The first is the economic benefits for the city, both for the near future and in the long run. The second is the urban benefit, which concerns connections to the existing city, transportation and traffic, architectural concept of the project, as well as environmental considerations. Some local authorities found ways to financially incentivize projects to enhance and support action. The Head planners found it was necessary to formulate policies to create certainty for the entrepreneurs, act consistently in decision-making and define the "rules of the game" for the area.

The study found that in re planning large complexes, "mixed-use" is the preferable concept. Mixing uses is economical for entrepreneurs, and contributes to the creation of a diverse environment, both in terms of uses and in terms of tenants and users, and is beneficial to urban vitality and life (Dovey, 2018. de Hoek, 2008).

Other Insights:

When the change starts – it is almost impossible and not desirable to stop it.

In order to direct, accelerate and promote such processes in the preferred directions, it is desirable that the local authority identify the process, formulate a policy, follow its implementation and update it from time to time.

The plan can be a flexible policy, or a statutory plan depending on the case in question.

It is recommended to allocate management resources to direct the complex and long process, either by establishing a separate institution or as a unique responsibility within an existing body.

Keywords: redevelopment, abandoned industrial sites, Land Use Change, urban policies

THE IMPACT OF URBAN STREET CANYON MORPHOLOGY ON THE MICROCLIMATE ENVIRONMENT: THE CASE OF THE THREE REPRESENTATIVE BUSINESS DISTRICTS IN SEOUL, KOREA (746)

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As urbanization progresses rapidly worldwide, high-density development is inevitably occurring around major cities, reducing wind speed and atmospheric circulation and resulting in various environmental problems. Korea also has an urbanization rate of 81.9% (2021), and Seoul, the capital of Korea and a representative high-density city, has considerable spatial variability in microclimate and pollutant dispersion patterns. Especially, with the complex land surface, urban morphology and heavy transportation, the major commercial and business districts (Figure 1 & 2 - Central, Gangnam and Yeoido Business Districts) have strong street canyon characteristics. The interaction of urban street canyon morphology and heavily polluted traffic emissions give rise to thermal and pollutant exposure threats to citizens in urban megacities. Accordingly, it is very important to minimize the potential health effects for the general public through detailed investigation and simulation analysis of urban microclimate and ventilation in the face of challenges for the liveability, sustainability and resilience of urban planning.

The method of this study is as follows. 1) A study on the characteristics of climate conditions and spatial structure in each region. 2) Analysis of vulnerable areas using the index of urban heat island (UHI) and air pollution levels (NO_x, PM_{2.5}) through ENVI-MET simulation. 3) Analysis of the correlation between urban street canyon morphology and microclimate environment. 4) We present an alternative by visualizing the mitigation effects through street tree planting, rooftop greening, and green open space planning in vulnerable areas.

Through this study, the correlation between the geometrical characteristics of urban spaces, an especially urban street canyon formed by street high-rise buildings and roads, and microclimate (thermal comfort, wind flow, air quality, Etc) are analyzed to promote effective and continuous management of urban spaces. Therefore these results can be applied to establishing sustainable urban forms and for redeveloping urban street spaces in consideration of the microclimate environment.

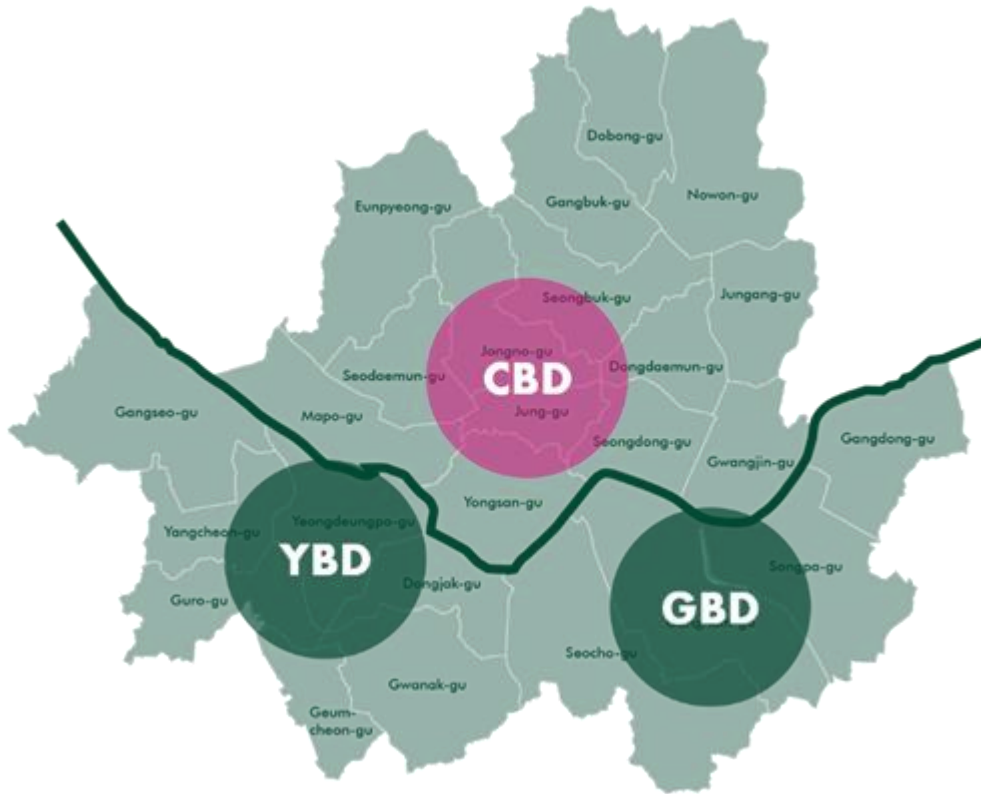


Figure 1. Three representative business districts in Seoul, Korea

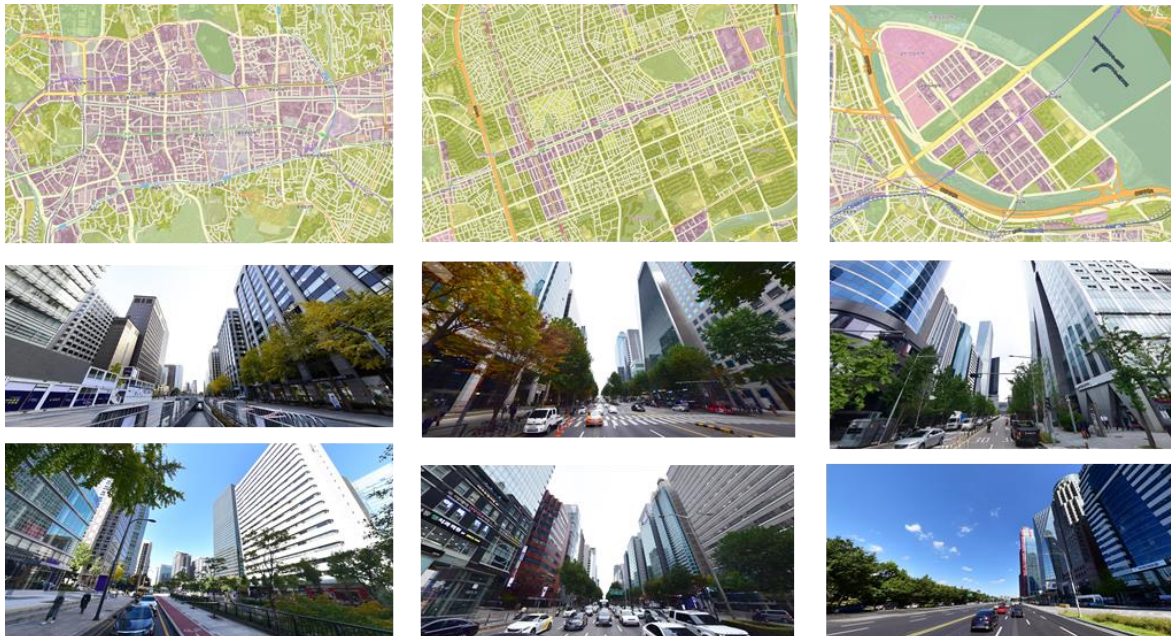


Figure 2. Urban Street Canyon in each business district
(Left: Central Business District, Mid: Gangnam Business District, Right: Yeoido Business District)

Keywords: Urban Morphology, Urban Street Canyon Microclimate Environment, Sustainable Urban Planning, ENVI-MET Simulation

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OVERCOMING THE CHALLENGES OF MUNICIPAL-LEVEL CLIMATE ACTION: THE CASE OF TURKEY (778)

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Local governments are the key actors of local climate action plans that will ensure the active participation of all relevant institutions and organizations in taking local climate action. However, local governments, which have prepared a climate action plan, are relatively limited in number in Turkey. More critically, they have not come a long way in the implementation of the action plans. From this point of view, this article presents the results of a participatory research conducted with a total of 13 municipalities, consisting of metropolitan and district municipalities, concerned with the issue of climate change on the agenda. The research focuses on the difficulties experienced in the implementation of the prepared action plans. The research methodology was carried out using qualitative and quantitative methods and techniques such as group and telephone interviews, questionnaires and participatory workshops. The findings reveal five common areas of difficulties that the participating municipalities encounter. These include the lack of action-oriented knowledge, legal difficulties, personnel/institutional problems, financial difficulties, and lack of collaboration. The research highlights the need of a multi-actor governance mechanism allowing a cross-levelled interaction between national and local authorities for collective climate action.

Keywords: climate change, climate action plan, local climate action, planning

THE REGENERATION CHALLENGE OF THE SHANGHAI FORMER SOCIALIST RESIDENTIAL AREA FROM THE PERSPECTIVE OF DEMOGRAPHY: A CASE STUDY OF THE RESIDENTIAL AREA IN EASTERN SHANGHAI (779)

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In 2022, the Shanghai Municipal Government completes the regeneration of old areas in the central urban area. As a result, the former socialist residential areas have become the main target of urban regeneration in the next period. Because of the deindustrialization and re-urbanization from the 1990s to 2000s, the structure of the population in this area experienced a drastic change, so the writer tried to identify the regeneration challenges through a case study of the residential area in eastern Shanghai—the largest former socialism residential area—from the perspective of demography.

Figure 2: Trends in the age structure of the population
Data Source: Yangpu District Statistical Yearbook

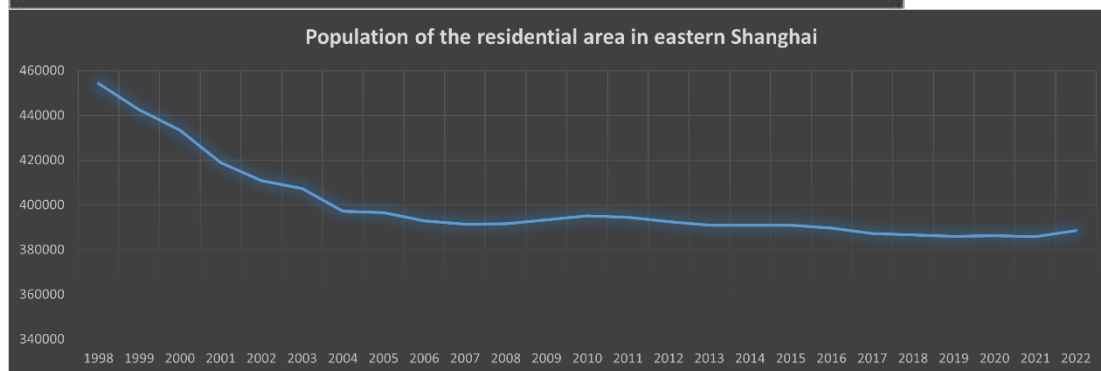
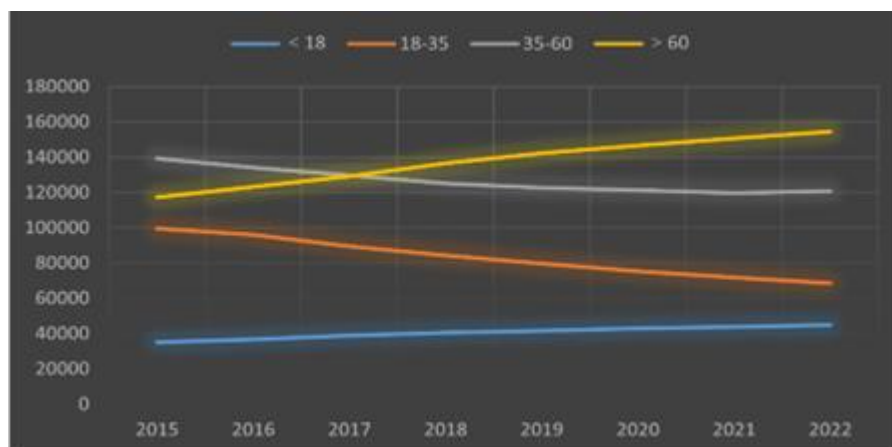


Figure 1: Population of the residential area in eastern Shanghai
Data Source: Yangpu District Yearbook

According to the author's analysis of the government's open-source population data, in the 1990s, after the factories in the eastern part of the city began to retire, the total population of the residential area in the eastern part of the city, which was initially planned for the secondary industry employee, decreased rapidly until 2005. A series of re-urbanization development has completely removed

the industrial land on which the residential area used to live, making the residential area in Eastern Shanghai become a single functional urban high-density residential area.

Figure 4: Fluctuation of registered residence population in the sub-district of residential area in eastern Shanghai

Data Source: Yangpu District Statistical Yearbook

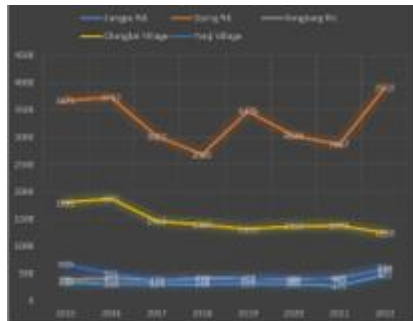
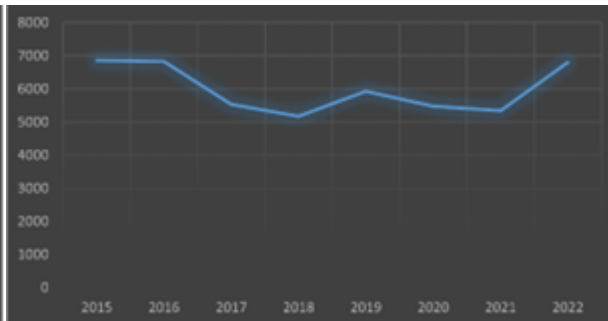


Figure 3: Fluctuation of registered residence population of residential area in eastern Shanghai
Data Source: Yangpu District Statistical Yearbook



According to the analysis of the age structure data of the population from 2015 to 2022, the author notes that although the fluctuation of the total population at this stage is relatively small, the overall aging process is rapid, and the retirement population over 60 years old has increased from 30% in 2015 to 40% in 2022. It means that the region is experiencing rapid aging.

From the perspective of the immigrant population, after 2015, the overall trend was downward, and there were two peaks of the immigrant population in 2019 and 2022. Due to the inclination of macroeconomic trends to related industries, the universities and related industries in Siping Road sub-district received two waves of the population in 2019 and 2022. The other four sub-district dominated by collective residential communities show a trend of convergence and low fluctuation..

From the perspective of the demography, although the population has fluctuated steadily in the past eight years, with the deepening of aging, the unappealing placement of the tertiary industry, and the outbreak of the pandemics, the population of the residential area of Eastern Shanghai will show a significant downward trend in the next few years. The demand for housing and community living will shift in the coming decades from a basic living floor, guaranteed by the quantity and size of housing, to a quality of life with the pursuit of quality. To meet the challenges, the author suggests that the population and function mix should be promoted through the renewal of old space, the placement of the tertiary industry, and the construction of the old-age service system, so that the former socialist residential area in the east of Shanghai can make a smooth transition from the current urban residential area with a single function to the complex urban area with new industries.

Keywords: former socialism residential area, demography, urban regeneration

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ESTUARIES AND CLIMATE CHANGE: A CONCEPTUAL FRAMEWORK FOR COLLABORATIVE GOVERNANCE OF ESTUARIES (816)

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Estuaries are complex ecosystems, subject to highly variable environmental conditions and increasing human impacts (Fidélis et al. 2019). This gives rise to socio-economic and ecological conflicts, posing challenges for suitable estuarine governance (Pein et al. 2022). Given their societal and economic importance, protecting estuaries and promoting their sustainability is of utmost importance for humans and human welfare (Truchet et al. 2022). Thus, climate change and anticipated extreme weather events, such as sea-level rise (Nicholls 2004; Weisse et al. 2014; Nicholls 2015), extreme floods (Aerts et al. 2014; Moel et al. 2015), will pose significant challenges for estuary governance in the future. In this context, a promising approach appears 'collaborative governance', which has already been successfully applied in addressing other environmental and societal conflicts. 'Collaborative governance' is an approach in which state and non-state stakeholders work together to balance competing interests and try to achieve a common goal (Emerson et al. 2012; Ansell and Gash 2008). Although there has been an increase in the number of studies on estuary governance, which call for approaches that balance the needs of various stakeholders while promoting sustainable development, there is a lack of studies that specifically apply 'collaborative governance' approaches to estuaries. To fill this gap, we developed a conceptual framework for collaborative governance of estuaries, based on a review of existing literature and research. Using five dimensions of analysis, we discuss 'collaborative governance' as a possible governance approach for resolving conflicts and supporting sustainable development of estuaries against the background of possible impacts of climate change.

Keywords: estuaries, collaborative governance, climate change, sustainability

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NEGOTIATING THE BROKENNESS: MAINTAINING HOUSING INFRASTRUCTURE IN AKTAU, KAZAKHSTAN (819)

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This paper explores how different actors in the city frame and manage long-lasting infrastructural crises. It explores the broad spectrum of broken and non-broken infrastructure, who and how participates in defining what is a *thing-in-order* or *out-of-order*, and the process of negotiating the *brokenness*.

The infrastructural crisis may not happen as an emergency but condense through years of insufficient funding, collapses, that hasn't been properly repaired, neglect, or simply, the cruelty of age. The crisis I am exploring is exactly that. The city of Aktau, Kazakhstan, located between the Caspian sea and the desert, hasn't got any major housing infrastructure reconstruction or repair work since it has been built in 1968. Water supply, including any fresh water, electricity, heating – it all was and still is provided almost exclusively by the nuclear power plant, for a couple of decades being transformed into the thermal power plant. The power plant has been in desperate need of modernization for twenty years now, but the city keeps growing, despite the fact that it cannot sufficiently provide enough resources even for what was already built during Soviet times.

In all that, here comes the choice of multiple actors regarding how to maintain the infrastructure they have, and how to get it to work. This paper explores the first five micro districts of the city built in the 1960s – 1970s, filled with large housing estates, and how the water supply and heating are managed by different actors. The level of deterioration of housing infrastructure in these neighborhoods has not been properly calculated, but according to experts' evaluation, up to 40% of the water pipes should be urgently replaced and could no longer be repaired. Although with the end or the start of each heating season the micro districts experience breakages, and the pump quite often cannot deliver the cold water to the floor higher than 5, multiple people still manage to sustain it over the years.



I explore different actors involved in housing infrastructure maintenance: residents, maintenance and service companies, authorities, and local and national experts. I rely on in-depth interviews, ethnographic observations, sessions following the maintenance workers, and media and laws analysis. Moreover, I engage with the concepts of *ecologies* (Domínguez Rubio, 2020) of *maintenance*, which allows accounting for the materiality of the infrastructure. The focus on ecological form in this case stresses under what conditions the actors operate in the field of maintenance: what are the affordances of this materiality? When does it start deteriorating? What it really means to be repaired?

Through looking at negotiations regarding the housing infrastructure, I explore the notion of *brokenness* and its limitations. Building on the idea that the functionality of infrastructure cannot be sufficiently described through bipolar states – *in-order* or *out-of-order*, but rather is located somewhere on the pole between them (de Laet & Mol, 2000; Denis, 2019), I show how the constant anticipation of brokenness is built through the ecology of maintenance. Through exploring the case of Aktau, I will show how actors negotiate: for how long can we continue doing what we are doing now? How do we expect infrastructure to work tomorrow? Next month? In a year? At the time of reappearing breakdown, the *temporality* of brokenness becomes highly important.

Keywords: ecologies, actor-network theory, materiality

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THE INTERACTION BETWEEN URBAN FORM AND ENERGY FOR MITIGATING THE IMPACT OF RISE IN PUBLIC PRICES (844)

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Energy consumption and prices in cities is increasing worldwide. LNG prices increased from \$695 per ton in April 2022 to \$1,465 in September 2022. In particular, in Korea, energy such as electricity and gas is supplied by the public through Korea Electric Power Corporation and Korea Gas Corporation to adjust prices. However, due to the pressure on energy costs, public utility charges are continuously scheduled to rise. We will introduce effective energy policies accordingly. Therefore, in this study develop to identify the interaction between urban form (structure, population, etc.) and energy to derive implications for mitigating the impact of rise in public prices.

FRAMING THE “SMART & SUSTAINABLE CITY” NEXUS BEYOND POLICY MANTRA: AN OVERVIEW OF TRADE-OFFS (875)

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The future of cities is often projected with a vision linked to the apparently inextricable nexus between “sustainability” and “smartness” (Martin et al., 2019). Despite the broadness of the two concepts, most strategic and policy urban documents implicitly recognise them as *a)* positive and *b)* synergic. In policy discourses, their joint use takes on both a *symbolic* connotation -as it provides a narrative for action- and an *instrumental* one -as it legitimizes policy choices and their implementation. Starting from the assumption that the “smartness & sustainability” nexus is not as harmonious as often framed in the urban policy domain (Yigitcanlar et al., 2019, Evans et al., 2019), this article reflects on this alleged alliance. After introducing the topic through examples from urban policy documents, the study investigates how the interplay between the two concepts is defined, characterised and framed in the recent academic literature on urban innovation and urban transition. To provide a broader perspective, the study looks at this binomial through multiple disciplinary lenses, with a specific focus on human-centred approaches to smart cities and socio-technical and socio-environmental critiques (Haarstad, 2017). Explicit assertions and “framing devices” (including words, sentences and schemes) used to define and formulate this nexus are identified. Different definitions and argumentations are then grouped based on common trends and critics. Finally, the results of the mapping exercise are used to identify a preliminary set of positive and negative trade-offs, which might not have been considered in urban policy frameworks. The article reflects on how recognising elements of tension and possible contradiction can favour a more critical interpretation of transformation dynamics hallmarked under the “smartness & sustainability” umbrella. Also, it discusses how disentangling discourses on the “smart-sustainable city” nexus can enrich the policy discussion.

Keywords: Future cities, Smart-sustainable city nexus, Policy discourses

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TOWARDS AN ADAPTIVE CITY: HOW ADAPTIVITY CONNECTS PLANNING AND CITIES IN A WORLD OF CHANGE (880)

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Over the centuries, some cities have more or less been able to survive, adapt, and even become stronger in the face of different changes, while others have failed to do so. But is this adaptation due to planning, or are there characteristics in the cities themselves which provided the basis for their success/failure? Or better to ask: Are cities adaptive spontaneously, or have planning enabled them to adapt? Planning debates face challenges in theoretical confrontation with this question. Notwithstanding years of experience in facing (un)expected changes along with attempts to dominate, abate and control them and their effects, there is still bewilderment in theorizing and defining the way in which cities adapt to the changing world. Therefore, the debates on adaptivity of cities as complex adaptive systems (CAS) and their characteristics has been more and more the focus of planners and the subject of planning studies and theories (Skrimizea, et al., 2019; Restemeyer, et al., 2018).

Some seek the answer within the planning domain or the use of planning in conditioning place and space (Chadwick, 1971; Ratcliffe, 1974; Allmendinger, 2017). From this perspective, the reason behind planning is to pass not only in placid times but also in turbulent times (Alterman, 2005). This view assumes that it is planning that shapes, controls and leads cities. Therefore, the success of cities in different (un)predictable situations depends on having and employing planning. Others suggest that the contemporary planning paradigm cannot work when change dominates planning (Marchau, et al., 2019; De Roo, et al., 2020). In this point of view, planning should be adaptive in a dynamic world of change. Some scholars have attempted to relate adaptivity to planning rationality (De Roo, et al., 2020; De Roo, 2012; Skrimizea, et al., 2019). They proposed adaptive planning to face unexpected situations.

From another perspective, looking at the context and its characteristics would be the answer. The main assumption here is cities can cope with unknowns through their inherent characteristics. Some focus on physical aspects (Makki, et al., 2019; Palaiologou & Vaughan, 2014), while others consider local actors and social assets, institutions and systems (Hall, 1969; Restemeyer, et al., 2018; Amirzadeh, et al., 2022) and some argue for both (Susetyo & Sasono, 2018). There are also attempts to suggest some general conditions for urban adaptability (Rauws & De Roo, 2016; Rauws, 2017)

It is very important for planners to understand and recognize how much cities owe their adaptability to planning, and how much is the result of the inherent characteristics of the cities themselves. This helps to make planning interventions more purposeful and establish the right balance between purposeful intervention and self-organization within the cities. This paper is an attempt to combine both views through literature reviewing and content analysis in a greater domain within which planning and context should be both adaptive to approach an adaptive city. Finally, it comes up with a comprehensive definition of adaptivity along with clarifying the role of planning and context in urban adaptability separately and collaboratively.

Keywords: Adaptive planning, self-organization, complex adaptive systems, dynamic changes, Adaptivity

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ECOLOGICAL CO-PLANNING FOR AN AMAZON CITY OF RONDÔNIA (BRAZIL) (894)

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This research presents the experience of a co-planning workshop in the city of Ariquemes, Rondônia state, Brazilian Amazon region. The workshop occurred in the beginning of 2023 and aimed to contribute for the future planning of the city towards a more ecological and sustainable planning using participation method. The article intends to show that co-planning activities on the site is a good strategy to help face the challenges of promoting more sustainable cities.

The Amazon biome is an area of 420 million hectares, covering 9 states in the North of Brazil (Acre, Amapá, Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima and Tocantins), which correspond to 49.50% of the Brazilian territory and 2/3 of the country's forest areas.

The process of deforestation and land use in the Brazilian Amazon are directly connected (Gomes and Bastos, 2018; Alves et al, 2021). This topic has gained international attention and political pressure over the recent decade, because of the ecological importance of the Amazon for the local and global climate (Gatti et al., 2021; Berenguer et al., 2021; Esquivel-Muelbert et al., 2018; Lawrence & Vandecar, 2015).

Rondônia state is particular related to urban growth and livestock expansion and its relation with the loss of natural vegetation. The state forest areas suffered great loss from 1985 to 2021. In 1985 87,10% of the state was covered with forests; in 2021, that percentage decreased to 57,58%. At the same time, the pasture area increased from 8,21% to 36,34%, and the soy plantations from zero to 1,34%. The urban areas increased from 0,08% to 0,21%.

The research topic is urgent and essential; the goals relate to a broad conceptual framework of ecological planning of human settlement in Latin America, combining ongoing debates related to sustainability and urban growth (Ndubisi, 2002; Macedo et al., 2018).

The research gathers a mixed methodological approach to articulate quantitative and qualitative data in macro and micro scale. The methods include mapping and morphological analysis and workshops with co-planning activities.

The morphological, mapping methods and co-planning workshops are based on the work of QUAPÁ Lab with Macedo et al. (2018). The mapping, together with workshops, benefit the transference of the research results to practical application and socio-ecological changes.

Keywords: Co-planning, participation, Amazon, Rondônia, deforestation

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UNCERTAINTY VS ADAPTABILITY: A RECONCILIATION LANDSCAPE IN TURBULENT URBAN FUTURES (910)

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Land consumption, transformation of the natural environment, water pollution are some of the main challenges for city development. The instruments to manage these challenges are not appropriate for the urban future. The paper aim to identify and discuss some important factors influencing the development of cities and determining the manner of their spatial development and direction of future development.

The contribution is related to the relationship between city and watershed as distinct systems of flow that generate shape and structure across the landscape to maximize their intrinsic objectives. The city form could play a role in restoring lost ecological services and it is a great opportunity for creative development solutions according to different requirements.

Watershed planning is addressing some of the greatest ongoing challenge to planning: development of urban form in human-dominated ecosystems. Besides solving for water management problems like flooding, the collateral benefits of implementing such plan include greater livability, sustained economic development, improved community resilience to disruption and shocks, and exemplary landscape that creates enduring value and symbolism. The paper will present some practices to cope with the challenges (ideas, concepts, experiments) and some reflections.

Keywords: watershed low impact development ecological restoration

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THE ROLE OF TOWNS IN CHINA'S URBANIZATION FROM THE PERSPECTIVE OF RURAL AND AGRICULTURAL TRANSFORMATION (924)

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With the continuous acceleration of China's new urbanization process and the comprehensive promotion of the rural revitalization strategy, the interaction of industrialization, urbanization and agricultural modernization has brought about a new development situation of China's urbanization. In particular, the current agricultural and rural structure is facing the transformation, and it is urgent to improve the low utilization rate of rural land resources. The agriculture also has to change from a single function to a compound industry integrating the first, second and third industries. All of the phenomena have had a crucial impact on the development of urbanization. Meanwhile, China's unique multi-level urban system makes the role of "town" in the process of urbanization full of particularity.

Therefore, by analyzing the development dilemma and the structural transformation of agriculture, population, land use and economy in rural areas, this paper systematically studies the impact of this change on the urbanization process and the regulating effect of "town" on the relationship between agricultural and rural transformation and urbanization, and proposes that "town" should give full play to its nodential role in the Chinese context to promote the establishment of new agricultural management subjects in town and rural areas. In addition, it also should promote the development of local township enterprises, establish material circulation system with township as node, and promote the construction of digitization in rural areas.

In the end, this paper puts forward the following considerations for the development of urbanization with Chinese characteristics: First, it is necessary to consolidate and improve the rural basic management system, continue to push forward the "three rights separation" of contracted land and the reform of rural collective property rights system, clarify the ownership of property rights and improve various functions; Second, agricultural scale management should be developed in an exploratory way, and should be promoted synchronously according to the evolution and upgrading of farmers' employment and income structure. Finally, the rural revitalization strategy needs to promote the diversification of rural residents' income, appropriately reduce the tax pressure of rural non-agricultural industry development, and pay attention to prevent township enterprises from blindly pursuing the scale benefit of cash crops while ignoring the overall national food security basic line and other ecological and environmental sustainable issues.

Keywords: town, rural and agricultural transformation, urbanization

LAND DEVELOPMENT MODEL AND ECONOMIC AND SOCIAL EQUITY: COMPARISON BETWEEN THE SOUTHERN JIANGSU MODEL AND THE WENZHOU MODEL (935)

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Since the reform and opening up, under the strong impetus of the market economy, China has formed many regional economic models and land development models with local characteristics. Sunan model and Wenzhou model are important examples. Southern Jiangsu has a long tradition of strong government and weak community. The local government has a strong ability to control local resources and social organizations. The land development model is characterized by strong intervention, large-scale, and regularization. Although the strength of rural clans in Wenzhou is strong, its development opportunities are more diversified. Rural communities are less involved in organization and management activities. The land development model is characterized by weak intervention, small scale, decentralization and so on. It is generally believed that the market economy has a natural tendency of inequality, and strong government intervention is more conducive to the formation of a fair economic environment and social effects. The study found that the value orientation of the government itself often has an internal conflict with the market economy, which has a profound impact on the vitality and fairness of economic and social development. The strong government (Suzhou City) tends to promote the overall development of land, pursue the large-scale and efficient use of land by enterprises, and is not friendly to localized small and micro enterprises, which is not conducive to the formation of local entrepreneurial environment, and is not conducive to the income distribution for local residents and employment. The weak government (Wenzhou City) is inclined to micro-intervention in land development, which provides a good land market environment for the development of various localized small and micro enterprises, and is conducive to local residents' entrepreneurship. From the perspective of economic vitality, Wenzhou has obvious advantages in terms of the proportion of operating income and the number of enterprises per capita; From the perspective of social equity, the proportion of residents' consumption and urban-rural income in Wenzhou's GDP are better than those in Suzhou. The land development model in Wenzhou is more people-friendly because of its low threshold, which is more conducive to shaping the economic vitality and fair opportunity at the micro level. The research conclusion has important practical value for us to seek the balanced development of efficiency and fairness.

Keywords: Land development model, economic and social equity

BEAUTIFUL CITY: PLANNING FOR TRANSFORMATIONS OF THE URBAN LANDSCAPE (960)

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Against the backdrop of increasing pressures for compact growth, higher densities, and large-scale energy provisions, planners are now more than ever under pressure to facilitate major developments that significantly alter rural and urban landscapes, their views and prospects, and established character. The speed of these changes is unprecedented in cities, where major residential and commercial developments, and even renewable energy projects more typically associated with less urban areas, are reshaping the experience of these landscapes.

The somewhat recent shift in attitudes towards large-scale projects in both our rural and urban areas has come as a result of a combination of high media coverage on climate change, energy security, and urgent housing needs, and the more immediate effects these crises are having on everyday living. We are becoming more receptive to accommodating major changes, as we pragmatically face the fact that towns, cities and their surrounding areas are growing at an exceptional rate and facing unsurmountable challenges. In spite of national targets and rapidly increasing environmental awareness, recent cases in Ireland remind us how beauty and particularly the visual components of landscape are still deemed worthy considerations in planning judgements.

Such cases are still predominantly associated with rural areas, renewable energy and telecommunications infrastructure, and very traditional ideas of beauty. The explicit and confident engagement with landscape changes when we turn our focus to the urban environment, even though these landscapes are now experiencing dramatic levels of change that equate to that of major technologies in the countryside. This is most certainly partly because of the differences with how we experience city landscapes; closer horizons, shorter view duration and less visual control over our surroundings mean 'images' can be more fleeting. And yet there are also striking similarities in what we value and why. Protecting views and prospects, for instance, has an established history within strategic policy formation for cities as well as rural areas. This largely comes down to an appreciation of the age-old concept of beauty and 'the picturesque', embedded in the roots of city planning and worthy enough to trigger the City Beautiful Movement in the late 19th century. It also touches on deeper values such as cultural character, identity and a sense of place.

Nevertheless, the current engagement with the urban landscape is brought into question in this paper. Using examples in Ireland where landscape and indeed beauty were key issues in planning cases, it teases apart the emerging trends in how planners are approaching these alterations, and raises somewhat ethical questions on accommodating considerations of landscape and beauty in the face of these pressures.

Keywords: Urban Landscape, Beauty, Cities

THE EVOLUTION AND REGIONAL DIFFERENCES OF DOMESTIC AND INTERNATIONAL DURAL CIRCULATION DRIVING CHARACTERISTICS OF CHINA'S URBANIZATION DEVELOPMENT - BASED ON THE ANALYSIS OF NEW CLASSICAL ECONOMICS (968)

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Since reform and opening up 40 years ago, China has seized the opportunity of globalization and achieved rapid economic growth. Today's globalization has entered a period of turbulence and stagnation due to the influence of health crisis, economic crisis and financial crisis, and China's export-oriented economic development has also begun to face various problems such as weakening momentum and bottleneck constraints. Therefore, in order to give full play to the advantages of China's ultra-large-scale market and the potential of domestic demand, the Chinese government has proposed the policy of "build a new development pattern with domestic circulation as the mainstay and domestic and international circulation reinforcing each other", which is also an inevitable trend of historical development. Under the background of the transformation of the new development pattern, urbanization development is also facing a new situation. This paper aims to explore the characteristics evolution and regional differences of urbanization development caused by China's participation in international circulation and domestic circulation from the perspective of New Classical Economics. This paper constructs an index system of specialization division of labor and transaction efficiency, and uses entropy method and panel regression analysis to analyze the cross-sectional data of relevant indicators in 30 provinces from 2000 to 2020. The empirical results show that the international circulation has played a greater driving role in the early stage of development. The index weight of domestic circulation is gradually increasing, and the driving effect of specialization in domestic circulation on urbanization is significantly enhanced, and there is a gradient difference between eastern, central and western provinces in space. In the future, China's urbanization will enter a new stage of relying mainly on domestic circulation, and the transaction structure, urban network structure and specialization will be continuously optimized.

Keywords: Domestic and International Dural Circulation; New Development pattern; Urbanization; New Classical Economics

TOKYO: AN INQUEST INTO A MATURE GLOBAL CITY (971)

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The city, as a system that moves energy and information, faces an uncertain future. Therefore, planning activities have to incorporate the capacity of cities to adapt to transformations, to propose versatile urban models and flexible forms of urban action, which allow reorienting decisions to adapt to new contexts (Sánchez, 2001).

The “*The three arrows*” *Abenomics* policies, aimed for the geopolitical rebranding of the country, were designed to tackle the consequences of the “*lost decade*” (Hausman and Wieland, 2015) as well as the demographic challenges faced by the country. As a consequence of these policies Tokyo started to attract populationⁱ.

Therefore the central area of the city experienced a revival of activities. Due the brown fields made vacant by the dismantling of the former inner-city industrial sites, privatization of national companies and relocation of government offices, the flexibilization of planning laws, the foreign investment in real estate, the new housing demand and the 2020-2021 Olympic games, major urban regeneration projects were developed and extensive area of the city were reshaped with big plot and massive buildings.

Nonetheless, the urban fabric of Tokyo is characterized a highly atomized land partitionⁱⁱ...These small plots of the Edo-Tokyo cannot be re-built within the economic logic mentioned above, therefore remain vacant.ⁱⁱⁱ These simultaneous processes are differentiating zones of growth and degrowth, resulting in co-occurrence of two antagonistic realities in the same city (Agueda and Cunningham-Sabot, 2018). While some central areas of the city are revived with large scale projects, at the smaller scale vacant plots unable to be incorporated into development sites triggering a site-specific process of spongification^{iv}.

The goal of this investigation is to look into the consequences of applying centralization policies in the atomized (none central) Tokyo neighborhoods.

Keywords: Global mature cities, Large scale urban interventions, demographic change, vacant land

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- [i] By the year 2010, Tokyo (the zone covering the 23 special wards) had reach 8,9 million, the same number of inhabitants as 1965. Source: Statistic Bureau of Japan.
- [ii] The average individual owner plot size is 173 sqm. Half of these being less than 100 sqm. Data from Housing and Land Survey.
- [iii] According to Tokyo's Land Use Statistics for the year 2017, the amount of unused land in 23 special wards (including the open air" category where parking lots are considered) is 6.54%. The vacant dwelling rate in the MMA as in Tokyo Prefecture has been around the 11% for the last 20 years. According to the Housing and Land Survey, the vacant dwellings can be classified in four types: Second Dwellings or Villas, for Rental, for Sale and Others which refer to abandoned houses mostly located in the suburbs. The 2013 survey on Vacant Dwellings shows that 26.24% in the MMA and to 18.65% in the Tokyo Prefecture are among these others dwellings type of vacancies. Major Metropolitan Area (MMA) is a definition by the Japan Statistics Bureau, this area includes Tokyo-To, and major cities of Saitama-ken, Chiba-ken, Kanagawa Ken and its surrounding areas
- [iv] Urban 'spongification' is defined as a phenomenon inside cities by which underutilized spaces such as abandoned buildings and vacancy land occur randomly in small unit lots and in considerable quantities. More information in: Aiba, S. Japanese community design in the age of population decrease. Great Asian Streets Symposium. Pacific Rim Community Design Network. 2018.

SPATIAL RESILIENCE OF LARGE INDUSTRIAL TOWNS IN CHINA: EVALUATION, CAUSES AND COPING STRATEGIES (999)

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A town is a special unit in the process of urbanization in China, with a population and economic scale between cities and villages. In the process of China's rapid urbanization, some small towns achieved rapid economic development through labor-intensive manufacturing, and quickly grew into large towns with a population of more than 100,000. They are typical representatives of China's bottom-up rural industrialization. However, in the process of globalization, these large industrial towns are affected by external disturbances in four dimensions: nature, economy, society, and technology, as well as the impact of the dual urban-rural land system with Chinese characteristics, which hinders their sustainable economic and spatial development. There are problems such as slow industrial economic growth, disorderly spread of space, and low space efficiency. As an important content in the field of sustainable development, resilience helps to comprehensively understand the characteristics of the large industrial town space and its interaction with the system as a whole, and provides feasible ideas for sorting out the internal mechanism of space formation and development and optimizing the space structure. Therefore, based on the RATA (The Resilience, Adaptation & Transformation Assessment) assessment framework, this paper takes connectivity, stability, and adaptability as the evaluation objectives, and constructs a spatial resilience evaluation system for strong industrial towns composed of three aspects: regional connectivity, urban stability capacity, urban renewal ability. The spatial resilience evaluation system evaluates six cases of strong industrial towns in Zhejiang Province, China. In addition, this paper analyzes the causes of the spatial resilience of large industrial towns from two aspects of regional influence and internal influence, and proposes optimization strategies to deal with them.

PLANNING SCRUTINY AND TRANSPARENCY IN CONTROVERSIAL URBAN DEVELOPMENT PROJECTS (1004)

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Transparency is considered as a cornerstone of good government and, more specifically, of good planning practice (OECD, 2017; Marantz & Ulibarri, 2022). Greater transparency is associated with higher levels of legitimacy and acceptability of planning decisions (Hirvola, 2022), particularly in the case of controversial development projects. Achieving greater transparency in urban planning relies among other things on allowing for public scrutiny and responding to criticism.

This paper analyses the discourses in the public and social media surrounding controversial urban development projects to firstly gauge the level of public scrutiny of urban planning, and secondly to identify whether and how planning responded to criticism arising from scrutiny. It does so by examining similar urban development case studies in two very different planning contexts in Europe: Albania and Finland. Not only do the planning systems differ significantly between these countries (ESPON, 2018), perceived levels of corruption (Transparency International, 2023) and general public trust in government (OECD, 2020) also vary substantially.

The paper begins with a review of recent literature on transparency and planning, highlighting that transparency frequently underpins key theoretical constructs and policy prescriptions in planning (see also Marantz & Ulibarri, 2022). The analysis of the case studies from Tirana and Helsinki focuses on the key similarities and differences between the main media discourses in Albania and Finland, and on whether and how planning has responded to debates and criticisms. The analysis pays particular attention to the key issues, their framing and the actors involved. Despite contextual differences between the cases, the results of the analysis suggest that it is not only possible to identify differences in the way planning has dealt with controversial projects – there are also some similarities, particularly in relation to the role and influence of certain actors in debates about such projects.

Keywords: Scrutiny; Transparency; Discourse; Debates; Media; Actors

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PATTERNS AND REUSE PROSPECTS FOR LONG-TERM BROWNFIELD LAND – A CASE STUDY OF GREATER MANCHESTER (1008)

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An element of adaptability to turbulent urban futures is how we deal with land in cities that has fallen derelict, often referred to as previously developed land or simply brownfield land. The regeneration of brownfield land has been a concern for planning and urban regeneration since post-industrial decline and low demand had left many sites and buildings vacant and derelict. In England this has been a policy concern particularly since the 1990s (Schulze Bäing, 2010). Within this broader agenda of brownfield reuse, one issue is the emergence of long-term brownfield land, so sites/buildings that remain vacant or derelict for many years (Dixon et al., 2011). The regeneration agency English Partnerships focused particularly on these sites in a report in 2003, referring to them as ‘hardcore’ brownfield land when vacant/derelict for more than 9 years (English Partnerships, 2003). Since then there has been limited national policy focus in England on this specific topic and to brownfield reuse in general. The government change in 2010 brought an end to the national target of 60% housing to be provided on previously developed land (Dixon et al., 2011), while the National Land Use Database for Previously Developed Land (NLUD-PDL) was abandoned in 2012. Then in 2017 a new measure was introduced requiring local authorities in England to produce and maintain annually updated local brownfield registers (Charlson, 2021). These are very much focused on brownfield sites that are suitable for housing reuse. But to date these have not been used to explore what they can tell us about changes to land use and long-term brownfield land since NLUD-PDL was abandoned in 2012.

This proposed paper presents and discusses initial findings of recent research. Using the case study of Greater Manchester this identifies which sites had already been registered as vacant/derelict in the old NLUD-PDL surveys and the first derelict land surveys in the 1990s. This also uses other data sources such as satellite images, Ordnance Survey maps, planning application history and selected site visits of specific prototypical sites. The plan is to use these sites as examples/ case studies to discuss in the later research phases as part of interviews. The research is partly a follow-up to earlier desk-based analyses of NLUD-PDL by the applicant showing which sites in Greater Manchester were already long-term brownfield land in 2010.

Findings of this research are relevant beyond the specific context of England and the UK, as many other countries have aimed to focus urban development on previously developed land. Hence the question is if such target-driven redevelopment efforts reach the most difficult to reuse sites. In addition, this contributes to the debate if hard end-use is always the best use for a brownfield site, or if in some cases other uses, e.g. green infrastructure can be a more suitable use.

Keywords: brownfield, land use planning, urban regeneration

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THE ROLE OF THE ECODISTRICTS IN ENABLING CITIES ACCOUNT FOR TURBULENT URBAN FUTURE (1013)

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Cities and urban areas account for a high percentage of energy use as well as greenhouse gas emissions, however it is widely recognized that cities are also best places where the bold actions against climate change can be taken. Cities around the globe, especially those in Europe, have committed to achieving sustainable development goals and net zero carbon.

This contribution seeks to highlight and bring experiences from a PhD thesis project that is exploring how ecodistricts are planned and designed based on case studies. It used data from three worldwide well-known case studies and elaborated them in several categories, including urban planning, mobility, energy, green areas and a few others. In this contribution, I will bring the lessons learned from those three case studies and will explore the challenges of planning and designing city components, based on selection criteria of the site location maximum 10 km away from city center and maximum 20 minute ride by public transportation.

The thesis research includes some questionnaires with residents where they are specifically asked about their satisfaction with a number of elements including urban planning, mobility and transportation, therefore resident's views would be added to the contribution.

Based on ecodistrict case study analysis the research identifies a number of features that are critical for cities and ecodistricts in achieving their sustainability goals, but most importantly in providing a green and healthy environment that enhance the quality of life and wellbeing of their residents.

Finally, this research underscores the role of the ecodistricts in positioning cities as drivers of change in a turbulent urban future, encouraging the use of innovative approaches in urban planning and other aspects, as well as influencing other cities around the globe to use similar approaches.

Keywords: adaptation, Adaptive planning and urban design, ecodistricts, urban futures

SOCIAL INNOVATIVE SETTLEMENT PROCESSES FOR LARGE URBAN DEVELOPMENT AREAS IN THE MAKING (1018)

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The presentation provides insights into the results of a currently completed research in the context of Open Science and urban transformation of large former industrial sites. The research exemplifies how contemporary urbanism attempts to implement sustainable development in large urban development projects. In recent years, new approaches to experimental urbanism have been used in Vienna to accompany the large urban development area Nordbahnhof Wien with real-world-laboratory settings, which has already been reported on at the AESOP conference in Venice (Peer 2019) and now a comprehensive project documentation (Peer/Forlati 2023) has been published. Following on from this, a novel experimental intervention was carried out in another large urban development project, in Neu Leopoldau, using Citizen Science as a pilot.

The research project Werkstatt Neu Leopoldau is focused on the settlement process as a workshop situation for social innovations in housing and urban development, with the aim of fostering sustainable development and creating good neighbourhoods (Peer et al. 2022). The Citizen Science project investigated the settlement process of the IBA quarter Neu Leopoldau in Vienna's 21st district. With a view to the proven and the new, process and structural qualities of the settlement and its socially integrative potentials were examined and further developed in a collaborative and co-creative manner in order to further think about life and coexistence in the neighbourhood. The project was realized in the period from November 2021 to October 2022 by a transdisciplinary team of researchers, students, residents, landlords, property managers and experts accompanying the settlement.

Using the examples of the development and settlement of Viennese large urban development areas, the presentation reflects firstly on the current possibilities and limits of the resilient development of large traffic-calmed urban neighbourhoods, and secondly, in methodological terms, on the possibilities and limits of an experimental urbanism and in particular of Citizen Science for researching urban development and settlement processes.

Keywords: large urban development project, sustainable development, settlement process, citizen science

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TRACK 12: TERRITORIAL GOVERNANCE AND COHESION

TERRITORIAL GOVERNANCE AND HIERARCHICAL COORDINATION IN SPATIAL PLANNING SYSTEMS: A CROSS-COUNTRY COMPARISON (84)

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Spatial planning is a process of multi-level spatial governance. Distributions of competences among levels of government established in spatial planning systems reflect the governance structures between the upper and lower levels of governments (Vigar,2009). Although in most developed countries, relatively stable planning systems and regimes have been formed during the evolution of spatial planning over a long period of time, the practices and systems are still undergoing dynamic adjustment, adapting to institutional and political changes and challenges. Especially in European countries, some prevalent new trends in planning revolutions have been observed, including the changing roles of central government and local government representing the process of centralisation and decentralization (EU,2017; Reimer, Getimis & Blotevogel, 2014). Current researches have focused mostly on spatial planning systems while the hierarchical coordination, often neglected, is expected to play a crucial role in spatial governance (Schmitt & Smas,2020). In this respect, this paper aims to conduct a comparative study of governance structures in statutory spatial planning systems by reviewing the on-going experiences in representative western and eastern countries. First, a general analysis of latest trends and concepts in the practice of international spatial planning is given. Second, based on case study, five main tools of hierarchical coordination among different levels of spatial planning are sorted out as policies, indicators, spatial boundaries, land use and facility allocations. Third, comparative territorial governance structures and hierarchical relationships are concluded. Preliminary result shows a diverse combination of both rigid and flexible forms of horizontal cooperation have been applied. The research contributes to the research field of spatial planning by outlining typical governance structures and summarizing methods of hierarchical coordination in spatial planning systems for further research.

Keywords: territorial governance, spatial planning system, hierarchical coordination, comparative study

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EU JUST GREEN TRANSITIONS - BETWEEN TERMINOLOGICAL INEXACTITUDES AND THE EXIGENCY FOR NEW GOVERNANCE MODELS (139)

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Green and Just Transitions (GJT) concept has been gaining a foothold of interest among politicians, scholars, decision-makers, and businesses since the European Union (EU) declared its Green Deal (European Commission 2019). Despite the economic predicaments resulting from the current pandemic and the escalation of the global energy crisis, the European Union have spared not effort to ensure a geopolitical and socioeconomic recovery of its Member States and neighboring countries by introducing a series of initiatives including the NextGenerationEU (NGEU), the Just Transition Mechanism (JTM), the Fit-for-55 package, the REPowerEU plan (European Parliament, 2021) together with other funding and supporting opportunities of the EU Reform Agenda and the New EU Strategy for The Potential Enlargement of the European Union (European Commission, 2022).

Correspondingly, the European Commission has been promoting the Just Transition Mechanism (JTM) as an antipode to make sure that the transition towards a climate-neutral future could be executed inclusively and justly, and thus, it became a core instrument of the European Green Deal aiming to operationalize the concept of just and green transitions. Despite, numerous economic investments and political measurements, there is still no clear definition of what the just and green transition is or should be, and consequently how it could be theoretically conceptualized and localized. Thenceforwards, in different official and mainstream discussions, “green and just transition” has been manipulated as terminological substitution to “decarbonization,” “low-carbon future,” “green economy,” “low carbon investment,” “sustainable energy transformations” and among others.

Through an extensive literature review, the scope of this contribution is to investigate the “unexplored potential” of the concept of green and just transition from a theoretical perspective. Accordingly, the paper assumes that “if everything is promoted as just and green transition – nothing in fact is just and green transition.” Consequently, this contribution will discuss three main constitutive dimensions of this theoretical concept: just as social justice based on “leaving no one behind,” just as spatial justice ensuring a balanced territorial development, and green as environmentally friendly-based (g)local development transition.

Through an exploratory approach, this contribution aims at probing into the terminological uses which might result at risking the application, the achievement, and the evaluation of the just and green transitions. Ergo, a critical review of a various sources (official documents, grey and white papers, scientific publications, and media press) could possibly help to clarify the inexactitudes or research noise created by such phenomenon for which a true application of the just and green transition goals might be difficult to be perceived at the theoretical level and even more harder to be achieved at the practical level, if not distinguished from any broader tendencies or attempts to promptly envision a post-pandemic new normal or by just smoothly returning to the previous

ways of living only with some modifications to the current economic models, geopolitical and transnational territorial politics, and some institutional and multi-level governing mechanisms.

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SHORT-TERM RENTAL DYNAMICS IN ITALIAN REGIONS. TERRITORIAL GOVERNANCE AS A POSSIBLE APPROACH TO THE ISSUE (142)

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The short-term rental (STR) market is a disruptive social and urban challenge for local Italian institutions because of its wide diffusion. At the global level, it is broadly approached by different fields of study because of its effects on urban liveability, and it is vastly discussed in over-tourist cities.

In Italy, the STR activities are part of a long-rooted market that is based on the diffusion of the families' real estate since the house property is a primary goal and the second houses, inherited from relatives or bought for leisure/investment, are common.

The issues linked to the STR market are multiple, and the 'new' actors in the game, such as online platforms that lists supply, enhance the diffusion of this activity. The entrepreneurship of the actors that short-term rent their properties is a problem of equity and justice in urban contexts, and it involves the over-touristified cities in Italy. Because of its consequences on economic, urban, and social spheres, the role of the global and local actors in the STR market on online platforms is at the core of governance stances at different scales. Even though over-touristified cities' institutions are the promoters of governance initiatives, recent studies evidence that some regions in Italy are involved in processes of regionalisation of the STR market on online platforms.

Therefore, the contribution explores the case study of Airbnb diffusion in Tuscany, investigating the geographic concentration of supply and demand. The STR market on online platforms is enhanced by long-term consequences of local policy and territorial path dependency, as it emerges from the case studies of Florence and the Chianti region. Furthermore, the stakeholders at the table, such as the global platforms and the private actors, are a fundamental part of the research and are deeply involved in the approach of public institutions to the multifaceted inputs and outputs of the STR market.

The contribution is part of the research agenda based on the PhD research work debated in July 2022, which proposes to frame the STR market in complexity theories linked to urban domains, in which assumptions on planning and governance rely on complex features of systems and are aimed at discussing the effectiveness of public policy models and tools, here debated in a regional dimension.

The methodological approach of this contribution consists of a single case study, Tuscany, and some cases investigated at a more detailed scale through quantitative georeferred and qualitative data. The single case study proceeds through a data-driven approach, while the research project is built on a theory-driven approach that refers to territorial governance studies.

The research study is focused on Italy and, therefore, considers the Italian law frameworks. Nevertheless, the conclusions can be generalised for other contexts because they sketch the efficiency of approaching the STR market from a regional perspective, especially for the public

institutions that are inefficient in framing the rules for the online platforms, actors still not totally defined also at the European level, and for private actors. Thus, the impossibility of foreseeing private plans at the local level doesn't imply the impossibility for other normative levels to set framing rules for STR platforms and correlated dynamics to protect the weakest actors in the game.

In conclusion, the territorial governance study framework opens the chance to further discuss the efficiency of urban and regional policy in approaching the STR market driven by online platforms, revising their models and tools at different levels, and reflecting on their potential to cooperate beyond boundaries.

Keywords: Short-term rental platforms; material and immaterial dynamics; territorial governance; global actors; place-based approach

TERRITORIAL GOVERNANCE IN MARGINAL AREAS: LEARNING FROM AN INTEGRATED PROJECT FOR LANDSCAPE REGENERATION AND PLACE-BASED DEVELOPMENT IN SOUTHERN SALENTO (163)

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In the last decades, both EU and National policies have promoted a place-based approach to local development to counteract marginalisation in peripheral areas (Barca, 2009), including the Italian National Strategy for “Inner Areas” (SNAI) (Cotella, Vitale Brovarone, 2020). Although multi-level and multi-actor dimensions were identified as key features for the success of those policies, the requested capacity to build on local capabilities and to promote innovative ideas through the interaction of endogenous and exogenous resources (Barca et al., 2012) often lacks in practice and hampers their effectiveness.

The paper analyses a place-based integrated initiative promoted by the Apulia Region, in Italy, for landscape regeneration and local development in a rural area known as Southern Salento. That area adds to the typical features of a peripheral context – which justified its inclusion among the SNAI target areas – those of a natural disaster known as “olive quick decline syndrome - OQDS”, connected to the Xylella epidemic outbreak (Martelli et al., 2016), which has recently transformed a huge part of its traditional landscape of olive groves into a ghostlike place, thus worsening land abandonment and marginality.

The initiative analysed in this paper thus developed in a territory, which was already targeted by several public policies for territorial recovery and local development – including the SNAI, the Rural Development Programme and an Extraordinary National Plan for the regeneration of the olive grove potential after the Xylella outbreak – whose capacity to reverse the marginalization of the area was nevertheless strongly questioned, as was their capacity to reduce power asymmetries with supra-local actors interested in its exploitation.

By drawing on the conception of landscape as constituted through the tangible and intangible practices that shape a place, emphasized by the European Landscape Convention, and on previous integrated landscape projects developed in the Salento area within the territorial landscape plan of the Apulia region, the regional initiative tried to tap into the most vibrant bottom-up processes and collaborative practices revolving around the promotion sustainable rural economies based on agro-biodiversity. These had been mostly developed in the shadow of mainstream practices but had very interesting potential for the identification of innovative development paths in the local context, being at the same time able to deal with context-specific obstacles for innovation and change. The capacity to mobilize, support and offer them long-term perspectives within a multi-level governance tool was thus the cornerstone around which the integrated project for landscape regeneration developed. Its reflexive analysis may thus give interesting suggestions for future public policies and instrument policy mixes aiming to improve the effectiveness of place-based initiatives in marginal territories (Flanagan et al., 2011; Servillo et al., 2016).

Keywords: place-based development multi-level and multi-actor processes marginal territories landscape integrated projects for territorial governance

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ECONOMIC POLICIES AND SPATIAL PLANNING: THE CASE STUDY OF THE SPECIAL ECONOMIC ZONE (165)

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This proposal is about incorporating, coordinating, and attempting to balance economic policies and spatial planning in the European Union and Greece.

At the international level, the economic integration of countries lies in increasing the level of welfare, with a parallel division of labour and the free movement of goods and services. There is consensus and cooperation regarding existing competition, monetary and fiscal policy, and regional development, which is also a necessary condition for the success and duration of integration.

EU regional policy, which lies in social, economic, and spatial inequalities, combined with optimising the efficiency of locations, makes up the cohesion policy, which is implemented through spatial planning. Regional development strategies converge on cohesion policy and disparity reduction.

The most widespread tool is the Special Economic Zone (SEZ), which is based on economic policy and spatial agglomeration theories. According to the United Nations definition, a 'Special Economic Zone' is defined as a geographically demarcated area within which certain tax and development incentives apply to boost industry and investment (UNCTAD, 2019). Economists and geographers have argued that economies benefit from the clustering of industries and businesses, either as companies in the same sector (localization economies) or as different businesses in the same location (urbanization economies). SEZs are subject to different economic regulations from other areas in the same host country, with the aim, of course, of attracting investment. The concentration of economic activity allows the transfer of knowledge and technology more easily.

Over the past two decades, SEZs have become increasingly popular as a means of promoting economic development. Most developing and transitional countries orient their economic policies towards the promotion of SEZs. They are encouraged to enhance economic development, both within the zone and outside the zone, by encouraging investors and new businesses that will increase employment and facilitate the transfer of technology and know-how (World Bank Group, 2017).

Throughout this process, SEZ, although an economic concept, involves issues of urban development, such as location, size, the distance from the existence of resources and raw materials, connection to networks and infrastructure, etc. Spatial planning should be the tool for the implementation of such investment attraction policies. Devadas and Gupta (2011) describe it as various systems that are in direct connection with the SEZ, which in turn activates the dynamic functions of the urban system and the investment functions of development.

The effectiveness resulted from a study of three examples. Ireland is a beginner in the implementation of the Zone, with superb results. China relied on the positive consequences of

Ireland, which also applied. The most recent, active, and first in activity in Europe today, as it has been characterized, is the Polish Zone. Since then, similar policies have been established in more than 130 countries worldwide, most of which are located in the developing world because there they seek to promote industrial development, attract foreign investment, and create jobs (Cheesman, 2012). In Greece, there is no institutionalised SEZ, even though the issue is not unprecedented and returns to the debate at regular intervals.

In conclusion, Aggarwal (2019) recognises three pillars for the achievement of the development results of the SEZ in a country: (i) the correlation of the strategic approach of the SEZ and the development policy; (ii) the strategic dynamism, regarding the risk of such a venture both for business investors and for the state; and (iii) implementation. To the above, a fourth pillar the integrated approach to spatial planning outside the zone could be added.

Keywords: Special economic zone, Spatial planning, Economic policy, Free taxes

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PLANNING FOR SHORT-TERM RENTALS IN A POST-COVID ENVIRONMENT: LESSONS FROM AUSTRALIA (170)

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Short-term rental properties through platforms such as Airbnb have quickly become popular in cities around the world. However, the rise of short-term rentals has led to acrimonious debates in the planning community. On one hand, local residents oppose the rapid 'touristification' of their communities, and argue that short-term rentals generate undue pressure on local rental markets, leading to loss of affordability. On the other hand, both hosts and guests benefit from the flexibility of short-term rentals, allowing visitors to 'live like a local' for a period of time that sits somewhere in between a hotel stay and a longer lease. In this presentation, I focus on the issue in Australia from an urban geographic perspective. The presentation is foregrounded with a quantitative overview of the growth of short-term rentals in Australia. It then focusses on the changes that have taken place during the COVID-19 pandemic, due in large part to Australia's international border closure, and local lockdowns that prevented interstate movement. The presentation concludes by laying out the new landscape of short-term rentals in a post-pandemic world, with a view to suggest pathways for policy and zoning that suit the realities of how short-term rentals have been embedded within, and alongside, longer-term rentals.

Keywords: Airbnb; Short-Term Rentals; Post-COVID City; Sharing Economy; Housing

IS SOCIAL INNOVATION A TERRITORIAL PHENOMENA? A METHODOLOGICAL FRAMEWORK ATTEMPT LOOKING AT TWO ITALIAN LOCAL ECOSYSTEMS (181)

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In less than 10 years since its appearance Social Innovation (SI) is increasingly becoming a relevant research object in territorial studies where SI is about to become a genuine “research field” (Tricarico et al., 2022). This change of pace has fueled interdisciplinary forms of investigation, the primary outcome of which was not so much that of offering different points of view on the same topic but rather that of bringing out original and new visions generated by the meeting of perspectives and different ways of analysing the phenomenon (van der Have & Rubalcaba, 2016).

In our contribution we want to describe our attempt to deliver a preliminary analysis on a specific unit that may be called local social innovation ecosystems (Stokes et al., 2017, OECD, 2021). With respect to this choice, the concept of ecosystem arises due to the recognition that innovation processes cannot be engineered in a linear way, designed from the top or a drawing board, but it is only possible to increase the probability that the innovation takes place (Chesbrough et al., 2006). If an innovation cannot be engineered, it is fundamental to see innovation ecosystems as relational place-based structures that can make innovation permanent and self-generating, increasing multiple factors of endogenous proximity (Beer et al. 202; Balland et al., 2015).

Infact, the concept of innovation ecosystem refers to the set of people, institutions, policies, and resources that promote the translation of new ideas into products and entrepreneurial processes (Foray, 2009; Scaffidi, 2022). Several elements are indeed involved in generating innovations, making the overall ecosystem quite complex (Maggioni and Del Giudice, 2006). Local innovation ecosystems are, indeed, locally or regionally specific and locally negotiated between actors and institutions that have strong territorial affiliations (Sgaragli, 2014).

In our contribution we want to test the notion of innovation ecosystem in its territorialised perspective, focusing on analysing the nature of interactions between existing institutional conditions and innovation trajectories (‘how institutions drive action’) showing which place-based dynamics of social innovation lead to the transformation of institutions or the formation of new institutions through collaborative practices (Sanzo et al., 2015). The adoption of a neo-institutional and organisational lens (Powell and Di Maggio, 1991) to analyse two Italian local social innovation ecosystems is particularly relevant to define a context characterised by a variety of actors, resources, and behaviours that are difficult to identify with quantitative economics of innovation methodologies.

Our analysis is focused on two Italian examples where we want to test our preliminary conceptual/analytical framework, an opportunity to reinforce the theoretical perspective through the institutional action and strategic governance analysis (Dembski & Salet, 2010) that overcomes the spatially-blind econometric viewpoints (Barca & McCann, 2012).

Based on the preliminary work done by Tricarico et al. (2023) and Scaffidi (2022) and, in order to accomplish the discussion of these hypotheses, the objective of our contribution is to describe and understand three aspects:

- (1) Ecosystem governance dynamics: Describing how organisational profiles have been sorted to set up a common innovation agenda (goals and challenges) through a collective intelligence system among different stakeholders.
- (2) Development of experimental open and social innovation practices that can sustain and include local actors in the innovation process; describing the tools and different operations and responsibilities of actors (no-profit, public or private) during the development of the strategy.
- (3) Territorial Impact delivered and its consistency with the mission of the local ecosystem to sustain endogenous local economic development.

The main goal of the present work is to understand the application of inbound or outbound social innovation strategies to undertake societal challenges through place-based entrepreneurial collaboration among different stakeholders.

Keywords: Social Innovation, Place-based development, Innovation Ecosystems

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SYDNEY'S POLYCENTRIC RESTRUCTURING AS THE OUTCOME OF MULTI-GOVERNANCE RESCALING (217)

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This paper contributes to understanding of how urban governance shapes the evolution of city spatial structures. It explores how new governance initiatives have facilitated the planning of a new strategic spatial structure for Sydney (Greater Sydney Commission, 2018) that is fundamentally different to previous ones. The new initiatives have involved governance rescaling by national and state governments that has redirected strategic planning agency away from the state government to national, regional and local levels. This has allowed development of a strategy that restructures the city toward one that gives more recognition to growing outer area needs, drawing on the opportunities created by the construction of Sydney's second international airport.

Sydney's strategy represents a distinctive response to the prevailing spatially polarizing impacts of urban economic development policies by the state that have prioritized global city activities. In Sydney's case, prioritization of global city policies by the state government has been a central feature of its governance since the 1990s (McGuirk, 2004). This has resulted in a spatial economic policy focus on a global arc in the east of the city connecting the CBD with advanced technology and corporate control activities to the north/north-west and the airport to the south. While policies were also directed to growing a second CBD in the west, this did not provide enough jobs to ameliorate substantial out-commuting from western Sydney to the east. Outer western areas had the biggest job deficits, but weak revenue-raising powers at local government level meant that these areas remained hostage to state government priorities. This has resulted in political action to 'rebalance' the city, facilitated by new governance structures allowing the voices of left-out areas to have greater weight in city policies.

Two governance initiatives involving rescaling at national and state government levels allowed scope for a new spatial structure to emerge. A new City Deal national policy to fund strategically important city projects - for development supporting the new second airport in Sydney's case - incorporated a voice for local governments such as those in the city's outer west. Additionally, around the same time the state government set up a new metropolitan agency that took over strategic planning functions from the state's own planning department. Together, the new governance framework allowed regional planners to break away from the existing spatial mindset of the state government and propose a third major city centre in the outer west. This third centre responded to outer western local government wishes to be less in thrall to the main CBD or the second CBD, and City Deal funding of an outer metro line allowed a third centre alignment to incorporate local governments' proposed expansion of existing outer western centres as well as a city centre around the new airport.

While the governance rescaling initiatives had somewhat different key rationales – the promotion of economic development and regeneration in selected precincts of Australian cities under the national City Deal program, and facilitation of sustainable expansion in Sydney under the new

regional planning authority – the conception of an outer, third principal node for Sydney allowed a strategic spatial response that joined up the rescaling initiatives and incorporated the desire of the outer suburbs to loosen the previous global city spatial emphasis.

Keywords: polycentric cities multi-level governance rescaling City Deal

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THE TALE OF TWO REGIONS: PLANNING FOR RESILIENCE IN FINNISH REGIONAL PLANNING, DOES PLANNING CULTURE MATTER? (294)

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Cities and regions encounter growing complexities in their operational environment, requesting ability to acknowledge the accelerating change dynamics and uncertainties in their planning processes. By nature, being formed of different municipalities, regions are complex territories for planning. In fact, the conventional regional planning has been lately criticised to be defunct (Harrison et al., 2021). Regions spatially are multifaceted and constantly in a state of flux (Allen et al., 1998). On the other hand, regional planning lay between two governments, the national and the local; thus, setting the agenda of regional planning is problematic (Friedmann & Weaver, 1979). With such a territorial and governing heterogeneity, regional scale is under-researched in planning studies (Purkarthofer et al., 2021). Furthermore, in creating visions for regional growth, two factors are essential to be harmonised: planning as an idea and planning as practice (Beauregard, 2020). Therefore, approaches of research on system-centred and practice-oriented regional planning can provide valuable insights. However, both research perspectives were also criticized for their shortcomings; thus, studies focusing on planning culture can offer a comprehensive understanding bridging both approaches (Purkarthofer et al., 2021). Planning culture is a country-specific concept rooted in and structured by the national scale priorities (Stead et al., 2015). This research builds on case studies of the two neighbouring Finnish regions Uusimaa and Southwest Finland. Uusimaa is a region of 26 municipalities and 1,723,000 inhabitants and Southwest Finland comprises 27 municipalities and a home for 481,403 inhabitants. The research sets out to explore the role of planning culture in enabling a region sensitive to the increasing complexities and the consequent need for resilient knowledge practices in processes. The research focuses on the processes of learning in each region and whether their planning culture contributes to easily integrate properties such as connectivity, robustness, flexibility, persistence and resilience in their growth visions. The research further examines the difference in planning culture of each region and thus the institutional sequence of actions and reflectivity to the knowledge complexity and the increasing need for resilience amid the accelerating multiscale change dynamics that the regions need to acknowledge. The study deploys qualitative methods by combining semi structured interviews with officials in regional planning bodies with document analysis. Noting that this paper is in process, the initial findings indicate differences between the regions considering both the knowledge practices and the priorities of their development agendas. However, the findings also demonstrate that in both regions the local level municipalities and major cities, prioritize local objectives over regional ones; thus, inserting fragility into the planning system. The paper concurs with Harrison et al. (2021) and urges improving an integral approach of regional planning in order to create more resilient and cohesive regions.

Keywords: Finland, Regional Planning, Planning Culture, Resilience

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CO-PRODUCTION AND THE SPATIAL GOVERNANCE AND PLANNING SYSTEMS IN EUROPE. TOWARDS A TAXONOMY (318)

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Recent studies (e.g., Nadin et al., 2020; Hossu et al., 2020) have clarified how European spatial governance and planning systems involve an increasing number of actors to varying degrees, including partnerships with private sector interests and civil society actors in decision-making. This new collaborative paradigm can be interpreted in terms of co-production, a concept that increasingly permeates planning theory and practice (Watson, 2014). One of the leading theorists of co-production, Elinor Ostrom (1996), has defined it as ‘the process through which inputs used to produce a good or service are contributed by individuals who are not “in” the same organisation’ (p. 1073). In this sense, co-production is a multifaceted concept encompassing a range of experiences that differ in both the ‘co-’ and the ‘production’ sides of the concept (Sicilia et al., 2016; Sorrentino et al., 2018).

When applied to the spatial governance and planning realm, the ‘co-’ side concerns the openness of (local) governments – i.e. the actor delegated to assign land use and development rights – to the involvement of actors ranging from civil society to property developers with their interests. In its turn, the ‘production’ side can involve different types of “stakes”, from the rights of inclusion to the supply and quality of certain services to the quantities of buildable and exploitable space etc.

In this light, examining cases identified in various European countries and based on some initial outcomes (Bragaglia et al., 2023), the proposed paper aims to elaborate a preliminary taxonomy that helps understand between which actors and for what purpose co-production takes place within the realm of spatial governance and planning. Moreover, the paper seeks to understand whether and how the proposed taxonomy can be related to “types” of European spatial governance and planning systems (Berisha et al., 2021). Overall, the supported hypothesis is that the various co-production mechanisms are functional to different ‘institutional technologies’ (Janin Rivolin, 2012, 2017). Furthermore, the social effectiveness of co-production processes appears to be related to the public control capacity of the respective system.

Keywords: co-production, spatial governance, spatial planning systems, Europe

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CAN LOCAL DEVELOPMENT ACTIONS BE TRANSFORMATIVE AND CONTRIBUTE TO SPATIALLY JUST DEVELOPMENT? (366)

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The question how to overcome spatial injustices at the local level is an important one for planners. The challenges are manifold: segregation and uneven living conditions; social exclusion processes limiting opportunities of local communities to fully participate in local society; or populist movements in regions with populations feeling left behind.

In recent years, place-based development approaches have become established as an instrument of territorial cohesion policy for promoting quality of life and living conditions in disadvantaged urban or rural areas. Local development actions in this vein tend to see the concerted efforts of all relevant stakeholders, bundling of existing resources, and the potential of civil society in these areas as a solution to counter local disadvantages. Potentially, and if designed well, such actions may challenge local or regional planning routines and processes and may shift (power) relations towards more inclusive processes and fairer outcomes. The key question of this paper is whether and how local development actions can have a transformative impact, and go beyond affirmative remedies for local inequalities. Transformative is meant here in the sense of challenging the dominant local routines and processes and the underlying framework that generates inequitable outcomes.

The paper builds on conceptual and theoretical work in spatial justice (Madanipour et al., 2022) and transformative social innovation research (Avelino et al., 2019) in order to answer to this key question. It presents an analytical framework for assessing the transformative potential of local development actions. This framework serves to analyse empirical findings from an EU-funded project (RELOCAL: Resituating the Local in Cohesion and Territorial Development, 2016-2021) on local development actions in diverse territorial contexts across Europe. The findings show that innovations in different dimensions (social, material, symbolic) are needed, in order to alter or change local institutions in disadvantaged areas. For greater spatial justice, this change needs to be targeted towards benefiting the interests of marginalised communities. The insights from this research help planners to be more aware of potentials and limitations of local or place-based development actions; and whether and how these potentially contribute to sustainable changes towards more inclusive and just localities.

Keywords: local development, territorial cohesion, spatial justice, transformative social innovation

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THE DIFFERENTIAL ENGAGEMENT OF METROPOLITAN AREAS WITH(IN) THE EU COHESION POLICY (377)

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Metropolitan areas progressively usurped the role of cities as catalysts and drivers of global development, as a consequence of complex processes of socioeconomic reorganisation and rescaling. This put traditional spatial governance models into crisis, with existing territorial units that are ill-equipped to deal with phenomena hardly manageable within their fixed administrative boundaries (Salet et al., 2015). A growing number of institutional experimentations emerged in European countries and regions, aiming to address the metropolitan dimension (Zimmermann et al., 2020; Demaziere, 2021). These episodes of metropolitan governance are highly heterogeneous in their scope and institutionalisation. They range from informal inter-municipal cooperation varying through time and in relation to the issues at stake, to more institutionalised structures that take on the responsibility to manage metropolitan development. The importance of metropolisation processes has been also recognised by EU institutions, which progressively acknowledged that to leave this process ungoverned could pose serious threats to social, economic and territorial cohesion. Through time the EU cohesion policy has been progressively adapted to cater to the needs of metropolitan areas, and new instruments were introduced to ensure greater flexibility in tailoring funding allocation to territorial needs (Cotella, 2020). However, to adopt suitable metropolitan governance and multi-scalar institutional arrangements that can exploit at their best these opportunities remains a challenge, and metropolitan areas often lack the tools, jurisdiction and funding that would allow them to embrace their role to a full extent.

Acknowledging this challenge, the proposed contribution draws on the results of the ESPON METRO research project (ESPON, 2021) to explore and compare the differential role that metropolitan areas play in the development, management and implementation of the EU cohesion policy. More in detail, it first reflects upon the high heterogeneity that characterises the metropolitan phenomenon and its governance in the European continent (in terms of the size of their FUA, models of metropolitan governance, cooperation and instruments etc.), to then discuss how all the nine metropolitan areas under investigation played a rather limited role in the programming of the EU cohesion policy 2014-20. When it comes to the management and implementation phases, the role of metropolitan areas is highly differential, mostly as a consequence of the EU cohesion policy's architecture in each country and the programmes and instruments that are employed. Overall, metropolitan institutions that are officially recognised within the administrative hierarchies of the respective countries seem to have played a stronger role, however influenced by the power tensions that organise their interaction with the other government levels. On the other hand, where formal metropolitan administrative units did not exist, we argue that through its cohesion policy the EU has favoured in a more or less direct way the emergence of a momentum towards their introduction.

Keywords: EU cohesion policy, metropolitan area,s functional urban areas, territorial governance, spatial planning

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REVISING ROMANIAN PLANNING LAW: HOW LOCAL AUTHORITIES' PLACE SHIFTS IN THE PLANNING SYSTEM IN TIMES OF UNCERTAIN FUTURES (393)

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The research paper examines the challenges that local authorities are facing in managing infrastructure, green spaces, local economic development to achieve climate neutrality objectives. It argues that the traditional administrative-territorial unit is no longer an effective scale for territorial planning and development. The paper suggests that there is a shift in the relationships between institutions, a redefinition of the way of intervention and coordination, accentuated by the increasingly blurred post-Covid backgrounds. All these issues suggest the necessitate of rethinking administrative capacity at the local level. Local authorities also face new challenges such as integrating more actors and coordinating multi-level public policies, which leads to an extension of planning into political, institutional, and economic spheres. The research suggests that finally occurs a move away from the centralizing and technical approach of the 'golden age' of spatial planning, towards cooperation based on the voluntary participation of local communities, encouraged, and observed by the state. In addition, the research suggests that the urban planning system in Romania is undergoing changes that are leading to a repositioning of local authorities, as they are becoming major actors. This shift is driven by the tendency of local authorities to take on a larger role in the planning and management of their territories, as they are given more autonomy and decision-making power. The research suggests that this repositioning of local authorities is a result of largescale rethinking of how we view the boundaries of local authorities in a changing world. In exploring these themes, traditional notions of sovereignty will be questioned insofar as how the concept can be reconciled with the reimagining of local authorities in times of uncertain futures.

SPATIAL PLANNING AND LOCAL AUTHORITIES' ROLE IN TERRITORIAL GOVERNANCE: ANALYSING METROPOLITAN DEVELOPMENT IN ROMANIA (394)

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In various European countries, the metropolitan area seems to be a successful model that goes beyond formal administrative jurisdictions. They operate at different scales for different purposes and include many planning initiatives to strengthen the polycentric attributes of regions. The research paper suggests that Romania has approached the logic of metropolitan development in a gradual manner. This was due to a variety of factors such as limited resources, lack of political will, or a lack of consensus on the best approach to take. The aim of the paper is to analyse how local authorities' role is approached under the assumption of growing local communities and significant urban sprawl. This research paper outline the impact of decentralization and globalization on local economies and the need for new strategies to build competitive, sustainable, and inclusive urban territories. The paper examines the challenges faced by metropolitan development in Romania and identify the types of administrative arrangements needed to effectively manage territorial planning and improve the delivery and quality of public services. The research also points out the importance of governance, which is not specific to the Romanian context, but rather a global concern in the current scenario.

SPATIAL PLANNING UNDER THE EU COHESION POLICY 2021-27: CHANGING IMAGINARIES AND NEW CHALLENGES FOR THE EUROPEAN CITIES (409)

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The contribution focuses on the relationship between the new challenges that have led the EU to provide for the New Leipzig Charter of 2020, conceived during the Sars-Covid19 Pandemic, building on the basic idea of the 2007 Leipzig Charter that all areas of urban policy must be coordinated in a multi-level and multi-stakeholder approach to an integrated and sustainable urban development.

Nevertheless, nowadays global challenges such as climate change, loss of biodiversity, resource scarcity, migration movements, demographic change, digital divide, lack of privacy, security issues, market dependencies, pandemics and rapidly changing economies intensify disparities on towns and cities throughout Europe.

These increasingly complex challenges in Urban Areas have been addressed by the New Leipzig Charter of 2020 entitled “The transformative power of cities for the common good”, that recognises the role of cities in promoting transformative action, and calls on those responsible to activate, bundle and promote the transformative powers of neighbourhoods, local authorities and regions. To be able to do so, all those who shape towns and cities for the common good need political support, reliable administrative action and sufficient resources. The New Leipzig Charter describes with the just, green and productive city three dimensions of urban governance for the common good. It identifies concrete areas of action in order to make cities resilient and empower them to deal with current and future challenges. Shaping the digital transformation is an overarching task in integrated planning and design processes. The same applies to active and strategic land policies and land use planning strategies at the level of local authorities.

With regard to such aspects, the contribution addresses the novelty of these challenges under the frame of the “post-pandemic world”, to provide a more integrated vision of the issues of the territorial agenda, by focussing on those aspects of urban regeneration and spatial planning that are most related with the just as well as the green transition. This lead to change spatial imaginaries of the cities and, in particular, ask local authorities to act for the common good, opening to new challenges for governance cooperation and stakeholders engagement.

BEYOND SOCIAL INNOVATION: QUESTIONS AND REFLECTIONS FOR IMPROVING THE HEALTH OF DEMOCRATIC INSTITUTIONS THROUGH URBAN PLANNING (428)

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For decades, social innovation – voluntary, non-statutory, citizen-led initiatives providing services or goods, beyond the State – has been increasingly commended for offering enormous potential by both academic and policy discourses (Moulaert, Nussbaumer, 2005; Mulgan, 2006). However, it has often become a convenient concept, especially for local governments to justify the disengagement of public action from tackling a wide range of problems around exclusion, deprivation, and lack of well-being (Bragaglia, 2021; Fougère & Meriläinen, 2021).

Despite many agreeing on the fact that local communities can unrealistically find alone progressive and long-lasting solutions for deep-rooted problems (De Fillipis et al., 2006; Peck, 2017; Savini and Bertolini, 2019), we still miss a comprehensive and critical understanding of the relationship between social innovation and institutions in urban planning, and how to overcome current drifts.

The Paper works on three major missed opportunities that have been identified in the current state-of-the-art: first, the investigation of the social innovation-institutions relationship from a spatial standpoint, providing a critical discussion of how relational patterns overlap with the socio-spatial distribution of disadvantages; secondly, an oversimplification and romanticism around most of the narratives; thirdly, the analysis of the enabling role of institutions to the emergence, evolution, and effectiveness of socially innovative practices, and the possibilities that institutions themselves can learn by engaging with social innovation, impacting urban planning.

Moving from this framework, this contribution will question if and how the interaction between socially innovative practices and institutional policies can be reframed for opening up spaces of deliberative democracy in a structural and long-lasting manner, producing effective outcomes for improving citizens' quality of life, and what's the role of urban planners in such endeavour.

The authors will share some preliminary reflection that emerged within the preparatory work for multiple case-study research, aimed at covering the Italian scenario from North to South.

Exemplary cases will give inputs to discuss some of the most pressing criticalities in the current status of public institutions, with a focus on the way municipalities embrace (or not) the interaction with socially innovative practices, as well as the limitation behind such practices.

The contribution will deepen the conditions of municipalities located far from the main metropolitan centers, with a lack of economic opportunities, lack of access to services, and affected by depopulation. As such, the authors refer to the lessons learned within the first years of implementation of the Italian National Strategy for Inner Areas (a territorial cohesion policy in place since 2013), and the ongoing debate on marginal areas (Esposito de Vita et al., 2021)

Findings will provide a first set of key concepts to be validated through further empirical research.

Keywords: Social innovation, planning, democracy, public innovation

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PLACE IN PLACE-BASED APPROACHES: A FRAMEWORK FOR ANALYSING INTEGRATION, AGENCY OF PLACE, ACTORS AND INSTITUTIONS (472)

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Developing transformative capacity within cities and regions is important and urgent for addressing interconnected societal challenges. However, this capacity seems alarmingly low and “it remains unclear what kind of capacity is needed to deliver urban change that is actually transformative” (Wolfram et al., 2019, p. 437). Place-based approaches are important for developing transformative capacity (Horlings et al., 2020) and have the potential to integrate various needs, resources and policy domains (Keller and Virág, 2022).

Recently, spatial planning and place-based approaches seem rediscovered in the Netherlands (Ministerie van Landbouw, 2022; Volkshuisvesting en Ruimtelijke Ordening, 2022). A unique and seemingly obvious feature of place-based approaches is that the *place* of concern forms its starting point (Horlings et al., 2020). This place has its own identity that relies on the integration of various perspectives of human actors and non-human attributes including natural and physical elements. Additionally there is not one single actor (e.g. the ‘spatial planner’ or the facilitating ‘government’) who is clearly and consistently in charge of steering spatial or place-based processes (also see: Boelens, 2010).

In an ideal process all human actors and non-human attributes concerned can articulate their needs, viewpoints, knowledge and expertise. The reality is more messy, with imbalances in power, access to information and resources. Moreover, there are stark differences in language, tools and knowledge used that can result in poor or limited integration. So, paradoxically, place-based approaches have the potential and promise to facilitate integration, at the same time it is challenging to realise integration.

Research has shown that individual and collective agency, abilities and competences and institutional capacity are important aspects of transformative capacity (see: Horlings et al., 2020; Keller and Virág, 2022; Wolfram et al., 2019). But our understanding of how transformative capacity comes about in place-based processes and how integration can be enhanced, remains fragmented and rather scattered. There is a vast amount of important practical knowledge, that lacks academic recognition and rigour. This paper develops a transdisciplinary framework, combining practical and academic knowledge, that shows how transformative capacity comes about within place-based processes based. It is structured around three dimensions:

1) Place-based integration

How does ‘using the place as starting point’ materialize in a place-based approach? This is concerned with understanding the formation of place-identity, the role of actors and non-human attributes, etc.

2) Competence

What individual and collective competences (knowledge, skills and attitudes) and agency are important in place-based approaches?

3) Institutions

What are important institutional requirements (resourcing, decision-making, networking, learning and innovation) in place-based approaches?

This framework is then used for presenting two exemplary case studies of place-based processes in the Netherlands: 1) the landscape approach and 2) the neighbourhood approach, drawing on the review of existing evaluations and additional interviews and focus group discussions. This results in an empirically informed and theoretically substantiated framework that can be used for the design of capacity development interventions.

Keywords: Transformative capacity, place-based approach, integration, transdisciplinary

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URBAN INNOVATION ECOSYSTEM: ACTORS, RELATIONS AND POLICIES. INSIGHTS FROM POLAND (476)

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Urban areas have always been the engines of civilizational development. Since the ancient times towns and cities have played a crucial role in introducing innovations related both to products and processes.

This paper refers to the concept of innovation ecosystem (Granstrand & Holgersson, 2020), where actors, artifacts, and activities are linked together through various relations, resulting in an application of something new to world, nation, community or a firm. It points at the importance of institutions and the policy-makers as the background factors enabling the innovative processes.

The study presents selected results of a research project URBIN funded by the National Science Centre Poland in the years 2023-2025 (grant agreement number UMO-2021/43/I/HS4/01647). A content analysis of the existing public strategies for urban innovation conducted in Poland conducted in early 2023 involved various tiers of government, starting from the national, through the regional down to the local level.

The findings show a variety of policy tools used to stimulate and promote innovation, including financial incentives, organizational and administrative solutions and support for public-private cooperation. As a result, a general picture of an innovation ecosystem in Poland may be drawn, including actors involved, various roles they play in the process, relationships between the actors, obstacles for innovation and ways of removing them, administrative procedures to be implemented etc. The core results of the study focus on territorial references of innovations, with particular attention to urban areas and their subareas (such as neighborhoods and districts) where the real impact of novel solutions and products can be observed and measured.

Keywords: urban innovation, innovation ecosystems, innovation policy Poland

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DESIGNING SPATIAL CULTURE WITH NARRATIVES IN MEDIUM-SIZED TOWNS (508)

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„The Great Transformation relies on narratives and experiments to find its way“, states the transformation researcher Uwe Schneidewind and proposes a „transformative literacy“ to work on this issue (Die Grosse Transformation, 39). While social sciences have already explored narratives, how to study, classify, or even develop them, it is still a new topic for spatial planners. Therefore, it was the researcher’s concern to find a way to understand the interaction between narratives and spatial culture. What are the stories told about space and how can you even explore them?

The approach was not to limit the work to desk research but to immerse into the field, while daring to change the participants’ perspectives. In the autumn of 2022, an experiment started on the central square of the medium-sized town of Neuruppin, Germany. For six weeks, the population of the city was invited to participate and tell their stories involving the square. While they were able to hand in a postcard on which they wrote their personal experiences, they could also present a narrative in front of other people, which made it possible to reflect whether hearing other stories changes one’s own views on space. In the end there were several events including writing workshops with school classes, discussions between city makers and the city administration and even a children’s theatre play on this square. All of this actions did not only help to identify which narratives are present on this square but eventually led to a change of the common talk regarding it and explored how stories can be a part of participatory action research. The intervention was supported by a spatial element, a stage, which was built particularly for this project. The rotatable object in the middle of the square did not only help the participants to see the different perspectives, but promoted the project by attracting curious citizens and giving them new ideas about the space utilisation.

Keywords: Exploring Spatial Narratives, Participatory Action Research, Tactical Urbanism, Storytelling as a Form of Participation

Reference:

Schneidewind, U. (2019). Die Grosse Transformation: Einführung in die Kunst des gesellschaftlichen Wandels. 3rd ed. Frankfurt am Main, Germany: FISCHER Taschenbuch.

“ECOPOLIS” AS A SPATIAL MODEL AND THE “AREA ECOPOLITANA” AS A POSSIBLE INSTITUTION TOWARDS THE TERRITORIAL ECOLOGICAL TRANSITION (528)

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There can be no “ecological transition” without territorial governance, a spatial vision and also “vast area” authorities capable of realizing it. In this perspective, not only do the Italian Provinces, by now emptied of powers and mission (due to the Law 7 April 2014, n. 56), seem to have become completely inadequate with respect to the tasks and commitment that this process entails, but even the Italian Regions appear, in many cases, unprepared for this new mission.

The aim of the paper is therefore to explain and argue this thesis using an approach that is not merely analytical-descriptive, but also operational, through a historical-critical approach that considers how, over the last century, important reflections have taken place on those urban-territorial archetypes that make it possible to rediscover, in an era of great crisis of meaning and references such as the current one, models on which to reflect in order to build spatial visions and perspectives for the “ecological transition”. The proposal of “Ecopoli” (Fabbro, 2021) and its administrative equivalent of the “Area Ecopolitana”, arises from the intersection between different approaches to the analysis and knowledge of these spatial models and, in particular, from the intersection of the “Regional city” (Parson, 1998) and the “Bioregion” (Aberley, 1999).

The Italian Provinces as a whole represent the non-metropolitan areas of the country and they cover approximately 85% of the Italian territory. The aforementioned bodies, for various reasons, are inadequate to face the great challenge of the ecological transition and therefore risk leaving more than half of the Italian territory - which, moreover, also constitutes the richest part of natural and semi-natural ecosystems of the country- “unplanned”, in favor of only the “metropolitan cities” which are already equipped with an updated (albeit not effectively used) government system. The ecological transition would ultimately prove to be not only partial but, leaving behind the areas that could contribute the most in terms of quality and surface area, also highly unbalanced.

To this end, the paper is divided into the following chapters: 1. Spatial visions and ecological transition; 2. Ecopolis as an “anti-metropolitan” archetype; 3. The “ancestors” of Ecopolis: Garden city, Regional city, Bio region; 4. Beyond the Italian Provinces: The Ecopolitan Area as an hypothetical administrative-institutional version of Ecopoli.

The final result of the paper consists, therefore, in the proposal of the “Ecopolitan Area” which should be understood not only as a territorial system complementary to the “metropolitan city” but also as a government body endowed with a precise mission: to rebalance the Italian territory not so much starting from the classic north-south dualism, as much from the dualism between central areas and internal areas, between metropolitan cities and non-metropolitan areas.

Keywords: Ecological transition, Ecopolis, Ecopolitan area, Regional city, Bioregion

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A NAVIGATING MEGA-REGIONALIZATION: A CONCEPTUAL FRAMEWORK TO UNDERSTAND THE CONFLICTS FACED BY REGIONAL SECONDARY CITIES IN CHINA (529)

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This paper aims to provide a conceptual framework to understand the conflicts between core and secondary cities in the process of Chinese mega-regionalization. Intra-regional unevenness becomes an important issue in Chinese urbanization. It represents the increasing socio-economic development gap between large metropolises and less developed, smaller-sized cities, identified as regional secondary cities. Under such a context, the authorities encourage building closer relations among large, medium, and small cities based on a fundamental regional spatial pattern: the mega-region. This spatial pattern usually consists of strongly interacting networks of one or two dominant core cities and a series of smaller secondary cities. The mega-region, seen as a centrally coordinated regional governance unit, initially promised to enhance the relations between core and secondary cities so that the former can be responsible for supporting the left-behind areas.

However, the "mega-region" does not necessarily benefit secondary cities: in most cases, their economic and industrial vitality is still declining, their social attractiveness is still decreasing, and the gap between core and secondary cities is still expanding. In the face of the problem, we start by conceptualizing the process of establishing mega-regions in China as a spatial restructuring from "a group of cities" to "a system of cities". The former refers to a group of individual cities with a strong hierarchy and dominant centers. In contrast, the latter refers to a polycentric regional system in which each component plays an important and complementary role regardless of city size and power and all benefit similarly from governance coordination.

This paper argues that to pursue such a transformation process, three conflicts between core and secondary cities must be addressed. Regarding places, local conditions and differences in urban attractiveness led to a polarization effect, in which closer connections between regional core and secondary cities exacerbate the exodus of population, investment, and talent away from secondary cities. Regarding priorities, the focus on promoting overall regional socio-economic transformations forces secondary cities to sacrifice their interests, such as economic growth, because core cities tend to prioritize their own transformation agenda, which is not necessarily aligned with the needs of secondary cities. Finally, regarding actor conflicts, decision-makers often make planning decisions that equate the development of core cities with the development of the region. Secondary cities lack the political voice and support to benefit from such a regional framework. This conceptual framework is built based on exploring current mega-regional planning and policies and their implementation process in different Chinese regions. We expect to open more discussions on Chinese secondary cities and how they navigate mega-regionalization to overcome the conflicts.

Keywords: Mega-regionalization, Intra-regional unevenness, Core-secondary conflicts, Secondary cities, Regional governance

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THE ROLE OF THE LOCAL ACTION GROUP (LAG): INNOVATION IN TERRITORIAL GOVERNANCE IN EUROPE? (534)

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Local Action Groups (LAGs) – as territorial development polities – have gained increased relevance in the last three decades. Some of these tailored deliberative polities (Servillo, 2019) have been in action since the 1990s, fostered and financed by the European Commission (EC) instrument LEADER, while others intervened in their territory as self-organised and self-funded citizen-based structures. During the EC programming cycle of 2014-2020, they had the opportunity to expand their intervention area and access European Union (EU) multiple funds by means of the Community-Led Local Development (CLLD) EU soft policy initiative.

CLLD – launched in the programming cycle of 2014-2020 with a strong LEADER heritage – encompassed urban areas that were out of scope in the previous framework, restricted to rural and coastal settings. LEADER and CLLD have over the years relied on strong LAG mobilisation, proactiveness and capacity-building for the design and implementation of a Local Development Strategy (LDS) – a spatial imaginary for an ad hoc territory.

In this perspective, a LAG can be defined as a polity (Palonen, 2003) if considered the following aspects: (i) it is an identifiable political entity – a governance arrangement of stakeholders with a collective identity organised in a form of institutionalized social relations – and in this specific case, related to a territory of their own creation – a soft space; (ii) it has the capacity to mobilise resources, in this case, by accessing EU structural funds, among others funding opportunities.

The ongoing Europeanisation dynamics and a soft turn in policy design and practice are the backdrop for the LAG agency. In this sense, the EU influence can be defined in two major sectors of trends: on the one hand the paradigm shift from government to governance (Jessop, 1998; Swyngedouw, 2005); the emergence of soft spaces and soft planning (Armondi and Hurtado, 2020), the rise of strategic spatial planning (Albrechts, Schmitt and Danielzyk, 2004) and regional development approaches (Adams, Alden and Harris, 2006).

On the other hand a growing emphasis on engagement, empowerment and capacity-building of local communities (Mohan, 2014; Ahmad & Talib, 2015; Mansuri & Rao, 2004). The latter aligns with global narratives broadcasted by the UN's 2030 Agenda (United Nations, 2015), New Urban Agenda (United Nations, 2016) and specifically in the EU, with the European Union's Urban Agenda (European Commission, 2016), New Leipzig Charter (European Commission, 2020b) and Territorial Agenda 2030 (European Commission, 2020a). These agendas are in alignment with a growing emphasis on context-dependent bottom-up people-centred place-based policies (Barca, 2009; Barca et al., 2012).

This paper aims at providing a contribution to the governance innovation debate, discussing the role of the LAG – a place-based, context-dependent governance structure – as an agent in a soft process of re-articulation of the state. Firstly, delving into the ethos of those engaged in the LAG,

seeking the core meaning of their agency, based on their ethics and values, interests and power relations (Flyvbjerg, 2004) as a basis for praxis in the production of spatial-temporal fixes. Secondly, verifying the LAG agency impact in statutory government structures and territory boundaries in a process of power rescaling.

The proposed methodology seeks to establish the analytical dimensions which can provide evidence of rationale; cultural adherence; institutionalisation; and inter/intra-politics of these governance arrangements. Spatially focusing on Lisbon Metropolitan Area, we present an overview of the LAG landscape in this territory and a case study portraying the possible nature of that role. The choice of a detailed narrative of the way both power and values work can shed some light on the contribution of LAGs to governance innovation in Europe.

Keywords: Local Action Group (LAG), Polity, Territorial Governance, Community-Led Local Development (CLLD), Europeanisation

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PUBLIC SPACE AS AN URBAN POLICY AGENDA? POLICIES, FUNDING AND SOFT PLANNING IN LISBON METROPOLITAN AREA (560)

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Being a fundamental layer of the urbanized territory, public space is physically developed according to a wide range of rationales and purposes and under the complex interplay of multiple actors and their interests and agendas. As such, it is charged with a socio-political dimension which is important to address to better understand the reasons behind the specific programmatic and spatial frames for urban projects. This issue is particularly relevant when inquiring on the interventions promoted directly by the public sector (i.e. government agencies and municipalities), in which the impact of political agendas on urban development may have a clearer presence.

The article explores this interplay by looking into the goals, priorities, and planning tools used in the policy framing of public space qualification interventions in Lisbon Metropolitan Area (LMA). As occurs in other South European countries, Portuguese urban development is primarily delivered by private developers under a market-oriented rationale, with public space usually handed over to municipalities for management and maintenance. However, public space qualification interventions (i.e. those focusing on existing spaces) are mostly funded and delivered by the public sector, in its multi-level institutional apparatus (Santos & Carvalho, 2022). Interestingly, most of the funding priorities and rationales do not consider public space as a focus per se; instead, they aim at more abstract realms such as urban resilience, sustainable mobility or social cohesion. Nevertheless, when looking at their physical outcome, public space qualification projects hold a prominent share in funding allocation. Furthermore, along with specific European Union (EU) agendas and funding priorities, a set of non-statutory planning instruments were deployed in order to frame funded projects under strategic soft-planning practices that emerged parallel and complementary to longer-term land-use normative planning processes (Cavaco et al., 2021, Carvalho et al., 2022).

The article presents a diachronic perspective framed between 2000 and 2020 on the triangular interplay of: a) the policy framework for urban development, with a particular emphasis on Portugal-EU funding agreements and their main goals and priorities; b) the impact of such goals and priorities on the effectively delivered public space projects in LMA; and c) the planning tools used in the programming and delivery of these projects. A twenty-years perspective of this interplay offers interesting insights into the policy dimension behind physical interventions. With the considerable presence of EU guidelines in what pertains to Portuguese urban policies and the corresponding funding envelopes such perspective can also add a relevant field of inquiry on what can be learned from past experience and to inform future policy-making, not only at the local and national level, but also for a European and international perspective.

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RESEARCH ON THE URBAN PLANNING AND DECISION-MAKING PROCESS OF CHINESE LOCAL GOVERNMENT: TAKE THE GUANGZHOU PLANNING COMMISSION AS AN EXAMPLE (576)

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In the past 40 years, with China's transition from a planned economy to a market economy, cities have formed multiple interest subjects and complex interest structures in the process of development and construction. The urban and rural planning led by local cities conforms to China's public policy decision-making system, and the planning committee institution as the decision-making mechanism for local urban development has gradually been attached importance. This paper has conducted a year-long meeting record of the Guangzhou Planning Commission and analyzed the annual report data of the Planning Commission in the past ten years. Based on the research theory of western public policy on China's decision-making system, it introduces the "separation and centralization" model under the bureaucratic political framework, and analyzes the organizational structure, review procedures, topic overview, and review results of the Guangzhou Planning Commission. The characteristics of the planning committee's decision-making are summarized as follows: the political and market nature of the agenda setting coexist, the decision-making objectives form a "fuzzy consensus" under the bargaining of multiple stakeholders, the decision-making process reflects the guiding role of the expert elite group, and the public participation achieves a certain degree of democracy. The paper points out that Guangzhou Planning Committee reflects the characteristics and influencing factors of the current Chinese political system, and has been optimized and improved based on the urban public policy system, forming a "democratic decentralization" decision-making model. This theoretical model is not only conducive to understanding the process of Chinese political decision-making and democratization, but also an expansion of the research field of Chinese sociology. Based on this theoretical model, the paper puts forward the optimization path for the system of Guangzhou Planning Committee: First, the deliberation power is decentralized to the district through decentralization, and the regular meeting system is formed; The second is to strengthen the decision-making consensus and distinguish the decision-making procedures of different topics; Third, optimize the organizational structure and increase the professional composition of members; Fourth, deepen multi-channel public participation and improve the democracy of decision-making.

THE PLACE-BASED APPROACH IN LOCAL TERRITORIAL DEVELOPMENT: A DECLINATION IN ONE OF THE ITALIAN “INNER AREAS” (592)

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The aim of this paper would be to reflect on the ways the Place-based is declined in the local context. The paper would discuss the challenges faced by the local administrations in activating integrated territorial projects in the so-called Inner Areas in Italy, particularly, the project actions related with landscape enhancement.

Besides, and certainly for the first time in modern history, the NSIA calls for the joint work of different municipalities and entities at the local level to jointly build and implement a territorial development strategy. Although the SNAI has been recognised in the academic debate as an interesting novelty and a special case of territorial sensitivity (Coppola et al., 2021; Viesti, 2021), there are still some questionable aspects of the effective implementation of the Strategy in project areas. The models and approaches considered so far are not reproducible in every context, where the processes of knowledge acquisition and capability diffusion have taken place with varying degrees of depth and complexity.

This paper would present the outputs of a case study. The context analysed by the research concerns the Bormida Valley, one of the three first pilot SNAI project areas in the Piedmont Region. The valley is rich in a widespread cultural and landscape heritage. At the same time, there is an interesting project scenario recently activated by the SNAI, the recently approved Piedmont Regional Landscape Plan and the objectives of the New Urban Agenda.

The paper will attempt to illustrate the arrangements made during the operational translation of the project, through answering some specific research questions: What is the declination of place-based that it is made by local institutions in Bormida Valley? How the local institutions redefine what a development policy can be for inner areas? What kind of actions did the leaders actually carry out? What kind of local knowledge is activated during the implementation? The insights are the result of empiric research, participatory observation, interviews and first-hand experience. The field-research activities were conducted over a period of time in the local territorial authority overseeing the project.

Finally, the article aims to offer a contribution to territorial governance practices, with particular reference to development policies and the activation of local knowledge, where bureaucratic apparatuses are limited and where the ineffectiveness of technical bodies for landscape enhancement has been previously lacking.

Keywords: National Strategy for Inner Areas, local development, policy implementation

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A DELIBERATIVE EXPERIMENT IN LOCAL DEMOCRACY - A CASE STUDY OF WALBRZYCH (POLAND) (597)

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Due to the widely observed 'democratic malaise' in Europe governments and researchers are looking for new methods and tools of involving citizens in decision-making processes. One of such tools is participatory budgeting (PB) - a democratic process in which residents co-decide on the city's public budget. PB generally proceeds as follows:

- stage I - residents prepare and submit task proposals addressing particular needs of their local communities. These proposals are analysed by municipality officials for their compliance with the public policy and feasibility;
- stage II - projects that have successfully passed the verification are presented to the residents for voting;
- stage III - projects that have achieved the best voting result implemented.

As the experience of some European cities shows, different countries have different experiences in conducting participatory budgeting. Some of them have got continuous and successful PB programmes whereas others have just started working on the procedures. The proposed paper describes the case study of Wałbrzych (Poland) where participatory budgeting programme has been developed since 2013.

A pilot experiment in deliberative democracy conducted in 2022 within a research project DEMOTEC "Democratising Territorial Cohesion: Experimenting with participatory budgeting and deliberative citizen engagement in European regional and urban policies" (funded within the H2020 research programme) involved 132 participants and enabled testing various levels of engagement in the decision-making processes. The research framework was based on how PB is generally implemented: starting from priority-setting session through project proposals articulation to voting. Participants were allocated to three groups (cohorts A, B and C). Some of them participated in the whole process (cohort A), some joined in the second stage (cohort B) and some were involved only in voting (cohort C). Each participant was asked to fill a pre- and post- questionnaire which measured his/her attitudes towards the public decision making processes.

The results prove that the level of satisfaction is strictly connected with the involvement level. Residents who participated in the whole experiment were more satisfied with the process than those who were invited in the later stages of the study. Hence, particular recommendations for urban governance can be drawn regarding the methods of conducting participatory budgeting. It seems that long-lasting involvement of citizens can be a good way of countering the weaknesses of representative democracy.

Keywords: participatory budgeting, urban planning, deliberative experiment

INTERNATIONAL BUILDING EXHIBITIONS AS A FRAMEWORK FOR EXPERIMENTS: EXPERIENCES FROM THE IBA STADTLAND THURINGA (618)

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Research on sustainability has highlighted the importance of experimental formats as accelerators of transformation processes (von Wirth & Levin-Keitel 2020, Kivimaa et al 2019, Wolfram 2016). It is becoming clear that sustainability requires experimenting with new ways of working and living in order to question and change unsustainable values, practices and rules. Especially in spatial development, experiments as temporary interventions offer a solid basis to assess possible negative impacts of e.g. spatial planning changes, to test conflicts with existing rules and to explore options for action. Experimental formats offer instruments for coproductive learning and can promote the acceptance of measures (Hölscher et al 2019, Polivka et. al 2022, Christmann et al 2020). But what framework conditions for experiments in spatial development are necessary and useful? What context do experiments need to achieve visibility, trigger discourses and promote upscaling? What role do planning actors play in experiments and what expectations are placed on them?

Taking the IBA Thuringia as an example, it will be shown to what extent International Building Exhibitions (IBAs) are suitable as experimental formats for sustainable spatial development at regional level. In particular, the limitations that arise at the end of the IBA process with regard to the legacy and endurance of the projects and discourses will be addressed. A case is argued for transitional platforms to promote experimentation in regional development in a long-term perspective by referring to the experiences of "Regionale" and past IBAs.

Keywords: sustainability, experimentation, transition, international building exhibition

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PROXIMITY BIAS AND EFFECTIVE GOVERNANCE (692)

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This paper presents the results of an online citizen science project aimed at identifying critical social preferences and needs in Poland's urban and rural areas concerning a long-term development strategy initiated by the Government. The project, which was conducted between May and September of 2022 in Poland, focused on the United Nation's Sustainable Development Goals (UN SDGs) and involved five waves of surveys, public discussions, and online activities devoted to Education, Life quality, Green Transition, and Social relations. The analysed sample consists of 1824 unique responses. The results of the project suggest the presence of a proximity bias in each thematic wave, which has implications for participatory decision-making processes at the local and central levels. Proximity bias refers to a tendency for people to prioritize the needs and concerns of their immediate community, or "proximity," over those of more distant communities. This bias manifests in a variety of ways, such as individuals or social groups placing greater importance on local issues and neglecting broader, regional or national concerns. The paper uses logit/probit and pooled OLS models, as well as the discourse analysis to examine the significance of the proximity bias, its geographical pattern (urban vs. rural), and its potential influence on the feasibility of development policy in the context of other factors. The paper contributes to the ongoing discussion on social participation and the delegation of responsibilities between local and central levels of Government in the development of an optimal model of development policy in Poland and other European countries.

Keywords: proximity bias, governance, participation, Poland, citizen science

THE RENAISSANCE OF ITALIAN METROPOLITAN CITIES? INTEGRATED URBAN PLANS A TOOL TO STRENGTHEN METROPOLITAN CITIES' GOVERNANCE (701)

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It has been pointed out that, despite the high level of institutionalization, the Italian metropolitan cities did not yet play a relevant role in the programming of the EU cohesion policy and have been involved only to a limited extent in its implementation (ESPON, 2021). The paper questions this position in light of more recent development, discussing how the Italian metropolitan cities are now called upon to play a central role in the territorial governance of the country. More in detail, it argues that the EU Recovery and Resilience facility has opened a window of opportunity for the further engagement of metropolitan authorities in territorial development.

Within the paper, attention is first drawn to Italy's National Recovery and Resilience Plan (NRRP) and to its rather broad scope and contents in comparison to those of other European countries and to the magnitude of the investments carried out in Italy, at least since the 1990s. In this sense, its implementation will be decisive not only for the future of the country but also for the success of the entire NGEU (Viesti, 2022).

Whereas the identification of the NRRP strategy and objectives has mainly occurred at the national and supranational levels, a different scenario seems to be unfolding with regard to the implementation phase. Local governments, particularly Metropolitan Cities, are called upon to play a central role in all the significant challenges identified in the NRRP through the so-called Integrated Urban Plans (Piani Urbani Integrati – PUIs). The investment in PUIs is part of Mission 5 Inclusion and Cohesion and benefit from 2.49 billion Euro of funding, in addition to 210 million Euro allocated by the Complementary Plan, for a total of 2.7 billion.

The intervention of PUIs is targeted entirely at metropolitan cities, to improve their suburbs by creating new services for citizens and upgrading logistics infrastructure, thus transforming the most vulnerable parts of metropolitan territories into more sustainable, smarter places. This is particularly important concerning the post-pandemic recovery and the resilience of these places vis-à-vis possible future shocks. To shed light on the matter, the article analyses and compares the 31 PUIs that have been approved. In particular, the distribution of funds among the various metropolitan cities, the processes of stakeholder participation, the different themes discussed, and the approach to constructing the various plans will be analysed.

The results of the analysis show that each PUI has been tailored to the specific socioeconomic and territorial characteristics of its wide-area contexts. This has stimulated the development of organizational and performative forms closely conforming to the spatial features and specific needs of individual communities. Based on the collected evidence, it is possible to formulate three levels of consideration: i) on the impact of the PUIs resources on the discipline of territorial government; ii) on the feasibility of the proposed projects; iii) on the different partnership formulas.

Keywords: Recovery and Resilience Facility, Urban Integrated Plans, metropolitan governance, EU cohesion policy, Italy

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GOVERNANCE CHALLENGES IN IMPROVING MARITIME TRANSPORT SYSTEM CONNECTIVITY IN THE GLOBAL SOUTH (CASE STUDY: INDONESIA) (729)

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A significant amount of problems in managing maritime transport originate from bad governance (Shaw and Sidaway, 2010; Monios, 2014; Vander Horst & De Langen, 2008). Investigating solutions to these governance problems is challenging due to the absence of clear definitions, criteria, indicators, and models of maritime transport governance in the current literature, especially for the global south context. Most literature revolves around either mono or polycentric governance (See, e.g., Ostrom et al., 1961; Aligica & Tarko, 2012; Roe, 2020). Whereas, reality shows that many variations exist between these two opposites. In addition, studies regarding maritime transport governance tend to focus on port governance, which is only one element of the maritime transport governance system (See, e.g., Talley, 2013). Identifying maritime transport governance within a whole system is important since maritime transport is not only about port-to-port and within-port connections, but also includes port-hinterland relations (Arvis et al., 2019).

This study identifies the governance challenges associated with maritime transport systems. We present a case study focused on Indonesia, which serves as an illustration of the global south. By taking integration and coordination as criteria, this study maps the various models that can emerge. A semi-systematic literature review reveals six models across the span of mono and polycentric governance. The level of integration and coordination will determine which governance model applies. A qualitative content analysis of core policy documents indicates that different sub-systems show different governance models. Hierarchical governance emerges in port-to-port and within-port subsystems, with typically rigid regulation. In contrast, the port-to-hinterland is characterized by competitive governance, which involves private companies as the majority operators, operating under market failure threats.

This case study shows that even the same maritime transportation system can have different governance models. The treatment to solve maritime transport governance problems should address which maritime transport governance applies. No one treatment fits the whole system. Maritime transport planners must be fully aware to see this challenge to be able to solve the complicated problems in maritime transport.

Keywords: Maritime Transport System, Governance Model, Global South

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NATIONAL URBAN AGENDAS AS POLICY INSTRUMENTS: A COMPARATIVE ANALYSIS (734)

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As the number of state governments, federations, and supra-national organisations that have voluntarily enacted proper urban agendas – or are equipping themselves with general urban policy frameworks – has significantly increased worldwide, national urban agendas have received increasing scholarly attention within international policy studies over the last years (Zimmermann and Fedeli 2021; Armondi and De Gregorio Hurtado 2020; Kundu et al. 2020). Against this backdrop, important cross-disciplinary insights stem from comparative research that seeks to detect the influence of different legislative traditions, political regimes, national party coalitions, dominant interest constellations, periods of rising or declining institutional commitment, and public interest in urban affairs.

This contribution presents and discusses the results of a research project carried out by the authors on the cases of France, Spain, Portugal, the U.K., the U.S., Canada, China, India, Argentina and Brazil (Gelli and Basso, 2022). With the aim of understanding the changing global geography of such tools since the second post-war period, the research highlights that whilst some discontinuities and differences exist between these Countries, they each demonstrate a common systematic investment in urban policies.

Our comparative diachronic and synchronic analysis has been guided by the following main questions:

- when and why did the issue of a national urban agenda become a matter of political attention? Was the urban agenda connected to the recognition of/response to a urban question?
- what were the main steps in the historical evolution of the urban agenda?
- where and how was the urban agenda debated? To what extent has it remained a matter of technical debate and/or has been developed as a matter of public concern? Was it constructed as a case of policy transfer?
- what forms did the agenda assume in terms of policy tools (communications, recommendations, regulative frameworks, etc.)?
- what were the main issues that the urban agenda has tackled?
- did the urban agenda generate a national urban policy, in terms of aid-to-city programmes and urban actions?

The empirical evidence collected through the case-studies and hereinafter presented highlight the emergence of a peculiar global geography that allows the identification of an “old” and a “new” geography of national governments committed to adopting such policy instruments. In addition, the research draws attention to the form and nature of such tools (as both explicit and implicit, discursive and programmatic tools) and their translation into dedicated policies, programmes of intervention and funding schemes that help cities elaborate their own local agendas, as well as the the approaches and styles of policy-making related to processes of agenda-setting.

Findings that will also be discussed relate to the way the concept of “urban” has entered and has been declined within national urban agendas, and the role played by transnational actors in drafting the documents through various mechanisms of policy transfer (i.e. the UN 2030 Agenda, or UN-Habitat National Urban Agenda).

Keywords: National urban agendas; agenda-setting; national urban policy

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CONSERVATION AND DEVELOPMENT OF HISTORIC AND CULTURAL HERITAGE IN WUHAN FROM A REGIONAL PERSPECTIVE: TAKING THE "STRUCTURE-FUNCTION THEORY" AS ANALYTICAL FRAMEWORK (841)

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In the process of rapid urbanization in China, the contradiction between heritage conservation and urban-rural construction has become an urgent issue (Shao et al., 2016). Large-scale land expansion and land property changes have destroyed the original heritage network, leading to the fragmentation of heritage (Zhang Jie, 2015), while also making city lack local characteristics (Shao et al., 2019). Moreover, heritage conservation approach in China now is still limited to individual sites (Shao et al., 2016), which is not sufficient to solve the contradiction between conservation and development. In fact, the "regional perspective" of historic and cultural heritage has gradually become a consensus, as no single heritage site exists alone, but in its surroundings (Zhang, Bing, 2015). A regional perspective on conservation emphasizes the vision of a larger "field" and focuses on different spatial scales (Chen, 2012). To study the relationship between conservation and development in a dynamic and systematic way, it is necessary to analyze heritage in the context of the city, considering the economic and social structural transformation. While the neoclassical "structure-function theory" divides cultural heritage into three dimensions: (1) ontological structure: focus on specific heritage which is considered as capital and resources; (2) external structure: to study how heritage is influenced by the external structure; (3) spontaneous structure: to study how heritage affects its external social structures (regions, towns, villages, etc.) and consider it as a form of resource allocation (Zhang, 2020).

This paper adopts a regional perspective and uses the neoclassical "structure-function theory" as an analytical framework to interpret heritage and analyze its development potential in economic and social aspects. As one of the National Famous Historical and Cultural Cities in China, Wuhan is endowed with outstanding historic and cultural heritage resources and has made many explorations in heritage conservation planning. Based on literature review and public data, this paper takes all the heritage resources within Wuhan as the research object and uses historical research methods and ArcGIS analysis methods. After sorting out the historical background and summarizing the heritage components in Wuhan, the following three spatial distribution characteristics of heritage are found: (1) Concentrated occurrence in the main urban area and scattered distribution in rural area; (2) A variety of heritage types coexist, and the characteristics of different areas are remarkable; (3) Heritage distribution is shaped by nature and concentrated along the river. By combining the spatial analysis of heritage with the neoclassical "structure-function theory", it is found that: (1) Heritage can be used as cultural resources and capital for the development of the villages and towns in Wuhan; (2) There is a certain homogeneity in the direction of cultural and commercial development in Wuhan, and a mismatch with the functional structure of city's heritage resources. (3) More attention should be paid to the development of customary heritage and institutional structural heritage.

Keywords: regional perspective; historic and cultural heritage; conservation and development; Wuhan; structure-function theory

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SMART SPECIALIZATION STRATEGIES AND SLOVAK REGIONS: MISSING LINKS AND PATHWAYS FOR REGIONAL INNOVATION (869)

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Experiencing deep economic, administrative and social changes, Slovakia is a CEE country open to transition and development in many aspects. This research focuses on regional innovation policy from the perspectives of EU Cohesion policy and smart specialization in particular. A set of strategies for creating synergy among stakeholders for innovation and identifying the most favorable sectors for innovation and growth by examining existing assets in a territory are known as Smart Specialization Strategies (RIS3). European Commission's Smart specialization platform primarily aimed to foster the industrial modernization of Slovak regions in two areas, which are advanced materials for batteries Slovakia as participating partner, and secondly cybersecurity where Slovakia as interested partner for the period of 2014-2020.

The smart specialization policies, as yet, could not be implemented in Slovakia efficiently due to the fairly generalized approach in the selection of economic sectors and the insufficient funds for training technical and qualified labor. For Slovak case, there is a missing link between universities and private sector due to bureaucracy primarily. The collaboration has been hindered by bureaucracy and the role of universities in innovation ecosystem has not been utilized properly. Although, through Operational programs, there have been contributions to the relationship between academia and industry in Slovakia, R&D system has still not been efficiently funded which effects the regional innovation policies inadequately. The updated Smart Specialisation Strategy of the Slovak Republic for 2021-2027 (RIS3 SK 2021+) aims to achieve the transformation with renewed strategies for an economy based on knowledge, with increased efficiency in terms of environment and energy prospects.

How well do current smart specialization policies fit with the Slovakia's reality? What steps need to be taken on a national scale for better coordination of external funds and allocation? This research involves general reflections on the smart specialization policy in Slovakia and with a specific focus on RIS3+ in Nitra region. How the smart specialization policies correspond to building local institutions for cohesion? A series of interviews are held with policymakers, stakeholders and specific industries related to smart specialization in Slovakia. As a result, existing missing links are revealed, and this research contributes to the discussion for influencing future regional innovation policies in the Slovak case.

Keywords: cohesion policy, regional policy, smart specialization, CEE countries, Slovakia.

FROM HEALTHY CITIES TO TERRITORIES OF WELLBEING: TRANSFORMING SECOND TIER PORT CITIES ALONG THE RHINE (878)

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Contemporary society is confronted with significant challenges including climate change, health, and poverty which are not uniformly distributed throughout the world, as both their burden and the capacity to address them vary significantly. Despite this unevenness, urban governance and spatial planning continue to be shaped by growth-oriented paradigms for integration in global economic systems. As a result, recent decades have seen a tendency towards hierarchical and exclusionary thinking that privileges growth over wellbeing and dominant core regions over others. There is a growing trend towards alternative frameworks focused on health and wellbeing to address the shortcomings of previous approaches. However, to become credible alternatives to growth-driven paradigms, it is crucial that they are conceptualized and operationalized for different places and at various scales, from the global to the regional and local. So far, most such frameworks (e.g. healthy city, smart city, 15-minute city, etc.) are too localized in a few core cities and have difficulties both in 'scaling up' to metropolitan and regional levels as well as 'scaling across' to different types of city. Therefore, this paper advocates a shift from a localized focus on health and wellbeing in frontrunner cities, towards a more inclusive and multiscalar perspective that incorporates and builds upon networks of cities and territories of various types and sizes.

This perspective stems from the observation that the challenges that most affect health and wellbeing - e.g. related to climate, infrastructure or justice - materialize at the level of territories and are best addressed through cooperation at that scale. But the required shift is especially relevant in Europe, where powerful global cities, despite their capacity to promote healthy urban development, often experience negative agglomeration effects, and interconnected, polycentric networks of second-tier cities are getting recognized as an appropriate scale for governance, policymaking, and spatial planning. On this basis, we claim that integrated and collaborative networks of medium-sized cities are significant environments to test and a good opportunity to implement a shift from a 'healthy city' perspective towards 'territories of wellbeing'. This is explored in the cities and regions along the Rhine watershed - a natural planning region at the demographic and economic core of Europe - whose development resembles the prototypical European urbanization mode of an integrated system of medium-sized cities. Through their shared geography, the cities and regions along the waterway share similar territorial threats and challenges, such as increased risks of extreme flooding, often paired with droughts, and engage in discussions about techno-managerial innovations and risk adaptation. Lastly, the Rhine cities are part of the same, special type of urban 'family' - port cities. Shared transnational economic, infrastructural, logistical, and institutional interdependencies and common cultural and historical references provide the incentive and need to cooperate at the territorial scale. The paper investigates whether this gives them multiple valuable capacity-building potentials to jointly achieve alternative goals of becoming a territory of wellbeing and drafts a framework to operationalize the concept and assess how regions perform in this respect.

Keywords: Healthy City, Territory of Wellbeing, Second-tier City, Port City, Rhine

PROJECT-ORIENTED PLANNING FOR A MULTI-LEVEL GOVERNANCE: THE METROPOLITAN AGENDA FOR SUSTAINABLE DEVELOPMENT (899)

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Today the ways in which development planning is tackled are an important aspect to reflect on to manage a sustainable urban growth scenario. The European impulses to counter the effects of climate change, with the commitment of the Member States, and the recent Local Authorities reforms have paved the way for the definition of flexible tools to foster a multi-level governance.

In this scenario, the Italian Ministry of the Environment and Energy Security (MASE) has undertaken to collaborate with the Metropolitan Cities to define coherent strategic tools capable of making a contribution to the achievement of the sustainable development goals of the regional strategies, being defined by the Regions regarding the implementation of the National Strategy for Sustainable Development (SNSvS) approved by the CIPE (Interministerial Committee for Economic Planning and Sustainable Development) in 2017.

On this basis, the Metropolitan Cities, already engaged in the definition, updating and implementation of their governance tools, such as the strategic plans, the urban plans for sustainable mobility, the metropolitan territorial plans, etc., oversee the Metropolitan Agendas for Sustainable Development in accordance with the Regional Sustainable Development Strategy (SRSvS). This Agenda represents not only an integration and orientation device for the current and implementing planning tools, but above all a reference framework and an operative tool that confers meaning and makes it possible to monitor metropolitan policies and projects. Nevertheless, it directs programming on funding channels relating to the sustainable development goals.

This paper presents the policymaking process for the Agenda for the Sustainable Development of the Metropolitan City of Cagliari (Sardinia, Italy), as a continuous process of contextualisation of the sustainability development goals. At the same time, the process aims to translate the principles and objectives of sustainability into shared guidelines for the implementation tools of the municipalities, in terms of operational and procedural indications and good practices. Furthermore, the paper discusses the institutional context for promoting integrated projects for sustainability as an opportunity to agree mutual commitments and obligations for their implementation.

Starting from the construction of a shared reference framework on sustainability initiatives, programs, and strategies at different levels, 9 fields of action have been identified to summarize the contents and objectives of the sustainability strategies in thematic areas. The fields of action prompt the debate with the local governments and their technostructures starting from the projects in progress or in planning.

The outcome of 5 meetings with the territories is the “urban planning geography” of the metropolitan city, a representation of the metropolitan structure in order of: problems, opportunities, projects, places.

A decision support tool based on the technique of cognitive maps together with specific selection criteria for the selection and analysis of the projects has made it possible to build the first clusters that represent embryonic forms of integrated projects for sustainable development.

Two groupings have been the subject of follow-up by the techno-structures of the metropolitan city of Cagliari and an integrated project for an energy and sustainable community will be started to test the method.

Keywords: multi-level governance; sustainable urban growth; Metropolitan Agenda for Sustainable Development; integrated projects for sustainability; decision support tools

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STRATEGIES TO DELIVER URBAN SERVICES UNDER THE SUSPENSION OF PLANNING LAWS: LEARNING FROM LOCAL PRACTICES IN THE CONTEXT OF LEBANON (907)

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Many studies have looked at the consequences of planning regulations and deregulations in different contexts and have considered their influences on the delivery of urban services (Aparcana, 2017; Bédécarrats et al., 2019; Boonstra and Boelens, 2011; Furlong et al., 2017; Lupo and Cusumano, 2018). However, looking at the condition where planning regulations and laws are suspended has not been thoroughly discussed in the extant literature on the management of urban services. This condition is referred to as what is known as the ‘state of exception’ (a concept developed by Agamben (2005) to explain a violent mode of governance within which people’s rights are infringed) and is used in this study as a theoretical lens to analyse strategies of recycling operators to deliver waste services. Under the condition of exception, recycling operators cannot refer to the law to guide their work, to protect their rights, and to solve conflicts in their operation, which can interrupt their delivery of services. This study aims to understand ways in which recycling businesses mobilise strategies to navigate pressures and uncertainties to continue to deliver waste services. The research methodology consists of 20 semi-structured interviews with multiple waste operators in urban areas and in a refugees’ camp within the context of Lebanon. The main findings suggest that recycling operators are mobilising various strategies to construct their social acceptance by responding to society’s needs (e.g., building networks with multiple sources of waste, using social media and public spaces to expose their services, and creating end-products). Despite, top-down solid waste management paralysis, recycling operators have proved their worth in delivering efficient and adaptive services and in presenting alternative solutions for society. The deactivation of laws is found to hold opportunities for local waste operators to negotiate their inclusivity in the existing solid waste management system without the need to change it. By doing so, they are acting as socio-economic drivers for new possibilities in neighbourhoods and cities despite the turbulences they face in their operation. The role of recycling operators and their associated dynamics are valuable in informing the wider field of urban planning to implement better solid waste management policies for local economies to flourish.

Keywords: suspension of laws, uncertainties, local recycling practices, adaptive urban services, socio-economic dynamics

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INTEGRATED TERRITORIAL GOVERNANCE IN RURAL AREA: BASED ON THE PRACTICE OF PLANNING UNIT ADJUSTMENT IN SICHUAN PROVINCE, CHINA (915)

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The large number and small size of villages have long constrained the efficiency of planning and territorial governance in rural areas. The reason behind Sichuan Province, China, which is a typical area of high-density villages due to the small administrative unit of villages, is that the regional division pattern established by the small-holder economy cannot be adapted to the needs of modern governance. Since 2021, Sichuan Province has been promoting the top-down merger of town and village administrative units, supported by the joint preparation of spatial plans by multiple towns, in an effort to revitalize territorially fixed rural regions. The literature suggests that regions as territorially fixed are often the result of human perceptions of regional affiliation embedded in specific governance structures (Allen, J, 2007). Skinner's (1965) study in rural Sichuan showed that the functioning of rural markets and the transactional behavior of villagers shaped the spatial structure of the region, and that this set of "market-hinterland" relations in the context of the governance system is the established town and its subordinate administrative villages. At present, the administrative fragmentation and excessive competition that accompany administrative boundaries have led the Chinese government to experiment with different scales of "regionalization". In the case of rural areas, the homogeneity and incompleteness of subjective power make it necessary to explore particular ways of local government cooperation. In this paper, we analyze the mechanism and practical effects of Territorial integration in rural region as an example of the dual approach of administrative redistribution of townships and joint spatial planning of multiple towns in Sichuan Province, China. The study shows that, firstly, bottom-up linkages such as market relations and social organizations still have clear structures and linkage resilience in the current Chinese countryside. Top-down integration agendas need to conform to such inherent structures. Second, spatial planning is a vehicle for formalizing informal integration agendas. Since the rural-territorial association is not an independent administrative subject, the concrete implementation of its integrated development results requires the instrumental platform structure of spatial planning. In short, following the endogenous structure of rural areas is the key to integration. Both administrative zoning adjustments and the use of policy instruments are means of anchoring structural adjustment at the governance level. The top-down policy tools (e.g., spatial planning) can effectively fill the power gap created by the restructuring of governance authority and responsibility.

Keywords: Territorial Governance; Rural Area; Space Planning; Space Integration

THE IMPACTS OF GREEN-TECH COMPANIES IN SUSTAINABLE TERRITORIAL DEVELOPMENT (916)

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Europe produces 2.5 billion tonnes of waste per year, which is about half a tonne of waste per citizen (European Commission). A large part of this is food waste, with nearly 20% of the total food produced being wasted (European Commission). Food waste is especially problematic in developed countries, where consumers waste a huge amount of food, and farmers are often forced to leave their harvests in the fields because they are surplus to consumer demand. The OECD/FAO predicts that the demand for food will increase by 15 per cent [OECD, 2019-2028], and with this, there will be even greater food waste. Therefore, it is becoming increasingly clear that the production of food waste must be reduced and waste products reused. To achieve this, it will be necessary to develop new circular business models, socially responsible projects and sustainable policies towards more resilient planning [Bourdin et Al., 2021; Malinauskaite, 2017]. Important advances have been made in food waste recycling and the circular economy. Many organizations are developing new technologies and innovative products that use food waste and food byproducts (Scaffidi, 2022). However, there is still a gap in the literature on the regional impacts of these companies and social enterprises. The aim of this work was to understand the impacts of these businesses on their urban and rural areas, review the literature on the circular economy and analyze greentech in Europe. This will provide valuable insight into the question: What are the regional implications of Greentech companies and social enterprises in the food waste sector?

Indeed, this research explores some of these Greentech companies and social enterprises in Europe and discusses the regional implications of Greentech with a specific focus on Southern Europe. Two examples from the region of Sicily (Italy) were studied. This research involved comparative and qualitative research methods, with semi-structured interviews.

It includes an analysis of the regional implications for Sicily and a community impact analysis (CIA). The results show the current and potential regional implications, specifically focusing on the social, cultural, economic and environmental impacts that they have. Furthermore, the results show the pecuniary and non-pecuniary impacts on the local community in the short, medium and long term. One of the major impacts of these Greentech companies is the reduction in waste and its consequent benefits for the environment. This is the direct result of their activity and will also have a positive economic impact on the food processing industry. The social aspect of these benefits is less direct, but it is anticipated that these activities will help to develop more sustainable behaviour in the local community. It is also anticipated that the availability of these local products will inspire a second generation of entrepreneurs who will create businesses which make new consumer products from these materials. This will have a significant impact on the local economy and promote youth entrepreneurship as well

The opening of new businesses that adopt circular economy principles can push local administrations to create new policies that support a circular economy, youth entrepreneurship

and the development of Greentech in general. New policies for the circular economy will lead to high economic and environmental impacts in the regions. This will be accompanied by medium-level social impacts and low cultural impacts. The development of new policies for youth entrepreneurship and greentech can also contribute to the creation of high social implications at the regional level. This can foster youth entrepreneurship, leading to greater population satisfaction and sustainable development.

This research represents a starting point for future research and highlights the value of the investment in Greentech for planning.

Keywords: Greentech, territorial development, multiple dimensions, environment, circular economy

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EU REGIONAL POLICY AND COUNTRIES IN THE EDGE OF EU-ACCESSION: THE CASE OF ALBANIA'S PATH TOWARDS REGIONAL DEVELOPMENT (959)

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The EU requires potential member states to demonstrate development and commitment to regional equality, stability, and good governance.

However, development is influenced by various factors, and unforeseen events can alter it on a large scale. While events such as the Covid-19 pandemic, the war in Ukraine, and the persistent issues posed by climate change have made development processes increasingly challenging to anticipate, posing obvious warnings that governments, and the EU as an organization, to brace themselves for additional development hiccups in the future.

In front of these challenges, Cohesion Policy has been at the heart of the European response to the crisis since the epidemic broke out in Europe (Musiałkowska, Potluka, & Idczak, 2020). This has helped the EU's economy towards recovering while current programs from the 2014–2020 era have been strengthened and modified to help sectors and areas that have been severely impacted by the crisis, demonstrating their responsiveness.

The newly reformed rules, as per 1 July 2021, are designed to strengthen the focus of Cohesion Policy on a "smarter" and "greener" Europe, as well as to create favorable conditions for investment through simplified delivery mechanisms and closer links to structural reforms. However, this shift towards a "smarter" and "greener" Europe also poses its own challenges, especially for countries striving towards becoming members of the EU. (Reynolds, 2022). On the other hand, as the enlargement ambition of EU is currently a hot topic, the shifting of European policies might impose greater uncertainties for the countries striving towards becoming members of the EU.

Regional policy becomes a crucial factor in their pre-accession process, especially to countries such as Western Balkan ones, which are often prone to continuous transition and path dependencies from the past governance system. Albania is one such country, and it has a significant challenge in balancing its need for regional development as a prerequisite for EU membership with its need for a better governance structure, which would accelerate the lengthy route to EU membership. The country's discussion on regional development has been on and off for the past sixteen years. The country's discussion on regional development has been on and off for the past sixteen years, with uncertainties still remaining regarding whether to pursue regional development policy or regionalization. (Imami, Bejko, & Shutina, 2019)

This paper seeks to put into context the critical position of countries such as Albania, which is on the verge of joining the EU, and the enormous need to deal with regional policies as a policy prescribed by EU accession requirements on the one hand, and the need to respond to domestic needs in the face of uneven development patterns at the regional and local levels on the other.

Keywords: regional development, shifting policies, pre-accession countries

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THE THIRD SECTOR AS A NEW URBAN ACTOR IN THE TERRITORIES OF FUNCTIONAL INEQUALITIES (976)

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Italy's inner areas are affected by an increasing functional, spatial and socio-economic discrepancy of opportunity in comparison with the cities. The policies promoted must take into account a reality that is very different from that of the large urban centres and equip the territory to enhance this diversity. (Oliva, 2022)

The SNAI (National Strategy for Inner Areas, in Italian) has already activated the political and strategic recognition of the lack of essential services, their territorial rarefaction and the low quality offered to citizens. In addition to this, it has emphasised the practices of central administration -far from marginal places- and local administrations -often locked in particularistic dynamics for mere consensus-. (Luisi, 2022)

Many resources have been deployed in the last decade to mitigate this inequality, increasingly in the form of calls for proposals. How can European (extraordinary) and national (ordinary) resources be activators of processes that follow general guidelines but are place-based?

Nowadays, it is the case that individuals are required to have an entrepreneurial capacity on the ground, while administrations prove to be too rigid and constrained. Therefore, individuals are more inclined to work in associative networks rather than with administrations, which are too slow and rigid to produce concrete changes in their life projects.

With the Code of the Third Sector¹, which came into force in Italy in 2017, a new approach to fund management is opening up. Third sector entities² carry out activities of general interest, like administrations, the difference lies in the constraints and restrictions they must abide by. For this reason, forms of relationship are envisaged between them that do not presuppose, as in the case of market actors, different and opposing interests, but a partnership to pursue a shared purpose together. What the third sector can do is to co-programme and co-design and thus offer itself as a subject that can to all intents and purposes dispose of funds to promote place-based approaches and multi-level governance, bridging the gap between national and individual policies. (Pallucchi, 2022)

The novelty of these processes that are being promoted only in some Italian cities³ could be a testbed to be monitored for inner areas, with less and less administrative capacity and more and more need for networking skills and experimentation. The Third Sector makes it possible to go beyond the traditional boundaries of formal administrative divisions. It allows practices tried and tested during other activities to spread and support welfare, promoting the ability of communities to carry out projects autonomously or with the support of the Third Sector body.

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Notes

- [1] D.Lgs. 3rd July 2017, n. 117. Codice del Terzo settore, pursuant to Article 1(2)(b) of Law No 106 of 6 June 2016. Gazzetta Ufficiale
- [2] "This is a new legal qualification constituted for the pursuit of civic, solidarity and socially useful purposes, on a non-profit basis, by carrying out activities in the general." Portale Cantiere Terzo Settore
- [3] Bologna and Milan for example

THE SOCIAL PERFORMANCE OF NATURE IN THREE BRAZILIAN CITIES: TERRITORIAL SYSTEMS AND SOCIAL INNOVATION IN THE HISTORICAL PROCESS OF VISUALIZING AND IMAGINING NATURAL PLACES (1047)

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This paper aims to demonstrate the social performance that our ideas of nature plays in urban planning and in the production of visions for the future, for that we will investigate the evolution of the imaginary of urban nature in three Brazilian cities, with the scope to visualize interplay of nature, subjectivities and spatial visions for the future. In a context of climate change and lack of alternatives, this aims to help building a reflexive approach to nature, untangling the political aspects of environmental planning. This aims to contribute to the Urban Political Ecology paradigm by including a perspective of Regional Design-thinking towards nature itself. That allows to approach nature as an object of design and, therefore, the designer's intentions and tools of representation and creation finds a role in the production of knowledge. The main challenge is to overcome a positivist assumption towards nature and, for that, we will need to denaturalize our conceptions of nature. As Bruno Latour suggests, this allows us to interpret to understand science and the production of techniques of phenomena, nature as social systems, and the role that design has in our political conceptions of nature. In the same terms that for Henri Lefebvre the right to the city meant the right to produce the city as a work of art, this approach might ground a right to nature as a right to produce nature as a work of design. For that, it will investigate nature as a social product, and we will focus on the interplay between social structure, politics and the production of subjectivities. That aims to unrevealing the different roles of nature at different moments of the history of the cities of Goias, Goiania and Caldas Novas. For this, we will develop a regressive-progressive history of the tree cities, focusing in their relationship with its mains rivers. With that we aim to establishes a concrete basis for evaluating the dialectic between the historical metamorphoses of nature and society. The research allows to visualize how the evolution of society in time generates different attitudes, appropriation and future plans for natural elements in the cities, spanning form conceptions of savage, domestication, sacredness, pastoral, imperialist, sanitarian social hygiene, tabula rasa, systemic rationalism and redemption. This aims to contribute to building a framework to understand the political elements and the social consequences of environmental policies, by revealing the design elements of the production of natural truths.

Keywords: Reginal Design; Urban Nature; Imaginary of Nature; Urban Political Ecology

TRACK 13: A MULTIVERSE OF PLANNING THEORIES

KNOWLEDGE IN ISRAELI URBAN PLANNING (78)

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Scholars have defined planning knowledge as a large and complex body, both professional and non-professional, that underlies and surrounds planning deliberations and actions and provides an understanding of the causal relationships between actions and their potential impacts. This paper presents the research plan and the early stage of our pioneering and wide-angle study of current knowledge contents, compositions and relations underlying current Israeli planning processes.

Recent studies have revealed conflictual shifts in power-knowledge relations in planning, with the rise of pro-growth planning technocracy, and the emergence of popular (or populist) insurgencies opposing technocracy and experts' knowledge. In Israel, planning knowledge has indeed become simultaneously more technical and specialized, and more popularized and widely debated - with recent fast-track plan promotion carrying significant social, economic, legal, cultural, environmental and physical implications for people and places. The research aims at identifying, mapping and analyzing the knowledge produced and used in planning processes, to underscore power-knowledge relations in and between different socio-spatial locations, and to explain these relations in light of institutional, social, spatial and ethnic variables.

We hypothesize that contemporary technocratic, technical, local, popular and alternative planning knowledge(s) are not isolated from each other. Rather, knowledge is shaped and communicated in uneven networks of professional, non-professional, mixed, traditional and new 'discourse arenas' and through their inner- and inter-relations. Such arenas and their compositions vary between locations, and include traditional local and state institutions, as well as various ad-hoc and digitized platforms. The analysis focuses on 12 different cities, and we will progress along 4 research phases: (1) in the first, current phase we trace and map the existing knowledge arenas and networks that address master plans in 12 cities across Israel, (2) following that, we will analyze the contents of these arenas, the relations between them in each city, and the existing knowledge barriers, sharing and diffusion, preferences, struggles, and hierarchies. (3-4) In the two last phases, we will probe knowledge contents and relations in selected local planning processes (3), and in pressing nationwide planning debates (4). In each phase we will use qualitative and quantitative methods, via computerized and human means, and gradually trace the knowledge fields, types, themes and means presented and communicated in and between arenas concerning specific plans and planning topics. Findings will be mapped, connected and compared in each phase, and we will identify knowledge arenas and their networks in and between different cities, the social factors and variables that explain differences, as well as relations between pro-growth planning 'technocracy,' popular and populist discourse, and alternative perspectives. The paper will address the research significance for the

understanding of knowledge contents and relationships underlying current planning processes, present first findings on planning- knowledge relations in light of socio-spatial distinctions and biases.

Keywords: knowledge, democracy, spatial inequality, social media, social exclusion, participation

WHY DON'T LEGAL THEORIES INFORM PLANNING THEORIES MORE OFTEN? (103)

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Many planning systems rely on regulatory planning or other forms of planning law. An innocent bystander would expect that from this proximity grows a productive exchange of concepts and ideas. In particular, the wealth of legal theories surely must inspire planning without end! Our innocent bystander will be surprised that most learned articles and books on spatial planning can do without mentioning Hohfeld's conception of rights, Kelsen's view of legal norms as expressions of ideology, Merkl's and Kelsen's hierarchy of norms, Luhmann's final programming, or human rights doctrine.

Some obvious reasons come to mind why planning theories are devoid of legal theories. Most planning theorists are not legal theorists, and many legal theories are a bit arcane. Surely, knowledge transfer from more accessible fields like sociology, political theory, or gender studies is easier than harvesting ideas from voluminous tombs of legal doctrine. Also, legal theories are not an universally accepted input for legal reasoning. Most judges would raise their eyebrows is a petitioner tries to argue her case with reference to Kelsen or Luhmann. If planners wish to educate themselves in law, they better study planning law cases and statutory planning law. Finally, it appears that planning theorists prefer to create their own view of the law without listening too much to legal professionals. For example, Dieter Bökemann's *Theorie der Raumplanung* abounds with references to a legal system that only exists in the author's mind.

In my presentation I shall discuss (politely, and without naming any more names) instances of missed opportunities of planning theories to make good use of legal theories.

Disclosure: Ben Davy is not an innocent bystander, but *Magister iuris* and *Doctor iuris*, with a habilitation in Constitutional and Administrative Law (University of Wien), and since 2019 Visiting Professor of Law, University of Johannesburg.

CHALLENGES, AMBIGUITIES, AND CHECKMATES FOR PLANNING THEORIES (AND PRACTICE) (118)

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Years ago, a preeminent Italian scholar, Luigi Mazza, defined planning as a craft available to a political project (see e.g., Mazza, 2010, 2012). Planning theory was engaged in debating the technical or political nature of (spatial) planning, and that was his proposition, welcomed by some, criticized by others. It came back to my mind since this is also a significant example of some sort of problems that at one point in time started to fade or disappear from scholarly debates although not fully solved. Observing nowadays planning theory debate, defined as a multiverse in this conference track, and the actual problems with which planners engage, it is rather clear that the nature of planning, and particularly its interaction with politics, economy, and society, is still an open issue that meta-theories, as many adaptations of complexity theories in the planning field are (Byrne, 2002; Chettiparamb, 2016), can just partially help solving.

Another example of that sort of questions whose trajectory saw relevant ups and downs is urban rent. After years of indifference and underestimation both by academic research and by disciplines dealing with land and governance (Haila, 2016) when it seemed that the question was not worth discussing further, the rent question (which includes land rent, and the increasingly various forms of rent which characterize our present – Pizzo, 2023) is coming back stronger than before, and “with a vengeance” (Andreucci et al., 2017). The predominance of the logic of rent, which can be observed in the diffusion of rent-seeking behaviors among an increasingly various actors, the multiplication of value-grabbing strategies, the submission of urban and territorial policy goals to the realization of the right conditions to get the highest rent-gaps, is also clashing with much urgent objectives, such as those determined by ecologic-climatic crisis. Although green, ecologic transition seems to have imposed its own reason through diffusing ideas, policy orientations, strategies, and their related vocabulary, it is limited by, if not openly conflicting with, economic stance made visible through the spread of rent logics, which in fact still dominate urban planning. Thus, to many, the meaning and role of urban planning seems mainly that of helping to find new ways for maintaining the same system that produced the crises. If it is indeed the “craft available to a political project”, which political project does planning sustain? Or, better, how planning position itself within power struggles among the different political projects that compete to find realization? Does planning have the capacity and the power to orient choices or is it destined to bow to other-directed, superimposed interests?

These questions inspire and cross the paper, that will combine the two mentioned streams of theoretical reflection: planning theory and urban rent theory, inquiring if and how major ongoing changes, and particularly those related with “rentier capitalism” (Christophers, 2021; Pizzo, 2023), are challenging planning, not just its practice but theoretically, reconsidering streams of past planning theory debate in the light of the current and more urgent questions such as ecologic breakdown, climatic crisis, increasing social polarization and overall instability – seemingly a perfect situation to revise planning objectives and priorities, and the foundations of its legitimacy. More specifically, the above-mentioned debates will be updated to unveil the ambiguity or

sometimes the checkmate position suffered by planning in an increasingly complex and turbulent system of multiscalar power relations.

Keywords: Planning Theory, Urban Rent Theory, Politics, Power, Ecologic-climatic crisis

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NON-PARTISAN ACTIVIST PLANNING (134)

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In a “world of turbulence”, planned interventions that do not privilege one of the stakeholders may have an integrating and stabilizing effect. Activist planning is usually partisan, supporting a particular neighbourhood or community, or advocating for a political cause (Sager 2013: Ch. 3). However, there are also activist planning cases where the activists do not take sides. Instead, their first priority is to improve the relationship between contending parties, reconciling the parties after conflict or facilitating dialogue and creative problem solving to make it less likely that potential fights break loose. I have collected case studies where activists apply plan-making as a tool in their peace-making endeavour.

The search for academic publications reporting on activists committed to a relational cause, resulted in two types of cases: (1) Intermediary activist planning, where the activists are affiliated with civil society groups, movements or organizations. (2) Campus-based reconciliation planning, where the activist planners are affiliated with a university or college. In both types, the aim is not necessarily consensus, but at least to reach a level of tension low enough to enable the social groups or interests to take concerted steps towards a better future.

Extensive search in bibliographic data bases, supplemented by the snowball method of examining reference lists, led to a set of 14 cases of intermediary activist planning and 6 cases of campus-based reconciliation planning. Intermediary activist planners do not necessarily implement a process involving the contending parties. Initiatives may be taken by somebody external to the community or the contested territory, doing peace work at a distance from the conflict. The issues addressed by means of campus-based reconciliation planning are mostly big questions that have been on national or international agendas for a long time: shared governance for Jerusalem, improvement of settler-First Nation relationships, and transborder management of common resources.

The conference presentation will show the cases and comment on some of them. Techniques and processes used to make the activist planning efforts both non-partisan and effective will also be mentioned. Better relationships can follow from, for example, increased trust, respect and mutual understanding. Is there a possibility of activist communicative planning (Sager 2019)?

Keywords: Planning theory; Activist planning; Non-partisan planning initiatives; Intermediary planning; Campus-based activism

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NAILING JELLY: WHAT PLANNERS DO AND WHERE POWER LIES AS REVEALED THROUGH MEETING ETHNOGRAPHY (136)

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Increasing professionalisation of work domains has led to greater research of knowledge workers and workplaces. Such studies focus on what knowledge workers do, what makes this 'professional' work, what combinations of factors define spheres of knowledge as more or less exclusive professional domains, and the relative agencies of professional actors (Muzio et al 2008). Yet planning research has not been subject to many such studies, which is surprising given that a good definition of what planning is, is that it is what planners do (Vickers 1968).

In this paper we draw on substantial ethnographic research in four planning organisations. Ethnography, we argue, is vital in understanding contemporary planning as it reveals more clearly what planners *actually* do, rather than what they say, or think they do as it uncovers the embedded routines and habitual behaviours that underpin practices but often go unrecognised (Le Pinel 2014). From this wider analysis we note that much of what planners do resonates with studies of other white-collar work: they spend considerable time sitting at desks, answering telephones, looking at screens, and talking to colleagues at desks and in kitchens (Schoneboom et al 2023).

Our empirical object in this paper is one highly significant aspect of planning work, that of meetings. Meetings are a significant feature of contemporary knowledge work and make up a substantial part of planners' working lives (see also Perez 2020). But, with some exceptions, they are little talked about in planning literature, 'hidden in plain sight' (Schawrtzman 1989), and much ignored in constructing planning theory (cf Forester 1999, Healey 1992). We argue that this matters if we see planning as a collaborative, communicative activity and the outcome of its processes as, "contingent on the ad hoc and in situ calibrations of human beings in interaction with one another" (Freeman: 2019: 372).

We conclude that interactions in meetings are highly significant in setting and progressing policy agendas and decisions and they deserve more research attention. Studying planning meetings reveals where power lies: firstly, 'in the room', how are attempts at authority asserted, and here we note the significance of social class and gender; and secondly in terms of how interactions and the ways they are framed reveal where power lies in contemporary planning systems, between the state and big capital for example.

Keywords: planning practice; power; micropolitics; meetings; ethnography

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NUMBERS AND SCALES: A STUDY OF THE INNER LAW OR THEORY OF ANCIENT AND CONTEMPORARY CHINESE SPATIAL PLANNING (146)

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Numbers, especially the odd numbers, are key elements in ancient Chinese civilization, which embodies as Hetu Luoshu (River Maps and Luo Book) and Jiu Gong Bagua (Nine-grid Pattern & Eight Diagrams), ancient China's patterned cosmology or universe view. This civilization gradually takes shape in pre-Qin Dynasty, of which Jifu System is the primary political system. It confirms the political and spatial scales of both Tianxia (the world) and China and contains the thought of spatial planning, governance and diplomatic relationships. Five types of Jifu system existed including the Internal and External Fu system, Three Fu system, Five Fu system, Six Fu system, and Nine Fu system, among which the Five Fu system was the most common. From analyzing various ancient Chinese texts, we argue that Jifu system has three implications. First, it is overall planning and governance on a global scale. Second, it delimits the circle layer structure by near and far relationship with the Tianzi (the king). Third, it constructs a hierarchical enfeoffment system through rite or ritual system, the primitive law system of China's pre-Qin Dynasty.

Coincidentally, contemporary Chinese Territorial Spatial Planning (TSP) has a five-scale and three-category structure, which also incorporate elements of (odd) numbers and political and spatial scales.

A comparison between pre-Qin Ji-fu system and contemporary Territorial Spatial Planning may reveal the inner law or theory of Chinese spatial planning that cross over time. First, both the systems imply the nature of spatial planning as a political instrument. Second, both systems are top-level design of the nation which govern the national territory from the central to the local and cover many essential domains of the society. Third, both implement the spatial planning and governance in different scales and planning categories. However, there are also differences between the Jifu and TSP systems. First, Jifu system is designed towards the world and incorporate both the domestic and diplomatic relationships, while TSP concerns only the domestic, namely the mainland China. Second, Jifu system focuses on people and stipulates the rights and duties of the kings and lords, namely the ruling class, to ensure the implementation of the political design or planning. TSP focuses on the territory and natural resources and carry out the planning by drawing arable lands and ecological red lines and urban development boundary.

Our findings imply that the inner core or theory of spatial planning of a country is embedded in its history, culture and political design. However, the outer layer or manifestation planning has been changing and is changing in the current context to enhance its suitability to the dynamic outer world. Our findings also provide a possibility to understand planning theory differently through scales.

Keywords: Jifu system, territorial spatial planning, planning theory, inner law

THE SOCIAL CONSTRUCTION OF ACTORS IN SPATIAL PLANNING: INSIGHTS FROM ORGANISATION THEORY (148)

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Planners face a complex world, as planning literature especially from a poststructuralist point of view does not tire to emphasize (e.g. Balducci et al., 2011; Lamker, 2022). Not only the spatial conditions planners deal with are complex, but also the social constellations of actors which planners need to (or want to for normative reasons) plan with are (Eräranta, 2020). In particular, the heterogenous group of people aggregated as citizens – in the context of citizen participation as a big part of planning processes – is hard to grasp.

This contribution states that planners create images of other actors to reduce this complexity. This holds for actors with whom they interact vis-à-vis as well as for actors that are out of reach. The ontological assumption of this perspective stems from social constructivism: Humans not only perceive but construct their environment (Berger and Luckmann, 1999). These constructions seem to be shaped by the institutional, social, and cultural frameworks planners work in. When planners are understood as individuals but embedded in the frameworks of a profession and moreover of an organisation (here: the public administration), insights from the social psychology of organisations and systems theory might dig deeper: Organisations / systems construct their (social) environment influenced by their self-image and construct themselves distinct to the picture they paint of their environment (Weick, 1995b, pp. 18–24; Luhmann, 1998, p. 833). These images then again shape interactions (Luhmann, 1976, p. 272; Berger and Luckmann, 1999, pp. 31–33).

The social psychology of organization in the fruitful connection with systems theory introduced by Weick (1995a, 1995b) as a manifestation of organisation theory gives important insights in how planners embedded in administrations consider their co-actors. Based on empirical findings from a case study conducted by the author in a local urban planning authority, this contribution wants to explore these images, their construction and their consequences: How do these processes run in the field of spatial planning, more precisely in the interaction between administrative planners and citizens, especially as part of sovereignly led participation processes? Which logics and frameworks shape these constructions and ultimately individual actions? What can planners learn from a reflection of the images they paint of others? In so doing, this input aims at deepening this perspective as a contribution to planning theory in the context of communication and collaboration.

Keywords: citizen participation, planning administrations, organisation theory

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A THEORETICAL-METHODOLOGICAL FRAMEWORK FOR THE ANALYSIS OF THE ENVIRONMENTAL PLANNING PROCESS IN SÃO PAULO, BRAZIL (155)

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Territorial planning in its multiple levels and scales is the result of socioeconomic and cultural factors, as well as affects and is affected by natural dynamics like climate change. In Brazil, planning is an emergent field, and given the current context of major socio-environmental transformations, apprehending the complexity of the planning process can be a challenge. It goes through establishing the planning field and its specific characteristics, structures, and relationships, including diverse elements, multiple dimensions, and scales in a diachronic perspective.

According to Bourdieu's theory of social fields, a "field" is characterized by the convergence of a "habitus", which is understood as a set of values that structures practices, making up a relatively autonomous set endowed with its own laws. It means looking at the agents, their relations, and distribution of capital, the "rules of the game" (habitus, doxa), as analysis and systematization to apprehend the dynamics that occur, in this case, in the planning process. Moving forward with this understanding, the Strategic Action Fields (SAF) theory, by Fligstein and McAdam, contributes to the conception of how fields emerge, stabilize, and transform themselves. That is the relations between fields (broader field environment) and situations that influence them, such as exogenous shock, contention, and settlement (closure of a crisis). In both ways, field theory can be used to understand theory production and planning practices.

Similarly, the planning system, practice, and culture approaches have been applied to understand how particular theories, policies, procedures, and associated values have been applied in specific contexts. The planning system goes beyond simply the administrative-legal framework and includes the institutional context, emerging changes in a concrete period, arenas of actors – mechanisms of inclusion and exclusion of actors and their interests, and different scales of planning practices. Complementarily, planning culture understands the explicit elements, and the implicit values, attitudes, relationships, unconscious beliefs, thoughts, and perceptions that affect planning. Planning systems are like corridors through which practice flows, driven by the planning culture. These approaches, which look at planning system, practice, and culture, help in analyzing and understanding how and why changes occur in the planning field, whether institutional configurations are intentionally designed or unpredictable, and how these changes impact public policy.

In order to contribute to the analysis of the environmental planning process in São Paulo, Brazil, a theoretical-methodological framework is developed that combines the aforementioned theories and approaches. The hypothesis is that they may be interconnected and, by systematizing their elements into a detailed analytical framework, we can raise the potential of each for a more complex understanding of the planning process. Both the theoretical-methodological approaches and the case characteristics, contribute to the development of the framework and its application. As a result, we expect an innovative theoretical-methodological

contribution to the emergent Brazilian planning field. Additionally, an overview of the environmental planning in São Paulo is given and scenarios and trends are highlighted. The current context of accentuated inequalities intensifies the need for planning and management models that respond to emerging problems. Hence, it can be an opportunity for establishing innovative and fair planning practices and models.

Keywords: Environmental Planning; Social Field Theory; Planning System; Planning Culture

Note: Grants 2019/18462-7; 2022/01660-3, São Paulo Research Foundation (FAPESP).

THE UNEASY MARRIAGE BETWEEN URBAN BEAUTY AND PLANNING: THE CONCEPTUAL MISUNDERSTANDINGS THREATENING THIS RELATIONSHIP (230)

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Cities are built out and result from numerous actions, works, plans, and designs of different generations. On the face of it, creating beautiful built environments is in our hands, but it appears to be a challenging task. Questions like "What is urban beauty?", "Where does it come from?", "How can planners and designers contribute to its generation?", "How did urban areas we like emerge?" remain largely unexplored. The neglect of this issue is not to the benefit of cities and planning. All makes us think that this is an uneasy marriage.

Leaving aside the eternal question of subjectivity, in the planning literature is common to refer to beauty as a work of art while forgetting the complex nature of the urban environment and its multiple facets. Indeed, most philosophical reflections on beauty are embedded in art and aesthetics studies and, apparently, permeate the planning discipline, too. However, there are fundamental differences between the beauty of a painting, a sculpture or a poem and that of a city area.

The article argues that a crucial problem in the debate on urban beauty and its tricky relationship with planning is conceptual. To overcome this impasse, it investigates and proposes three widely overlooked peculiarities of urban beauty which makes it different from other types of beauty. Specifically: (i) urban beauty is an emergent property, and the way to interpret it differs from the aesthetic judgment of a single designed object; (ii) urban beauty is the product of an interrelated whole meaning that we cannot limit its understanding to the form of the built environment, but it is open to multisensorial experiences; (iii) order and harmony are crucial aspects, yet the complexity, not simplicity, of such an interrelated whole, increases the aesthetic experience. Understanding these three peculiarities implies crucial conceptual and practical implications. The article will present and discuss some of them and contribute to this debate with a novel standpoint showing a clear gap in the literature.

Keywords: Urban beauty; Aesthetics; Complexity; Built environment

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INDIVIDUALS MATTER! BUT HOW? ANALYSING THE IMPORTANCE OF KEY INDIVIDUALS FOR PLANNING PROCESSES (256)

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Despite the importance of key individuals such as politicians, planners or executives of development companies for shaping planning processes, their influence is still conceptionally underdeveloped. “Actorless” debates in urban renewal discussions (Bernt 2017: 42) or key individuals being the “factor X” (Gailing/Ibert 2016: 391 f.) are parts of the diagnosis that systematic analysis of individuals in spatial development processes are rare (Haese 2017: 25 f.; Richter/Christmann 2021). This contribution approaches the question, how individuals become influential in planning processes of urban key projects.

Firstly, there are heuristics that view the influence of key individuals as a dialectic between individual characteristics and skills, their social relationships and the structural context (especially Richter/Christmann 2021; also Bakir 2017; Bakir/Jarvis 2017) as well as promising conceptualizations of key individuals in policy processes such as “Entrepreneurs” (e.g. Kingdon 1995). Secondly, the concept of Planning Culture (e.g. Knieling/Othengrafen 2009; Othengrafen 2014) takes socio-cultural factors into account and proves to be suitable for analysing patterns of thinking in planning processes. It is argued that the combination of the planning culture approach with heuristics and conceptualizations of key individuals can be promising.

Bernt (2017: 58) calls for taking motives, resources and tactics into account. This contribution argues that successful tactics to influence planning processes have to be seen as critical to evaluate individual agency. To understand why and how tactics – and therefore individuals – are successful, it is critical to analyse their preconditions. These include the relations between personal characteristics, social surroundings and structural contexts (Richter/Christmann 2021) as well as path dependences of earlier phases of planning processes. With this contribution, first empirical insights from interviews with key individuals for the planning process of Frankfurt’s “New Old Town” (Germany) are discussed and a systematization of these preconditions is suggested.

Elements of the local planning culture (such as routinized perceptions of the local society) do not only influence the availability of individuals’ tactics to push for a favourable policy. Their tactics are also important for developing a project specific planning culture. Individuals deploy a variety of tactics such as strategically using parliamentary and planning instruments, mobilizing values and patterns of thinking within the public, visualizations of architectural scenarios or adopting policy suggestions for own political advantages. Taken together, these tactics have a significant influence on decision-making and the development of the planning process.

Keywords: key individuals, planning process, planning culture, tactics

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APPLYING BEHAVIOURAL THEORY TO THE ENVIRONMENT-PLANNING INTERFACE (280)

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Many of the most pressing issues which the planning academy and practitioners are tackling relate to the environmental challenges facing humanity. Indeed, the need to mitigate and adapt to the varied threats of climate change, biodiversity loss and airborne, marine and terrestrial pollutants represent one of the greatest drivers of turbulence within the developed and developing world (IPCC, 2022; IPBES, 2019; EEA, 2019).

In light of this, there has been considerable theorisation of the interface between planning and the environment, though to date there has been an emphasis towards theorising the procedural aspects of this interface (Cowell et al., 2020; Adams et al., 2013). This bias can be observed in the development of a plethora of methods, metrics and tools within environmental planning (Davoudi et al., 2019). Prominent examples include the ecosystems approach, green infrastructure metrics and the use of ecosystem services.

At the core of many of the drivers, and responses to the environmental challenges is the behaviour of a variety of agents within planning. This means that examining the current behaviours and practices of these agents, and understanding how these might be influenced through a variety of interventions is an important aspect of managing and minimising future environmental risk (Whitmarch, Poortinga and Capstick, 2021).

However, the procedural approaches discussed above, along with several other prominent approaches to planning theory often minimise or fail to fully appreciate the role of behaviour within the planning-environment interface (Rain-Kwon and Silva, 2020). Therefore, this paper will argue there has been a long-standing 'behavioural gap' in the theorising of environmental planning.

As a result, there is a need to identify and apply alternative theories to analyse the environment-planning interface. The paper will begin to do so through the presentation of a trio of cases, which illustrate three contrasting theories drawn from the spectrum of behavioural theory. Each treats the rationality of agents within planning differently, and as a result conceptualises behaviour and the relationship between action and observed outcomes differently (Biely, 2022; Rain-Kwon and Silva, 2020).

These theories are applied to three different environmental threats and responses to such threats. These examples are deliberately varied, and represent a sample of environmental issues which drive turbulence across the world. As such, the paper responds to the need for planning theorising to connect to the challenges and opportunities that planning practitioners across the developing and developed world are addressing.

First, the use of game theory illustrates the challenges faced by planners in meeting climate mitigation and adaptation objectives alongside other planning objectives. A second case illustrates how the application of concepts from behavioural economics can help explain action, and inaction with regard to the protection and enhancement of ecological assets through planning. The third is the application of social practice theory, an approach to conceptualising

behaviour change is applied to illustrate the means to promote a modal shift towards cycling within an urban area.

The paper therefore introduces planning academics and practitioners to behavioural theory, illustrating its utility in conceptualising the environmental-planning interface. In doing so, the paper will also set out how the application of behavioural theories to a range of issues in planning can provide a worthwhile avenue for future theorising, not least within environmental planning. Beyond this, the paper will also illustrate how such theorising can strengthen the connections between planning theorising and practice by illustrating how behavioural theory can provide useful insights and recommendations for planning policy and practice.

Keywords: Behavioural Theory, Environmental-Planning Interface, Climate Change, Biodiversity Loss, Environmental Planning

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PLANNING, POLICY AND SUSTAINABILITY TRANSFORMATION: NEW INSIGHTS FROM THE MULTIPLE-STREAMS-FRAMEWORK? (339)

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Planning and policy-making face the challenge that the increasing global climate and biodiversity crisis calls for fundamental and wide-ranging changes, with regard to production and consumption, as well as, the corresponding steering mechanisms driving human-nature interactions. It is a decisive question how planning and policy-making can live up to this challenge. The paper explores the requirements for achieving the needed sustainability transformation from the perspective of the Multiple-Streams-Framework which is well established in policy science. It focuses on the policy process and postulates that there are three distinct streams: *problem, policy, and politics*, endowed with their own momentum, which must converge in a policy window for significant policy change to occur. The Problem Stream is about real developments that are interpreted as problems. The Policy Stream consists of offered solutions to problems and is especially associated with experts and planners. The Politics Stream reflects the struggle for majorities, the influence of interest groups and discontinuities among actors. The coupling of the streams is driven by a policy entrepreneur.

The paper presents the Multiple-Streams-Framework and examines its relationship to planning theory. Finally, some implications for transformative planning and policy-making are highlighted. For illustrations the paper draws on examples from landscape and open space planning and policy.

Keywords: Planning, policy-making, transformation, Multiple-Streams-Framework

IDEA AND PLANNING THEORY (352)

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The expansion of the quantitative revolution in the 1960s caused natural science and technology to create a huge change in human life. The human sciences became subject to these achievements and tried to establish themselves in the modern intellectual tradition by simulating the natural sciences and physics and, like the natural sciences, by predicting and managing human behavior, it provided the possibility of creating and maintaining social order in a controlled manner. But this approach, although was able to bring some fruits, ultimately , it could not play a useful role in the field of human intellectual and existential life, due to ignoring the unique human characteristics and reducing the human species to a quantifiable category. As a result, the development of planning science in a positivist way and in the new academic tradition was considered as something that can be transferred from any time and place to any other time and place.

Any planning theory undoubtedly has political thought. The two theories of planning known as structural adjustment and spatial planning with the Walter Christaller model have been the cornerstone of any planning theories in parts of the world in general and in Iran in particular.

The purpose of this research is to understand the shortcomings of the two theories of structural adjustments planning and the Christaller model. The required data collected through documents. In this research, firstly, the political ideas of aforementioned planning theories have researched. Then, their spatial manifestations in Iran have been shown. Finally, the inadequacy of these opinions have been analyzed from an academic point of view.

The result has shown that the structural adjustment theory considers social inequality as a positive phenomenon, which has economic motivation, and the Christaller model of planning imagines man as an economic man and justifies his behavior as atomistic and in accordance with Newton's law. As a result, planning based on these theories will not be able to be realized and relationships between basic areas (social, economic and environmental) will not be established.

Keywords: Political Idea, Planning Theory, structural adjustments, Christaller model

BEYOND THE RHETORIC: PLANNING THEORY IN THE AGE OF TECHNOLOGY (399)

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Within the animated debate of contemporary Planning Theory, more and more space is (appropriately) devoted to the critical deconstruction of some forms of rhetoric that, collecting vast consent within the public opinions, have been widely used in the field of urban politics and urban planning. What are these rhetorics? How do they take shape? By whom, how and why are they used? In the attempt to answer such questions, the article addresses a couple of perspectives which are inherently related to the vast, as well as alarming, utilization of planning rhetorics.

The first one has to do with the powerful affirmation of a neo-scientism which, while not constituting a novelty per se in the field of urban planning – the formulation of an ‘urban science’ goes back to the 1970s (see, for instance: Batty, 1976) – today raises new questions and concerns. In the face of an unprecedented technological advance, spanning from the provision of software-enabled services up to the spread of user-generated spatial databases (to name just a few), urban planning has been deeply challenged – both theoretically and practically. Indeed, what seems to be the main takeaway of this digital revolution up to now is the increasing neglect of a qualitative approach to planning, phagocytized by forms of ‘computational thinking’ (Mattern, 2021) and increasing hyper-specialization. It is not by chance that such paradigm is today acquiring an undiscussed prominence also in the field of spatial planning. As a matter of fact, in the age of technology specialization represents «the spirit of our time» (Pitari, 2019: 367), that is: the principle at the basis of the functioning of scientific research. Digitization – as a technological as well as socio-economic, epochal process – relies on specialization, particularly with reference to its numerous applications within the urban realm. Planners, therefore, are no longer the ‘leading experts’, being their profile unsuitable to the high level of specialization required to master increasingly complex design-support technologies – by now essentially depending on the extraction of vast amount of data.

Such forms of data-driven planning have taken many different names: the most (mis)used is *smart city*, but actually exists several declinations including, for instance, *smart urbanism*, *cybernetic urbanism* and *platforms urbanism*. To understand to what extent the ‘smartness’ is not only a goal or a model but also a disciplinary rhetoric (Palermo, 2022) it is useful to pause on a second major consideration: that is, the contradiction inherent to the *Leviathan city* which is rising as the model for the next urban (dystopic) future. Such incoherence consists in the exaltation of a quantitative approach to planning, legitimized by a neo-positivist epistemology, and instrumentally used to overcome any possible obstacle – both in terms of uncertainty and conflicts. Yet, such claim for a ‘scientific’ foundation of the disciplinary field is far from being a step toward a (self) legitimization in the light of accountability and transparency. Rather, it might be understood as a deleterious drift toward a post-political scenario (Allmendinger, Houghton, 2011): guided by technologized procedures, the planning process would be conceived as a mean to shape consensus evading any form of ‘friction’ between the parties involved.

In light of this, Planning Theory in the age of technology should address emerging epistemological concerns, in the attempt to rethinking the role of planners 'beyond the rhetoric'. Hence, through a literature review and the definition of a proper conceptual framework, the article represents a first, explorative endeavor towards the deconstruction of planning rhetorics.

Keywords: Planning Theory, Technology, Specialization, Rhetorics

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EMOTIONS IN PLANNING: TOWARDS AN EMOTIONAL RATIONALITY? (414)

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Planning processes and decisions trigger a variety of emotions, both for citizens as well as planners themselves. Especially in participation processes, planners are confronted with emotional reactions, ranging from hope and sympathy to anger and sense of injustice. Despite this and in contrast to neighboring disciplines, the topic of emotions appears to be relatively little explored in planning literature. In recent years however, planning theorists have started to approach the topic of emotions within the context of planning (e.g. Baum, 2015; Hoch, 2006).

Planners tend to view emotions as part of a dualism in which they act opposed to rationality, while the latter has a fundamental role for the profession (Osborne and Grant-Smith, 2015). In contrast, advocates for an emotional turn in planning suggest a practice that acknowledges the emotional dimension of planning in some way, arguing that both cognition and emotion are central elements to human decision making. These suggestions are based on conceptualizations of emotions which are inspired from different disciplines like psychoanalysis (Gunder, 2003), the sociology of emotions (Schubert, 2014) or cognitive psychology (Ferreira, 2013). Views on what emotions are and how they influence human behavior and vice versa differ accordingly between and within these disciplines, e.g. on the question of how much control humans have over their own emotions. Emotions can be interpreted as mainly bodily, individual phenomena but also as a dynamic or energy (Collins, 1993) that enfolds through human interaction and that is shared and expressed within political and social spaces (Durnová, 2015). Thus, the question of what role emotions can or should have in the planning process depends on the emotion-theoretical starting point.

This contribution structures existing approaches to emotions in planning and points out the theoretical implications and contradictions of acknowledging emotions for the planning profession. In doing so, it differentiates between psychoanalytical, sociological and psychological perspectives on emotions reflected in existing planning literature and points out the consequences of each perspective for planning. It raises questions on how a dualistic emotion/rationality ontology can be challenged and if an emotional rationality (Schubert, 2014) might be one rationality among others that planners encounter in their work.

Keywords: Emotions, Planning Theory, Rationalities, Psychology, Sociology of Emotion

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POETIC PLANNING: CREATIVE LANGUAGE AND CHANGE IN SPATIAL PLANNING (466)

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This paper explores the power of words and discourse in urban planning. Based on a professional biography approach with a leading planner in Israel – Architect and urban planner Shamay Assif –it analyzes the potential of poetic means to generate change in the way of thinking about and practicing planning. For the last five and a half decades ,Assif practices planning at some central public and private junctions of planning in Israel. He led the National Outline Plan #35 (issued in 2005) and was the head of the National Planning Committee for a decade. His professional story, gathered through 80 hours of in-depth interviews ,evokes, among other things, the use of poetic means in planning. In this paper I would like to propose that these poetic means are what Featherstone (2020) termed as 'strange writing'; a method to disrupt the bureaucratic power and reconnect practice to human capacities.

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This paper investigates a case of co-production that engaged academia, grassroots and civil society organizations, and the state planning apparatus within a specific political context characterized by a deep bi-ethnic conflict in Israel. The overriding objective of this study is to conceptualize the role of community planner in co-productive planning process. From a self-reflexive perspective, this paper explores a planning event that evolved from the confiscation of a large area of lands privately owned by the Palestinians of Jadeidi-Makr, a small town in northern Israel, by the Government of Israel, which initiated a plan to establish a large new city to host 100,000 Palestinian residents on the confiscated land. The plan was aimed at concentrating Palestinians in a highly dense, ethnically segregated space, to discourage their migration to Jewish-dominated cities, and hinder their urban natural growth.

The Palestinian residents, a minority of about 21% of the state population, have been facing prolonged institutional discrimination in planning and land policies since the establishment of Israel in 1948 (Jabareen, 2017, 2018). The state has been applying territorial and planning policies, at the local, district, and national levels, aimed at controlling the land and ensure Jewish demographic presence in, and domination of, all parts of the country (Yiftachel, 2006). The results of these Judaization policies enabled the state to massively confiscate Palestinian land, thus resulting in state ownership of 93% of the land in the country. Only 7% of Israel's land is privately owned, and only approximately 2.3% is owned by the country's Palestinian minority, although Palestinians constitute nearly 21% of the overall population (Jabareen, 2015, 2014). The new Government Plan falls under the geopolitical agenda of the state, through a process described as the Judaization of the country.

The Palestinian fiercely objected to the plan, considering it a “ghetto plan.” Herein, I analyze how a co-productive planning process was initiated and succeeded in overturning the state “ghetto plan” and conceptualize the role of the planner in leading this process. Drawing on Rancière’s concepts of the politics of aesthetics, this paper proposes that the co-productive planning process constitutes a new system of possibilities that enables changes and can overturn the state planning agenda in some cases. Thus, the role of the planner is to intervene and disrupt the state-predominated distribution of sensibilities; build alliances; and mediate and negotiate the social, cultural, and spatial sensibilities of the community (disadvantaged groups) with the state. In our case, through a sensible co-productive planning process, the community gains the possibility of achieving change.

Keywords: Coproduction, planning, conflict, communicative, sensibility

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SCHRÖDINGER'S [CAT] SCHOOL: ENGAGING THE YOUNGEST IN IMAGINING AND TRANSFORMING THE PUBLIC SPACE FOR A MORE INCLUSIVE AND PARTICIPATORY URBAN REGENERATION (487)

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Schools have been the first and most important institutionalized cultural spaces widespread and capillary all over Italian territories. The enormous heritage of buildings and open spaces, spread in most towns, centralized the post-war educational drive in a recognizable public space (Renzoni 2011; Laboratorio Standard 2021; Mattioli *et al.* 2022).

Even if schools conquered over time a cultural grip on young people's social habits and capacity for self-determination, learning from the territory continues to be the most accessible kind of education. Moreover, it is all-inclusive because it is not only technical but also philosophical and moral. This informal school entrusts transmission, preservation and regeneration of culture to verbal communication, direct memory, repeated experience and exchange with others. Students can't fail the informal school. Being life itself, this school can't delegate its educational role elsewhere, as it happens in formal education, merely acknowledging its failure. On the contrary, it has to learn how to teach even to the most punk students (Pira, 1978).

"Improper schools are, with all evidence, those that rely on verbal communication, direct memory, repeated experience and the exchange of sign-objects for the transmission, preservation and regeneration of culture" (Pira, 1978)

The research investigates the spatial characters of the transition of (institutionalized and non-institutionalized) learning spaces, starting from exploratory fieldwork in the Sardinian territory. Since the 20th century, public services, particularly schools, changed the role they play within society, as well as their programs, the conformation of their spaces and localization (Secchi 2005). Nowadays, this heritage needs a transition that can reconfigure its social role and urban potential. At the same time, urban space is already an effective place of learning, both in its material and immaterial aspects.

So, what are (and what can be) the spaces where learning takes place in the indeterminacy of the socio-ecological transition process? Can schools accommodate multiple (sometimes conflicting) uses, users and natures? Can the territory be recognized as a school? Can school facilities, widespread in the territory, become trigger points for urban regeneration e ecological transition?

Some signs of the potential relationship between schools and territory are deposited on the urban space, making walls and "streets a triumph of art for all" (Majakovsky, 1918). Like in the streets of San Sperate in South Sardinia, turned into an open-air museum by the incentive of the artist Pinuccio Sciola. This experience, started by rebel painting with local children, was intercepted later by the official schools, with workshops that engage students in designing and transforming the public space.



Learning from the streets in San Sperate, Paese Museo. (Image by author)

Rereading some research-action processes and some emblematic cases in Sardinia, the research denotes a taxonomy of spatial elements and actions of learning. This spatial code of *imparai* [SRD: *verb* 1. learning, teaching] combines open and integrated uses of the official schools and incidental or informal education of the improper school. This code sets the ground rules of a collectively directed game to engage young people in imagining the city. Schools may be signified as open spaces of socialization and territory may become an inclusive and plural educational space. But if *Schrödinger's School* will be dead or not depends on scenarios under collective direction.

Combining formalized and incidental education can make schools more open to transformative thrusts of the territory, which becomes an informal teacher, and turn school spaces into triggers of broader urban regeneration. Engaging children in the imagination and manipulation of urban space using playful participatory activities educate the inhabitants from the earliest to an autonomous understanding and experimentation of their right to the city (Lefebvre, 1970), to build a deep-rooted sense of respect and awareness towards the commons (Geddes, 1915). Moreover, it may be an effective tool to avoid top-down projects towards truly inclusive models for the needs of all inhabitants.

Keywords: socio-ecological transition, schools, playful participatory activities, vandalism, incidental education

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'CONSENSUS' AS A TOOL OF FORECLOSURE: HONG KONG'S LAND SUPPLY CONSULTATION (490)

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In Hong Kong government's latest effort to address land and housing shortages in the city, a taskforce was appointed in 2018 to forge a consensus among the public as to how the city can increase its land supply. Drawing on the literature of post-politics, particularly its critique on consensus (Mouffe, 1999, 2005; Rancière, 2003; Swyngedouw, 2009), this paper explores how the narrative of consensus has been deployed by state and non-state interests over the question of land supply to legitimise positions and to restrict the space of debate. This paper does not only provide further evidence of how the notion of "consensus" can be used to foreclose the political space, but also points to important differences observed in the Hong Kong context and the West. This paves way for the extension of theory to contexts where post-politics has been under-explored.

The results of this paper are informed by interview and documentary materials. Its first finding relates to how the content of "consensus" was never specified (consensus on what?) and hence the notion was constantly bent to fit the government's agenda. While the result is broadly in line with the literature's critique of consensus politics, a closer look reveals the government's explicit retention of force as a last resort shall consensus not arise naturally — an under-studied area in post-politics particularly in non-Western liberal democratic contexts.

Another finding concerns post-politics' description of displacement of conflicts as a result of consensus-seeking approaches. Post-politics describes the rise of antagonism as an undesirable outcome of consensus politics. It holds a negative view towards displacement, fearing that it will undermine democracy. In the case of the land supply consultation, discussion in the media was vibrant. Interview materials also show that people with different views were willing to engage with each other. I argue that in the case of Hong Kong, the expression of views outside the official consultation framework has helped promote mutual understanding and tame antagonism — a departure from theory.

All in all, this paper points to areas where post-politics can enrich understanding of the situation of Hong Kong while at the same time identifies caveats where explanations need to be contextualised against the city's colonial and post-colonial background.

Keywords: Hong Kong, consensus, post-politics, public engagement, land supply

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INTEGRATION IN SPATIAL PLANNING THEORIES: THE QUESTION (506)

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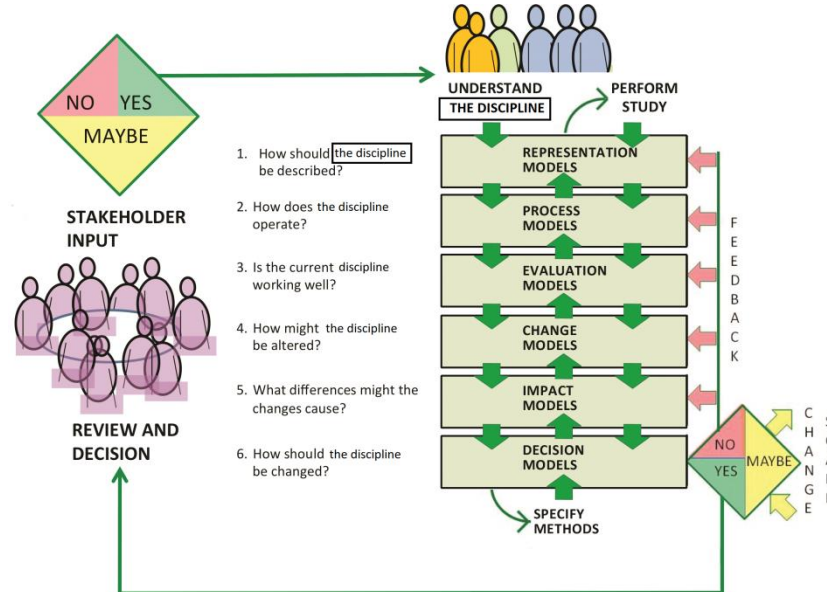
The question on the possibility of integrating knowledge in spatial planning theories is open. This conclusion is based on: the 2011 dissertation Possibilities of Improving Integration in Spatial Planning Theory and a 2017 Planning Theory book published in Serbian Cyrillic. The AESOP Congress and Track with these particular titles seem to have offered the right time and place to reopen the question in front of the wider international audience interested in spatial planning theories and to offer a proposal.

The question originates from the main results of the mentioned work. These were mainly obtained by the old-fashioned review of the available literature: the answers to the main questions of spatial planning - why, what, how, when, where and who plans - are still fuzzy; planning theory is not determined; the rational theory/model/paradigm is criticized, but its strength in providing the structure for the institutional survey-analysis-plan sequence is not contested; there is no "shift" but an accumulation of theories; these were mostly produced and offered along the main lines of criticism/frustration raised by rational planning: 1. Planning is not (only) rational and comprehensive; 2. The public interest is not monolithic; 3. The planner is not (only) an expert; 4. Planning is subordinate to capital and the market.

The question: can planning theory be general or not? is wrong. Instead of polarizing positions, we need a structure that integrates the knowledge of spatial planning. After identification, attempts at integration were presented chronologically and introduced by the relevant context of the decade(s) in which they were published: Etzioni (1967), Hudson (1979), Healey, McDougall, and Thomas (1982), Yiftachel (1989); Sartorio, 2005, Schönwandt (2008), Archibugi (2008), Ferreira, Sykes, and Batey (2009); Loorbach and Rotmans (2010). Certainly, many attempts are lacking, but those that have been found lead to one conclusion: there can be different types of structures to identify the scope and objectives, analytical tools, and outcomes of different planning theories so that they complement each other. These could contribute to a more systematized and integrated knowledge production across the discipline.

The question is: can three iterations used to link the following models (Steintz, 2012) in our discipline: Representation, Process, Evaluation, Change, Impact, and Decision, be used to begin answering questions in spatial planning theories: Why, How, What, When, Where, and finally Who plans (Figure 1).

Figure 1. Modified Steinitz's Geodesign Framework (with Carl Steinitz's permission)



Keywords: question, structure, knowledge

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POSSIBILITY DESIGN. RECONSIDERING AIMS, SCOPE AND NATURE OF SPATIAL PLANNING INTERVENTION (540)

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The paper explores the meaning and role of a ‘possibility-based theory of human action and interaction’. The central assumption is that action occurs at the intersection between what exists and what has yet to exist, between what has the capacity to be and what can never be. In this perspective, spatial planning mainly deal with “possibility design”. In this paper, the concept of possibility will be considered a fundamental and underlying aspect of all human activities across time and space. The first question is: What would change in describing and explaining human action and interactions (e.g. the society and the economy) if we imagined agents as immersed in (and challenged by) a stream of possibilities? The second question is: can spatial planning be considered – and under what conditions – as mean and occasion to expand human possibilities? According to this view, human environments like cities (where an increasing number of people live worldwide) are regarded as preferential areas in which to investigate the emergence and assemblage of human possibilities through time and space. One could even say that the ‘triumph of cities’ depended on the expansion of human possibilities that they enabled. The objectives of the paper are to (i) present a multidisciplinary literature review on the concept of ‘possibility’ and its application in planning practices; (ii) explore how different conceptions of ‘possibility’ may influence planning processes; (iii) propose a preliminary model for ‘possibility design’ in spatial planning. The expected results would concern both explanatory and normative issues. First, if one takes ‘possibilities’ seriously, how one describes and explains human agency and social life radically change: human actions and interactions may be regarded as ways to explore (and activate) streams of possibilities. Second, and in normative terms, a new theory of public intervention will be developed to consider ‘possibility’ as an action-guiding value if not the very scope of policy measures.

Keywords: possibilities; spatial planning; human agency; social interaction; design

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DISTINGUISHING “PLANNING” FROM THE “PLAN”. THEORETICAL AND PRACTICAL IMPLICATIONS OF TAKING URBAN COMPLEXITY AND UNCERTAINTY SERIOUSLY (541)

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In the twentieth century, planning as a (public) activity and the plan as an instrument came to coincide. As a consequence, the plan became the “centerpiece” of urban planning. From this perspective, planners are professionals specialised primarily in conceiving and designing plans. This paper suggests that we should reject the overlap between planning and plan, recognising the latter as just one of the tools that planning can use (and for very specific purposes). It is divided in three parts. The first part distinguishes between two different tasks of local administrations: the infrastructural task, and the regulatory one. The second part emphasises how the pre-twentieth-century idea of the plan was in the twentieth century inappropriately extended from infrastructural activities to regulatory ones as well. The third part suggests how to remedy this situation.

Keywords: uncertainty, complexity, infrastructure, regulation, plan

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LET'S THINK AGONISTIC THEORY FURTHER! CONCEPTUAL AND EMPIRICAL INSIGHTS INTO THE ANALYSIS OF CONFLICTS RELATED TO THE MOBILITY TRANSITION (608)

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Spatial planning activities intrinsically have a conflictual nature. Especially the social-ecological transformation of society is a highly contested process, which is marked by struggles over values, power asymmetries, the redistribution of resources, the change of behavioral patterns, and other crucial issues. Despite many decades of intensive conflict research in a wide range of disciplines, the question of how to deal effectively with conflict remains – especially in times of multiple crises and planning uncertainties. Spatial planning processes rely – to varying degrees – on the participatory involvement of the public, often with a focus on consensus. This can be observed, for example, in the field of transportation: Often communication focuses on a harmonious reconciliation of interest while concealing existing lines of conflict and thus distracting attention from necessary political decisions (Schwedes, 2017). However, practice shows there are deep conflicts that cannot be dealt with constructively in this way. Pizzo and Di Salvo (2015, p. 100) interpret planning as "an interactive context of practices where the conditions of conflicts - as well as their course and outcomes - are (intentionally or even unintentionally) shaped." How conflicts are dealt with in planning is fundamentally related to the underlying understanding of democracy.

In our contribution, we follow the thesis that an open, constructive handling of conflicts is necessary to fully explore their potential for social change. In distinction to rationalist and deliberative models, critical planning theories have been developed which understand conflict "as a constitutive element of social relations and as a source of their strength and ability to innovate" (Gualini, 2015, p. 3). Under certain conditions, conflicts can contribute to the development of collective identities and open the possibility for social transformation through the redistribution of rights, privileges, and goods as well as the redefinition of norms and values, and the establishment of new institutions (Grossmann, 2013). Agonistic conflict theory has formulated important approaches to this. Mouffe (2013) suggests celebrating dissensus and making it visible to challenge the current hegemonic order (as long as the conflict parties adhere to certain democratic principles). The questions remain how planning processes can reflect agonistic principles and under what conditions an antagonistic situation can be transformed into an agonistic one. There is little empirical knowledge on these questions.

We develop a conceptual framework to fill the implementation gap of the agonistic approach. This first requires looking closely at conflicts, why they arise, how they play out, and what the different perspectives of the conflict actors are. On this basis, windows of opportunity for agonistic innovations in governance processes can be identified. To achieve that, we adapt the approach of conflict field analysis and explicitly focus on the different dimensions of space. Our approach is illustrated by the empirical study of conflicts around bicycle mobility in rural Bavaria (in the south of Germany). In the rural areas of Germany, social participation without a car is almost impossible, and twice as much CO₂ is emitted per trip compared to urban areas (Schelewsky et al., 2021). In a conservative political climate, where the car lobby traditionally

plays a major role, civil society actors are struggling to improve conditions for cycling through a referendum. The challenging framework for the mobilization of civil society engagement in rural areas is particularly interesting from the perspective of democratic theory and raises crucial questions regarding the meaning of conflicts and how they can be used to foster transformation.

Keywords: Conflict; agonistic planning theory; sustainable mobility; civil society

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FLAT ONTOLOGY AND THE CONTEMPORARY HERITAGE OF MODERN SPATIAL PLANNING (610)

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This essay offers a reflection on the epistemic roots of spatial planning and explores the implications of embracing a flat ontology in its theories and practices. Employing an historical gaze the essay investigates the links between utopian thinking and the consolidation of spatial planning as a discipline in Modern times, proposes a critical reflection on the epistemic foundations of the discipline and identifies in the 'nature-society bifurcation' the exquisitely Modern grounds on which it has historically erected its practicalities. Therefore, drawing Latour's definition of Modernity (1993) the paper identifies in the recent ontological turn (Pellizzoni, 2015) a necessary framework to understand spatial planning theories' anthropocentric foundations and opens to a continuous search for common ground with social (Bookchin, 2012) and political ecology (Swyngedouw, 2003).

Consequently, the paper places the nature-society dualism at the centre and raises open questions about the capacity of spatial planning to overcome dichotomous and hierarchical interpretations of nature and society not only on theoretical terms but also within its practical realm. Evolving beyond these dualistic perspectives means not only deconstructing the idea of the city in opposition to the natural realm or welcoming, within the processes of change and development of spatial theories, the study and the analysis of multiscalar and metabolic processes of socio-natural space production (Heynen, et al. 2006). It also means embracing an understanding of spatial justice that fully includes non-humans with all the practical implications of such inclusion. The paper argues that spatial planning's Modern roots are still alive and may act as limits to a potential evolution of the discipline itself. To deepen the proposed considerations the paper presents on one hand some insights from urban political ecology (Loftus, 2012) recognized as interesting perspective to feed a disciplinary advancement, on the other opens unanswered questions about the operationalization of such understandings.

Keywords: urban political ecology, modernity, non-human

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COLLECTIVE WILL IN PLANNING STEMMING FROM CONFRONTATION AND POLARIZATION – DESIRABLE OR FRIGHTENING? (641)

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The growing confrontation and polarization of current times raise a two-fold question which is of interest to planning theorists. The emphasis on confrontation, strife, and disagreement – characteristic of agonistic approach to planning (see e.g., Bond, 2011; Pløger, 2004) – may lead to the expansion of political space and the emergence of new groups, generally considered a positive development among theorists. Following Laclauian populism (Laclau, 2005), with which Mouffean agonism (Mouffe, 2000; 2005; 2013) shares its origins, new groups are created through the formation of collective identity, and they embody a collective will. Thus, the first part of the question is: With the wave of confrontation and polarization, are we approaching a new era of collectivity? And related to this: Does individualism now have to make room for collective views when it comes to planning democracy and citizen participation? This would be interesting considering the current focus the development of digital participation tools – such that may not allow a collective view to emerge.

The second aspect of the planning-theoretical implications of confrontation and polarization relates to the quality of potential collective action: What will it be like? Can anything good come out of collective action stemming from confrontation? The collective will – the unification of the group – is potentially sought through simplifications and catchy slogans. It is easy to group behind such, but the side effect may be the degeneration of the discussion. On the other hand, such action stemming from confrontation may channel collective power and genuine change in the field of participation, where individualism has come to dominate, and embracing diversity – thousands of individual voices – may prevent the formation of a collective voice.

This paper discusses the different accounts of planning democracy and asks whether participation as a group amplifies the voice of citizens more than participation as individuals. Furthermore, the paper discusses whether such collective power is desirable or frightening: is it constructive or destructive?

Keywords: Confrontation, populism, planning democracy, collective power

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HEALTHY, JUST AND SUSTAINABLE CITY: A THEORETICAL FRAMEWORK FOR A SMALL-SCALE URBAN HEALTH MONITORING CONCEPT (685)

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Urban environments are posing different challenges and opportunities for health and well-being of urban dwellers. Living conditions and quality of life depend on the quality of housing and retail, opportunities for quality employment and education as well as active transport, safety of the environment and opportunities for social interactions that are not equally distributed in cities (CSDH, 2008). Unequal distribution of urban health resources and risks is reflected in environmental inequalities (Bolte et al., 2018).

These complex urban environments and high level of uncertainty require the engagement of urban planners in extensive policy debate to develop cities that promote health, wellbeing and urban justice (Rydin et al., 2012). However, expanding a sustainable urban development approach to health and well-being makes a planning scope broader, which requires interdisciplinary discussions and overcoming challenges of sectoral work of local governments (Skodra, 2019). Traditional planning is challenged with complexity and uncertainty and requires new planning approaches and interventions, as well as assessing and evaluating them for their positive and negative effects on health and well-being (Rydin et al., 2012). Although there are various indicator systems for urban health (Pineo et al., 2020, Rothenberg et al., 2015, Corburn, 2017) there are challenges in applying these nationally and internationally developed indicator systems to a specific local, urban context.

In this paper we examine and combine several conceptualisations for healthy, sustainable and just cities and propose a theoretical framework for developing an integrated, small-scale urban health monitoring concept. The aim is to use the concept as a vehicle for cross-sectoral cooperation and as a base for informed planning and decision-making. An indicator set will be developed and used to assess among others local issues like: living conditions and quality of life; health and well-being; access to resources and facilities; green and blue spaces use; resilience and adaptation to climate change; processes of segregation, etc. The main focus of our project is on small-scale monitoring and local conditions; however, a theoretical framework conveys issues on different scales, including the global one. For developing the theoretical framework, a systematic literature review was employed to bring together interdisciplinary perspectives. A transdisciplinary approach was used to discuss and enrich the theoretical framework with actors from the city administration in the City of Bremen, Germany, in order to improve its applicability.

Combining different conceptualisations on the interlinkages of the social and built environment and health from an urban justice and sustainability perspective shows different synergies as well as trade-offs. Enhancing our understanding of spatial, environmental and social contextual factors

in a complex, interconnected urban systems will be helpful in coping with uncertainties and reducing existing urban injustices.

Keywords: urban planning, healthy city, sustainable development, urban justice, monitoring

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THE UNNOTICED RETURN OF RATIONALIST PLANNING PARADIGMS IN AN AGE OF DIGITALISATION (709)

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Spatial planning is facing multiple challenges in an ever more digitalized world: not only questions of data management and integration, cybersecurity, or privacy arise; additionally, digital regulations and urgently needed novel digital standards put existing approaches into question. These include the new opportunities that come alongside digital twins, building information modelling, (web)GIS, knowledge graphs and the semantic web. In this digital age the emerging multiple new models, sensors, apps, devices, new data sets and formats have substantial implications for city making, and planning. With these developments new stakeholders shape planning practices, and with them their logics, narratives and scientific approaches: That is the computer scientists, modelers and engineers. More precisely, with the digitalisation of and in planning processes, smart city developments, digital twin uses, increased use of integrated apps by citizens and the rapid change of IT systems in local authorities across the world, the collaboration of governments with new stakeholders and tool providers increases. These are often stemming from the IT, agent-based modelling and computing arena, where often linear ways of thinking are dominant, and whose tools open up new opportunities to faster and seemingly more effectively and cheaper support administrations.

In this article, we scrutinize how the new stakeholder settings and practices impede on planning practices and logics. We argue that incrementally, planning practices become bit by bit subject to new underlying logics. We then analyse the implications for planning processes through the lens of planning theories (see Harris 2000) suggesting that we as a result see a largely unnoticed return of rationalist planning practices and paradigms, and a return of the planner as an advocate through AI, IT and digital tools. Digital tools, such as knowledge graphs aim to incorporate linear decision makings that can be delivered in an automated way based on predefined decision parameters.

With our contribution, we want to warn planners and city administrations about the return of a rationalist planning paradigm that slowly seems to infiltrate planning practices led by an increased dominance of modern IT tools and systems. Even more so, we warn that planning education does not sufficiently take into account these new technologies, effectively not sufficiently equipping future generations of planners with sufficient technological and digital literacy to compete, work or engage in these new environments. (Not to create a too hard, warning, but to some extent there are forces underway that rather aim to extinct planners as a species) This has fundamental implications for the decreasing role planners could play in future digital planning, urban managements and political decision-making, and of course the weighing of different needs.

Keywords: digitalisation in planning, planning theory, rationalist planning, smart city, artificial intelligence

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THINKING (AND) PLANNING WITH HANNAH ARENDT (856)

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The past years have seen reinvigorated interest in the work of political theorist Hannah Arendt, particularly, her provocative writings on democratic practices in the face of totalitarianism and the de-politicization of the modernist and individualist society; issues that strongly resonate in the current context of multiple and intersecting crises. Her rich spatial vocabulary has attracted theorists from different disciplines to examine her concepts of “spaces of appearance” (Teerds, 2022), “public space” (Benhabib, 1993), as well as elaborate on a coherent “spatial vision of the human condition” (Debarbieux, 2017). Together, these publications contributed to a better understanding of what it entails to (re-)think the politics of planning as well as to conceptualise planning as a (performative) stage for politics. They attribute value to Hannah Arendt’s arguments for opening and holding non-hierarchical spaces for public-political action, whilst remaining critical of her rigid conceptual binaries (e.g., between what constitutes private and public space), as well as her outdated and problematic statements, for example, in regard to feminist struggles.

The presentation expands on this emerging, critical body of literature as well as on previous research by one of the authors (see Mayrhofer, 2021) and translates Hannah Arendt’s *Vita Activa* (1960) - her writing on the private reproductive and productive life, which is only complete if combined with a political life that enacts relational encounters and plurality (*poiēsis* und *praxis*) - into a theory of action for planning. It takes Hannah Arendt’s refusal to affiliate herself with a specific School of Thought and her determination to write suggestive and disruptive texts as methodological inspiration to develop an open-ended, pluralistic and inconclusive translation. We first juxtapose literature from diverse disciplines and fields including planning and political theory to sketch out key terms, questions and their correlations, hence, outlining terminologies and grammars of a theory of action for planning that speak to ongoing debates such as the tensions between agonistic and communicative planning theories. We then invite philosophers, political theorists, and planning theorists in a workshop to think with Hannah Arendt, thereby probing the emerging translation to make explicit its contradictions and incompleteness, and to scope if (or not) it has potential to radically re-frame an approach to politics *and* planning.

The main argument underlying this presentation is that decision-making processes in planning need to be reconceptualised through public participation as citizen power. Arendt’s non-authoritarian concept of politics, her understanding of citizen power as associative-communicative political power to act, and her descriptions of subsidiary and agonal decision-making structures (Arendt, 1960) thereby serve as entry points. Planning research has long documented public-political moments of citizen power, both in formal and informal participatory planning, that go beyond tokenism and resistant actionism. Thinking (and) planning with Arendt, then, triggers explorations into how planning can open, recognise and sustain these moments of political action through adequate framework conditions as everyday spaces.

Keywords: Hannah Arendt, *Vita Activa*, planning theory, political action

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POLYRATIONALITY IN A TURBULENT WORLD: DIRECTIONS AND OPPORTUNITIES FOR NAVIGATING THE MULTIVERSE OF PLANNING THEORIES (862)

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The metaphor of multiverse postulates the existence of parallel or alternative dimensions endowed with diversified rationalities. Inspired by this metaphor, the paper investigates the relationship between rationality and planning. In particular, it suggests that a plural idea of rationality (here termed polyrationality) enables navigation through a multiplicity of theoretical planning approaches. And this is the key to dealing with the turbulence of Today's world.

Rationality has been the key/crucial concept of planning theory since the fifties of the past century (Alexander, 1984). In 1997 John Friedmann stated, "If there is one theme that runs through all the discussions and debates on planning, it is that of rationality" (1987: 97).

From the nineties onward, planning theory developed from a debate on a technical rationale towards a communicative rationale. On the way forward, new approaches emerged that make planning theory a variegated field of opportunities nowadays in search of a new multiverse rationale to prepare to approach the unknown and uncertain (socio-spatial) future (Balducci, 2020).

This paper explores two theoretical directions (among a multitude of them) in the debate on rationality and planning. These directions open opportunities for future approaches against worldly cultural, social, economic and climate turbulence. In particular, this work builds on the assumption that a strong push forward in the academic planning debate came with the two following approaches: (1) the hybridisation of a particular branch of planning theory with the complexity theory (and the emergence of a Complexity Theory of City) (Portugali, 2012; de Roo, 2018) deepened through the discourse of a multi-level expansion of the rationality model for planning behaviour beyond the early 1990s planning discipline paradigm shift referred to as the communicative turn in planning (De Roo, Perrone, 2020); and the rise of a postmodern approach to planning under the so-called epistemology of multiplicity (Sandercock, 1998) developed through the concept of transactional rationality (Bridge, 2005) and later on through the vague translation of critical-studies theoretical narratives into planning theory and practice (Perrone, 2022; Brenner, et al. 2011).

Both approaches question modern rationality and embed a nuanced, patterned, multiple understanding of rationality and the ways of knowing in theoretical planning approaches.

This paper explores these patterns and the lessons learned. Then, it traces some theoretical pathways that unfold different planning meanings based on multiple rationalities. By doing this, the paper offers some reflections on the idea of a multiverse of theories that are congruent and can coexist even when apparently diverging. The final purpose is to show opportunities for more practical/prepared planning responses to the new unknown challenges of the XXI century.

Keywords: rationality, planning theories, transactional, polyrationality, complexity theory

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SEEKING FOR PLANETARY PREMISES OF PLANNING THEORY (877)

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Within a conventional sustainability approach, moderate habitat loss, climate emissions and exploitation of natural resources can be tolerated, if the environmental burden is counterbalanced with benefits gained from an economic, social or cultural sustainability viewpoints. However, from a point of view of planetary boundaries, it is irrelevant if the boundaries are met through just few eco-inefficient or numerous relatively eco-efficient land use projects. Leaving behind relational understanding of ecological sustainability requires rethinking of premises of spatial planning. As in forthcoming EU-based regulative framework, the projects of detailed land use must fit to the ecological frames: international regulation is expected to steer spatial planning towards no net-loss and net-land take development.

In this paper, we take part in planning theoretical debate from a novel conceptual Planetary Well-being (Elo et al.: *Interdisciplinary Perspectives on Planetary Well-being*, in press. Routledge.) approach. We argue that in the future land use must better meet the criteria of strong sustainability, and the individual planning solutions need to be based on systematically monitored state of environment. Consequently, the existential environmental crises follow with a need to critically review the increasingly facilitative premises of planning theory. Planning scholars should hurry up addressing legitimacy issues of more restrictive planning policies, instead of keeping on finding ways for flexible facilitation of development projects.

Keywords: Planetary Well-being, strong sustainability, weak sustainability

THE AESTHETICS OF PLANNING IN THE AGE OF FINANCIALIZATION (888)

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In planning theory, value-related aspects, linked to equity, recognition, respect to nature, etc., tend to dominate assessment and judgments of plans. Such judgments are generally controversial in the public sphere, not only due to the value pluralism inherent to our societies, but also due to the faint causality chains that can be established between values and action in the physical space. A consequence is the limited influence of planners' critics and debates in spatial planning decisions.

The hypothesis in this paper is that such critics, recommendations and debates could be strengthened through the more careful consideration and integration of aesthetics together with the usual ethics-related arguments. The interlink of ethics and aesthetics has strengthened within the philosophical sphere for a few decades now, consolidating a practical or public philosophy, with a philosophy of the city being one of its most relevant outcomes for planners (Lehtinen, 2023).

An aesthetic analysis of plans can take a variety of perspectives (Tedesco & Davis, 2022). For example, considering the plan itself as an aesthetic object produced by planners from assembling basic materials from disparate origins: the physical location where the plan will take place, the socio-economic conditions of the human communities and the legal and institutional framework, to cite a few. We are interested here in the aesthetic merits of the product planners deliver, as evidence of outstanding professional practice.

It is also possible to take a macro perspective in the aesthetic analysis, in which the plan is put in the context of major global trends. The aesthetic characteristics of the plan (such as size, image, relationships between the parts and the whole...) are reviewed through the lens of their ability to strengthen (or to challenge) the potential of the planned site as a symbol of current capitalist appropriation mechanisms. Aesthetic characteristics are relevant to commodify the planned site in accordance with the trends of real estate investors, to attract or reflect global capital flows, to create value or to merely capture it (Welsh, 2018).

Finally, the aesthetic analysis can take a micro perspective, building upon the traditions of pragmatism and somaesthetics (Shusterman, 210), centred in the public's experience. Along the lines of everyday aesthetics and the concept of aesthetic engagement (Berleant, 2013), the central question for analysis is the opportunities for rewarding experience the plan opens to citizens. Should stakeholders adopt that perspective while confronting a planning proposal could strongly influence the outcome of the planning process and neutralize the opportunistic/ tactical manipulation of the aesthetic dimension that overemphasize aspects such as architectural ambition or techno-fantasy.

The paper takes as a case study a large redevelopment project in Madrid, Spain: Madrid Nuevo Norte. It examines the planning concept through the lens of the experiences it intends to support. The analysis is made at two different levels: diversity (the experience in a place to live, to work, to visit, to socially interact and to invest, and the balance among them), and the socio-economic

added value (i.e. the economic and social processes) it claims to create or support. The paper concludes by assessing the ability of aesthetics to restate the relevance of the human and local micro-scales in planning.

Keywords: urban aesthetics, financialization, planning theory, pragmatism

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INSURGENT PLANNING ETHICS AND INSTITUTIONAL CHANGE (934)

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This paper opens up for epistemological and conceptual debate when deepening planning theory's interest in insurgent movements and institutional change with human agency and ethical relations-to-self. As such I address the subject of urban planning (negotiating the legitimacy of multiple social orders along the legality of spatial borders) and significantly subject planners themselves. Taking up planning theory's intensive engagement with the 2nd generation of Frankfurt School the 3rd generation has provided a powerful fundament for Habermasian communicative rationality, planning theory is not aware of. Here, Axel Honneth has outlined the *Moral grammar of social Conflict* along social, legal and emotional struggles for recognition – as critical theory of justice – linking subjective needs to inter-subjective, social struggles, deeply rooted in ethical relations-to-self. While ethical insights are vital for urban studies' interest into conflict, resistance and justice, more generally, my paper targets norms, forms and scales of planning ethics, and the role of urban planners, who know what is good for others but keep distance to subjectivity, emotionality and possibilities that affect them personally. As such the communicative planner listens and learns, tell stories but hardly ever his or her own. John Forester is clear when highlighting the Habermasian benefits of clarifying *what* is the problem, *how* can it be solved for planning theory and practice. Exploring the fundament of this question with Honneth the deeper question of social motivation and communicative practice is *why* to engage in the first place and *who* exactly cares? Highlighting political subjectivity and emotional rationality for self-critical planning ethics and institutional change, the paper sheds light on the making of self-confidence vis-à-vis self-limitations in institutional settings that come with questions of planners' determination, reservation and claims for self-organization.

Keywords: justice, recognition, insurgent movements, planning ethics, Frankfurt School

CREATING FUTURES AND NEW RELATIONS: TOOLS FOR KEEPING THE FUTURE ABUNDANT (951)

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Planning is seen as a discipline that works to assert control over future events and which ideally operates in a democratic arena. Still, it is acknowledged that the planner holds power through the planning process to control how the future is perceived. Planning thereby deals with an ontological perspective that relates the future to the present. An 'ontological view' on futures planning has the potential to open the debate about possible futures and how such futures should be handled in the planning process. The chapter presents a theoretical account of the ontology of futures planning. It does so by focusing on two aspects, one being the ontological space-dimension of the future. The other being the moment during the planning process when a future settles and becomes locked. The argument is that postponing settling on a future, as far as possible, is the most democratic, while the process should expand the ontological space-dimension of futures, not as much as possible, but through multiplicity, to allow inclusion of necessary perspectives to achieve true sustainability. A variety of methods and processes will serve as points of reference and examples of different ontological space-dimensions and ontological lock-in moments. A discussion of how Danish planning implements the UN Sustainable Development Goals (SDGs) will act as a case and reference throughout the paper. By focussing on how the top-down implementation and how SDGs has overrun the sustainability agenda from national to local planning arenas the paper shows the destructive elements in vague global agendas. While the SDGs helps local ill resourced planners to discuss the complexity of the sustainability transition, it stops short of facilitating a visualization of sustainable futures, leaving planners to discuss implementation strategies and frameworks rather than inclusive and sustainable futures.

Keywords: multiverse, degrowth futures, co-production, participatory planning

RESISTANCE, CULTURE AND COMMUNITY. REVISITING RAYMOND WILLIAMS' VOCABULARY IN WALES, 40 YEARS ON (1985)

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This paper presents a case study based around community-based initiatives that aim at redefining and reclaiming the use, layout and social value of land and buildings in Gwynedd, Wales (UK). These initiatives start informally, generally focusing around assets, and then take a variety of different legal and social forms, from community enterprises to ordinary business companies. Some of the initiatives in the case were initiated in the 70s originally, others have a more recent inception. Over time, the density and concentration of community-based initiatives in the area has grown to cover substantial parts of towns and villages in a sustained experiment of community-led planning. Mapping these community-based initiatives shows substantial coverage of the local territory by community-based planning and action in absence of substantial market-led pressures. The case study of Gwynedd presented here is part of a series of cases tracing the nature, content and actions involved in a variety of People's plans developed across the four UK nations over the last six decades, investigated in an AHRC-funded research project on 'People's plans: the hidden histories of community-led planning in the UK' (see <https://www.peoplesplans.org/>).

Going against the grain of mainstream planning research – that sees planning as mainly defined by statutory land use practices – our project sees planning as an ever-changing process of change involving people and places and aims to re-centre people and their efforts to shape the space they live in within the wider field of planning. We are particularly interested in developing tools to understand what factors support the development of such a number and variety of spatial community planning practices and how and why spatial practices stemming 'from below' can find their way within institutionalisation processes, ultimately effecting change in planning. Wales, a small and culturally-distinctive country of the UK with its own devolved planning system, constitutes fertile background to our case study as recent shifts in planning regulations (i.e. One Planet Wales) show it as an open and reflexive policy environment.

The paper uses Bourdieu's concepts of field and change as interpretive models to investigate how planning is shaped and re-shaped over time through local spatialised practices – involving a variety of actors drawing on a densely interwoven social network characterised by asymmetric power relationships - and delves in the neo-institutionalist toolboxes to map and interrogate the case study. The vocabulary of Raymond Williams (himself a proud Welshman), first published in 1976, provides theoretical interpretive support to the study – particularly the centrality of culture in defining local fields of (spatialised) action, in constantly redefining the rules of the game, and

in shaping habitus - and the case enables the authors to develop his keywords further, adding a geographical angle to his historical perspective on shifting meanings.

Keywords: People's plan, community-led planning, culture and territory

PLANNING AND OTHER URBAN DEVELOPMENT METHODS (1009)

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The study analyses and describes methods of urban development. The proposed theoretical model is a simplification, taking into account only their essential features. An urban space designer may use all the distinguished methods depending on the task and professional role.

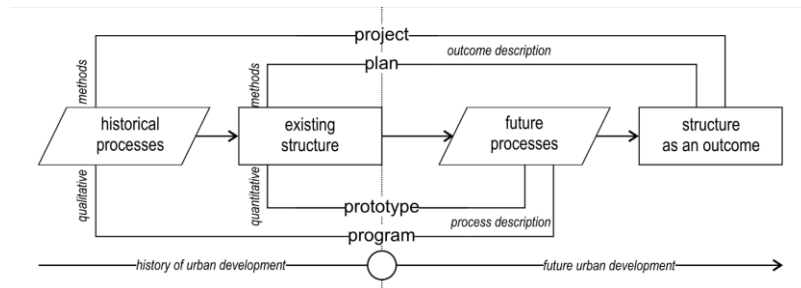


Fig. 1 Diagram of inputs and outputs of methods in urban planning (Wróblewski 2022).

Polish praxeology distinguishes between "*plan*", "*project*" and "*program*" (Kotarbiński, 1973). Contemporary design additionally offers "*prototype*". The above proposed distinction is due to *process*- or *structure*-oriented urban development methods. In literature, this dichotomy is clearly outlined in the methods of describing the *past* of cities (Koter, 2015) and the *future* of urban development (Duany, Talen, 2010; Wróblewski, Zasina, 2022). If the vision of the future is defined by the description of the structure, it tends to produce new things, but also organizational structures and ideas. Outcome-oriented methods in other disciplines are referred to as quantitative ones. If the vision of the future is defined by the description of the process, it leads to the organization, improvement and maintenance of an action or sequence of actions. The expected processes provide an answer to the question of how to make a change thus, it is the orientation appropriate for qualitative methods. Referring to the concepts used in other disciplines, in simplified terms, it can be said that the quantitative researcher is looking for data verifying the theory, and the qualitative researcher – for a theory that will explain the collected data (Paluchowski, 2010). The history of the city recorded in its structure as a set of object forms along with their features and structure is therefore a set of quantitative data. The past has left a specific material and material resource. The history of the city seen as a process is a set of phenomena causing physical transformations of space and the formation of given spatial structures, i.e. an explanation of data. On the one hand, the past has created certain opportunities, but on the other hand, certain limitations and threats for the future.

Table 1 Matrix of methods in urban planning (Wróblewski, 2022).

| | | | FUTURE | |
|------|-----------|--|--|--|
| | | | structure | process |
| | | description | objects, structure quantitative method | action, mechanism quality method |
| | | resource | | |
| PAST | process | opportunities, limitations and threats | PROJECT materializes existing possibilities in the form of an object or a complex of objects | PROGRAM transforms existing opportunities into a further process with the assumption that better organization will produce better things |
| | structure | forms and materials | PLAN defines the transformation of an existing resource into new forms and structures; it focuses on static, finite states of land development, yet the methods and possibilities of execution are secondary | PROTOTYPE triggers the process and maintains the feedback loop by modifying and manoeuvring the existing, "minimally satisfying" material resource |

The analysis and comparison of descriptions of structure and process relating to the past and future lead to a matrix of categories (Table 1) and in consequence, provide a synthesis of currently used methods.

Keywords: urban development methodology, project, plan, program, prototype

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TRACK 14: CEE PLANNING DOCTRINES AND PRACTICES

PERI-URBAN LANDSCAPE: A FORGOTTEN OR EMERGING TERRITORY OF THE PLANNING SYSTEM? (355)

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Situated between the rural and the urban, the peri-urban landscape is a diverse set of ecosystems that vary in their supply of ecosystem services (ES). With the growing urbanisation and consequent redevelopment of cities, peri-urban green space is under increasing pressure, often because of a shortage of ES in the cities. The peri-urban landscape is therefore important for urban and suburban dwellers for the intangible benefits its ecosystems provide. Commonly described as cultural ecosystem services (CES), these are strongly linked to quality of life and wellbeing of local people.

This growing demand for CES puts large pressure on the peri-urban landscape, threatens with overuse and consequently the effective provisioning of specific landscape qualities such as biodiversity, tranquillity, and naturalness. However, despite a elevated awareness of the relevance of CES, in many CEE countries there is as yet little practical application of this knowledge in planning and decision-making. Often, CES in peri-urban landscape are sacrificed for economic and ecological reasons, and they are rarely fully integrated in ES assessments because they are difficult to quantify in biophysical and monetary terms (Chan et al., 2011; De Groot et al., 2010; MEA, 2005; Roy et al., 2014). Existing research points to deficits in the knowledge of CES and assessment tools remain poor. Landscape policy and planning for CES in peri-urban landscape requires reliable data on users of these spaces, their landscape preferences and types of green spaces they use (Komossa et al., 2020).

In Slovenia, negative effects of cities' growth on CES provision in peri-urban landscape pertain mainly to its capital, Ljubljana, and several smaller cities. In the early 1990s, after Slovenia got independence, urban developments were not governed by spatial development strategies but simply responded to the needs and demands of the market economy and new public and private investors (Pichler-Milanović, 2003). As a consequence, retail but also housing and infrastructure sprawl rapidly expanded, primarily on city-edge greenfield and arable land (Pichler-Milanović, 2005). Although by now, most of the municipalities in Slovenia managed to formalize municipal spatial plans (OPNs), these rarely address the challenges related to peri-urban landscape. In Slovenia, the importance of CES is stressed as objective in some national and regional documents, but CES are not explicitly included in any national, regional and local norm or regulation, which may lead to inappropriate planning decisions (Žlender, 2021).

There is a recognised and urgent need to include CES in new and existing policies to ensure steady provision of ES for the human population (MEA, 2005). In Slovenia, COVID-19 lockdown showed the importance of CES in peri-urban green spaces, when due to massive visitation of people seeking leisure experiences there brought in question the maintenance of several landscape

functions (Ugolini et al., 2020). This study therefore attempts to improve existing understanding of the eclectic character of peri-urban landscape by exploring and clarifying the temporal changes of CES there. It is focused on two CES categories, outdoor recreation and sense of place, which are explored on the case studies of three Slovenian cities: Ljubljana, Kranj and Koper. The study assesses the extent to which peri-urban green open spaces provide CES by (1) examining changes of peri-urban land uses since Slovenia's independence; (2) identifying spatial planning actions and their influence on the peri-urban land use (3) evaluating, whether new planning approaches such as CES framework could improve the state of peri-urban landscape to retain its functions and benefits to its users. The results of the study can facilitate incorporating information on CES in a format that can be used by city authorities and spatial planners in the formulation of spatial planning measures and guidelines.

Keywords: peri-urban landscape; cultural ecosystem services, recreation, spatial planning system, Slovenia

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PLACEMAKING AND DEMOCRACY. ADAPTING THE PLACEMAKING APPROACH IN THE REGENERATION OF PUBLIC SPACES IN BULGARIA: THE CASE OF PLOVDIV, BULGARIA (361)

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Contemporary movements in urbanism such as *placemaking* emphasize the spontaneity of the urban environment and outline the direction in which the development of cities is moving – the increasing participation of people in urban planning processes. According to Salzman (2020) placemaking is a viable form of political participation that has the potential to meet or exceed some forms of traditional participation in democratic effectiveness. The process is inherently networked (Pierce et al, 2020), constituted by the socio-spatial relationships that link individuals together through a common place-frame and has a tremendous political potential when it comes to the conceptualisation of the urban fabric.

The spatial planning system in Bulgaria refers to the systems of transition and is part of the group of Eastern European countries, for which the significant role of an efficiently and transparently conducted processes of spatial development is emphasized (Burov, 2015). The transition is from a totalitarian state with a centralised economy with the associated clearly structured, hierarchically developed and relatively closed expert system to a democratic state with a market economy with an unconvincingly developing and not entirely open system for citizens.(2015) In this context, the principles of placemaking based on the inclusion of citizens and their views in urban planning processes reveal how the process has the potential to contribute to the democratic conceptualisation of the urban fabric.

Focusing on the process of placemaking, the research work uncovers its potential as a democratic socio-spatial instrument for urban regeneration, simultaneously fostering the collaboration between local authorities and citizens, people and places. Using the city of Plovdiv as a test-ground, the work implements the action-research methodology of the *urban living labs* in conducting placemaking workshops and adapting the approach for the regeneration of public spaces in Bulgaria. In addition, the research involves carrying out a series of interviews with citizens, experts and representatives of municipal administrations, investigating the attitudes and expectations of various stakeholders regarding public space, the processes of communication and integration of the approach in the governance of public spaces in relation to local planning processes and tools.

The results of the research are planning to provide an indispensable source for the political and democratic aspects of urban planning and governance in Bulgaria, reveal how the placemaking process can be integrated into the existing urban planning practices, as well as contribute to the development of more inclusive and emancipated working methods for architects, town planners, policymakers and local authorities.

Keywords: placemaking, democracy, participatory planning, urban living labs, urban governance

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30 YEARS OF TRANSITIONS: WHAT HAS CHANGED IN THE ALBANIAN PLANNING SYSTEM SINCE THE FALL OF THE DICTATORIAL REGIME? (497)

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In 1993, in Albania, with the fall of the dictatorial regime, the government drafted and approved law 7693, dt.06.04.1993, "On Urbanism". This was the first attempt in a long journey of reforms and legal changes to revise the planning system in Albania. Following that, legal changes in 1998, 2009 and 2014 have tried to reform and modernize the planning system. This paper examines the legal changes in Albania vis-à-vis the territorial planning practices and achievements. The paper has a special focus on local level planning in order to understand the way planning is shaping territorial development but at the same time achieving the declared goals of the new legal framework.

Over the years, the legal changes in Albania, have aimed to expand the scope of planning from a narrow urban and regulatory frame towards a spatial, integrated and comprehensive approach. Nevertheless, due to several factors, while instruments, practices and approaches have changed, the outcomes are not always what are expected. Therefore, this paper, through the use of different cases to illustrate the (miss) achievement of the planning system in Albania, tries to analyze and understand some of the doctrines that are persistent in the Albanian planning milieu as well as new ones that are being created.

Keywords: planning system; transition; planning doctrine; planning practice; planning in CEE

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DEBUNKING THE LATEST TRANSFORMATIONS IN UKRAINIAN SPATIAL PLANNING: IS FORMALIZING INTEGRATED URBAN DEVELOPMENT SUFFICIENT? (550)

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State re-scaling, as described by (Brenner, 1999), recently took place in Ukraine in 2019, when municipalities were enlarged and given more responsibilities and financial control. This invoked a push towards reforming local spatial legislation to capture planned territories' increased size and complexity. This latest evolution of Ukrainian planning followed the German-inspired system of Integrated Urban Development. Several years of municipal and state-level consultancy via the German state enterprise GIZ led to a definitive change in the planning system, which was for a long time oscillating between layering and drift as discussed by Anisimov (2021) based on the model of Mahoney and Thelen (2009). Layering would suggest a simple introduction of new rules, whilst drift would point to a gradual change in the enactment of the existing laws. In fact, a merger of integrated & strategic planning on the one hand and statutory planning on the other has taken place in 2020 – resulting in a “Comprehensive plan” system. Without reforming the contents of the statutory planning system, the latter was complemented with a larger planning scale, shortened minimum timespan to update the plan, and separate land-use documentation was eliminated. Besides this, municipalities are now strongly encouraged to develop an integrated strategy.

Developing further the theoretical perspective offered by Tyminskyi (2022), this project gives a more detailed look at the “shift from ‘General planning paradigm’” to a synthetic one that includes some innovative aspects while preserving the core of modernist planning. Based on the previous research, the hypothesis is that such a shift is closely tied to the ability of the planning system to address inherited path-dependencies and reform current institutional arrangements while responding to the dynamic effects of Europeanization (Nadin, Stead, Dąbrowski, & Fernandez-Maldonado, 2020).

This is more than a local challenge, as new intersections of statutory and strategic planning have been recently explored in several research projects about the CEE planning (Machala & Koelemaij, 2019; Nakrošis, Šiugždinienė, & Antanaitė, 2020; Nowak, Lozynskyy, & Pantyley, 2021). On the theory development side, this research gives a new perspective on the theory of policy transfer in planning and intrinsic institutional development. It also leads to a deeper understanding of how the policy ideas travel to states with weak governance in spatial planning. Using the historical/discursive institutionalist approach as lately developed by Granqvist, Humer, and Mäntysalo (2020), the aim is to debunk such concepts as path-dependence and policy drift related to the decentralization of planning powers (i.e. new multi-level governance) in the Ukrainian context of the last decade. This will allow better guided and conceptually synchronized international comparison research and inquiries about planning in Ukraine in the future. This is critical in the short and long term to build an understanding of the sufficiency or inadequacy of planning institutions and governance for the upcoming recovery of the country and expected financial and project flows.

Keywords: integrated urban development, Ukraine, policy transfer, institutional change, governance

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MANAGING SUBURBANIZATION IN POST-SOCIALIST COUNTRIES. A NEW PLANNING INSTRUMENT FOR ROMANIAN METROPOLITAN AREAS (677)

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The transition from a centralized socialist planning system characterized by compact urbanization to a de-centralized planning system strongly influenced by the adoption of neo-liberal doctrines has been a significant challenge in Central and Eastern European countries (Branković et al, 2016; Hirt & Stanilov, 2009). As a result, the prioritization of private interests has led to rapid suburbanization processes, often in the form of sprawling developments lacking the necessary public infrastructure (Stanilov & Sýkora, 2014). The negative impacts of these processes have not been mitigated as the existing governance structures proved incapable of controlling urbanization across different administrative territories (Csizmadý et al, 2022). As in the case of other post-socialist countries (Slaev et al, 2018), the main driver of suburbanization in Romania has been the development of low-density residential areas around larger cities.

Metropolitan areas were first defined in the Romanian law in 2001 (Law no. 351/2001) as voluntary associations of local administrative units including the most important cities in the country and their surrounding towns and communes. The creation of metropolitan areas was only encouraged after 2008, with the designation of seven National Growth Poles which were obliged to adopt Integrated Development Plans at metropolitan level in order to have access to European Regional Development Funds (Benedek & Cristea, 2014). However, the strategic plans and governance structures developed in this period have often remained purely formal (Munteanu & Servillo, 2014), with challenges such as suburbanization failing to be addressed. These shortcomings have been emphasized by a lack of correlation between regional development policies and the spatial planning system, with the existing territorial planning instruments defined by law at metropolitan level being seldomly applied. As a result, the regulation of land use has been done exclusively through General Urban Plans, which are developed independently by each local administrative unit, even in the case of metropolitan areas. The discrepancies between the different types of plans often becomes a problem when trying to implement the plans' provisions (Nowak et al, 2022).

The new law on metropolitan areas (Law no. 246/2022), approved in July last year, has introduced the possibility for metropolitan areas to develop metropolitan general urban plans covering their entire territory. This new planning instrument, also defined in the new Code for Territorial Planning, Urban Planning and Buildings currently being discussed by the Romanian Government, could provide an answer to the existing legislative gaps. However, there are currently no detailed norms regarding the structure and characteristics of this Metropolitan General Urban Plan.

In this context of legislative change, and building on our previous analysis of suburbanization in Romania's metropolitan areas, our aim is to propose a set of recommendations concerning the planning principles, content and possible procedures that should be addressed by a metropolitan plan. Our proposals were based on an extensive review of the existing

legislation, which included the analysis of the approved plans for two of the most dynamic communes in Romanian metropolitan areas. We also interviewed ten urban planning experts involved in central or local public administration, in order to better understand the current barriers for a coherent development of suburban areas. Finally, we analyzed current planning practices in other European metropolitan areas from Italy and Poland that could serve as lessons for the Romanian spatial planning system.

Our research shows that the main barrier for coherent suburban development is institutional, with metropolitan areas lacking powerful institutions that could guide urban planning. The metropolitan plan should refer to broader strategic development objectives, but should focus on designating the major functional areas and infrastructure networks at metropolitan level, while also establishing precise land use regulations in current suburbanization hotspots.

Keywords: metropolitan planning; spatial planning system; legislative reforms

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Acknowledgements: This work was supported by a grant of the Ministry of Research, Innovation and Digitization, CNCS - UEFISCDI, project number PN-III-P1-1.1-PD-2021-0030, within PNCDI III.

CENTRAL EUROPEAN PLANNING CULTURE IN 21ST CENTURY: MODEL, METHODOLOGY AND CHALLENGES (884)

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Spatial planning of 21st century is a delicate multidimensional process going far beyond pure regulation and traditional classification schemes and patterns. More than ever, it deals with phenomena like community, identity, place, social behaviour or human values. Planning culture could be deemed as specific, unique as well as typical, non-casual set of approaches (based on underlying values) toward the factors playing principal role in the process of spatial development within certain territory. It can be considered as one of the softest tools of spatial planning and its characteristic nature and particular traits significantly influence not only spatial development, but the society as whole. Planning culture is generating and developing its own values, beliefs and assumption related to certain specific situations of spatial development. Strong and highly profiled planning culture means an extraordinary ability to influence the background of the planning processes: explains the process of decision-making, facilitates the implementation, increases motivation and engagement of the stakeholders and secures the stability of spatial systems. Non-formal system of values, norms and proven proceedings is encoded in planning tradition, best practice and expected forms of acting and used behavioural patterns. An effective planning culture considerably contributes to public involvement, engagement and participation on planning activities among inhabitants. Our contribution deals with specific shape and nature of Central European planning culture, strives to define its essential scopes and contents, introduces our analytical model and recaps the recent major challenges which Central European planning culture is now facing. Integral part of our longitudinal research was comparative analysis of Central European planning systems (comparative vocabulary overview), terminological comparison, comparative analysis of tools and instruments utilised within the legislative dimension of spatial development and its overall impact on Central European planning culture. Planning culture is an essential link, binding all our past and future success, achievements and failures together.

Keywords: planning culture, culture, value, underlying assumptions, consensus oriented planning, trust, spatial behaviour

THE CASE STUDY OF THE CITY OF ZIELONA GÓRA IN THE CONTEXT OF URBAN PLANNING PRACTICES (963)

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Zielona Góra is located in central-western Poland and performs as economic, cultural and administrative centre of the Lubuskie Voivodeship. As it is located at the intersection of transport routes of national and international importance, it has high economic and spatial potential. Rapid development of its urban infrastructure has been noted in recent years, and it was ranked as third in the Arcadis Ranking of Polish Sustainable Cities of 2021. Unique connections of the city with its surrounding forest had insignificant impact on this result.

Economic development induces spatial growth, which, if inappropriately guided, can create a city that does not provide an adequate living quality for its inhabitants. This article aims to analyze existing trends in the development and spatial planning of Zielona Góra with an emphasis on the surrounding forests (the urban forest cover is 55%), and to set out potential perspectives in this regard. FCM (Fuzzy-logic Cognitive Mapping) was chosen as the research method, which allows the development of various variants of models of environmental issues, social problems and socio-ecological systems.

Consequently, the city's drawbacks and problem areas will be highlighted. In relation to these, it will be possible to propose solutions, based on the example of good practices towards resilience applied in other cities of the world (i.e. Stockholm, Copenhagen). To relate potential activities to the attitudes of local communities towards the current direction of spatial planning in Zielona Góra, the results of a survey conducted in conjunction with the student debate "Opportunities and Threats for a City Surrounded by Forests / for a Forest in the City's Neighborhood," held in December 2022 at the University of Zielona Góra, will be used.

Keywords: Zielona Góra, urban forests, green city

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TRACK 15: ENVIRONMENTALISM: CLIMATE CRISIS AND GREEN DEAL

ASSESSING URBAN FOREST GOVERNANCE CAPACITY IN PERI-URBAN WOODLANDS: A COMPARATIVE STUDY (49)

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Successfully planning and managing urban forest initiatives requires governance arrangements able to establish inclusive and informed decision-making, develop sound policies, allocate adequate resources and, therefore, ensure the delivery of a wide range of tangible and intangible ecosystem services to dependent communities (Randrup and Jansson, 2020). Despite its significant contribution to sustainable and resilient urbanization, limited research attention has been paid to urban forest governance (UFG) and, in particular, to the investigation of those factors influencing its success and how to assess them, especially at local level (Wirtz et al., 2021; Ordóñez et al. 2019; Ostoić et al., 2018; Secco et al., 2014). To fill this knowledge gap, this study aims to assess the capacity of actors involved in UFG to interact and cooperate for achieving targeted goals, delivering expected benefits and addressing societal issues (Dang et al., 2016; Arts and Goverde, 2006) as a relevant approach for understanding how decisions are made and what their performance are in urban forestry as a precondition for their improvement in changing urban environments.

For comprehensively assessing UFG in the peri-urban woodlands selected as case studies – *Boscoln Città*, Milan, Italy; *Amsterdamse Bos*, Amsterdam, Netherlands - this study uses the governance capacity assessment framework (Fig.1) for investigating both institutional capacity and governance performance and, therefore, identify success factors.

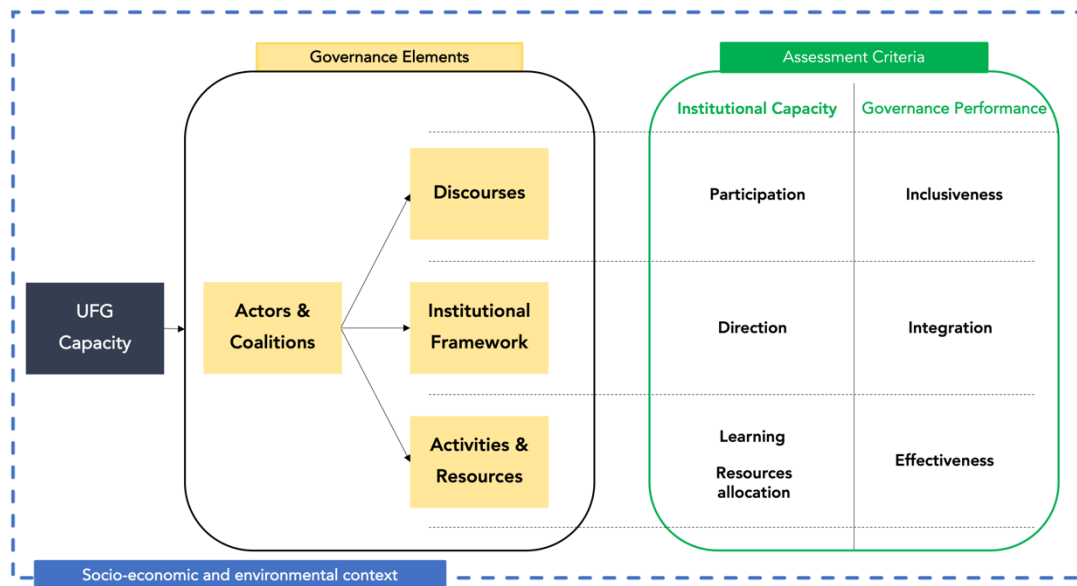


Fig.1 Urban Forest Governance Capacity Assessment Framework (adapted from Dang et al., 2016)

Through a mixed-methods research approach including desk research, semi-structured interviews and web-based surveys, a set of intertwined criteria - i.e. participation, inclusiveness, integration, direction, resources allocated, learning, and effectiveness - linked with the Policy Arrangement Approach's analytical dimensions (Arts and van Tatenhove, 2004) - i.e. actors, discourses, rules, resources - to which an activities-dimension was added (Mattijssen et al., 2017), were assessed taking into account also socio-economic and environmental contextual factors.

Study's findings confirm the importance of establishing collaborative and multi-level UFG arrangements as a key factor to carry out activities finalized at achieving expected benefits. Collaboration, however, should not be limited to the operational level, since external actors may represent an added value also in co-producing knowledge and creating shared urban forest strategies. In line with this, horizontal and vertical integration is another critical factor for the success of UFG, both for gaining political and local support, and developing holistic management plans aligned with municipal and supra-municipal planning tools and citizens' demands. Finally, this research suggests that the allocation of adequate economic resources, for which state actors still play a vital role, and the development of specific skills to attract diverse funding streams, are crucial factors to achieve UFG effectiveness, even in absence of comprehensive and formal management, implementation and monitoring plans.

Keywords: urban environmental governance; nature-based solutions; urban green infrastructure; collaborative governance

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HOW TO ACHIEVE JUST TRANSITION FROM A PERSPECTIVE OF ACTOR-CENTRED INSTITUTIONALISM: A CASE STUDY OF OFFSHORE WIND POWER DEVELOPMENT IN TAIWAN (80)

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Energy transformation is a must while facing the challenge of climate change. The transformation involves a series of structural changes, including not only industrial but also societal and spatial. These all relate to the distribution of cost and benefit, so a question of how to achieve a more just transition is emerging. The offshore wind power policy in Taiwan has been initiated since 2012. Its implementation has long-term influences at not only national and global, but also local levels. At national and global levels, the whole process and its results relate to not only the realization of the renewable energy policy in Taiwan, but also to whether the issues regarding global environmental sustainability and national economic development can be properly dealt with. At local level, it directly influences the local living, economy and environment of coastal areas, since the offshore windfarms are highly overlapping with fishing grounds in those areas.

However, regard of the significance of the policy implementation, the central government only asks developers to carry out their projects in a case-based manner according to existing regulations without a holistic assessment of the local influences and sound public participation. Therefore, it results in many conflicts and controversies. Marine scholars, hence, address the importance of marine spatial planning and claim that the making of Marine Spatial Planning Act could be a solution. However, if the lawmaking does not acknowledge the existing operation of power, the whole processes of lawmaking and planning practices would merely reflect existing power structure.

In light of this, this research aims to explore the interrelationships between central and local governments, developers, and local environmental groups, fishing associations and fishermen in the processes of offshore wind farm development under the implementation of renewable energy transition policy from an actor-centered institutionalist perspective. This research will focus on identifying the cognitive differences and conflict points among stakeholders, examining how the decisions are made and whether some stakeholders are excluded in the process, evaluating how the decision making influence local profit redistribution and power dynamics and clarifying the role of existing institutional setting in shaping the decision making processes and results. Based on the study results, this research will deepen the understanding of the interrelationships between institutional design and just transition.

Keywords: offshore wind power development, just transition, Taiwan

POSSIBILITIES OF ENERGY EFFICIENCY IN INDIAN HIGH RISE BUILDINGS: AN ARCHITECT'S APPROACH (82)

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In futuristic development views the only suitable and logical planning space left before mankind for developing habitation is to rise vertically up (Sanyal D. 1996). The vertical growth pattern of highly developed urban areas projects more development of high-rise buildings. But high-rise buildings are major energy users. The artificial lighting and air handling of spaces are the major sections of energy consumption. Vertical transportation and comfortability of inmates also uses much energy. Different building services consume fair amount of energy. Distribution of energy accounts for transmission losses. This usable energy is generated from fossil fuels which are major pollutants and will not last longer. 6 present Indian mega cities have started competing with each other in verticality, with Mumbai leading with 61 stories residential tower. So, in near future tall buildings will be extensively used for all types of habitation and high-rise cities will come into existence. At this juncture, Use of renewable sources of energy should be promoted (Sanyal D. March-April 1996). Synergy can be tapped by adding solar panels to the external facades of tall housing or from Building Integrated Photo Voltaic (Sanyal D. 1997). Energy can be also generated by using bio-mass technologies utilizing biological wastes from tall buildings. Use of renewable energy resources & low energy building materials will reduce the negative environmental footprint of tall buildings in one hand; smart measures will ensure efficient use of available resources on the other hand. This research identifies strategies of usage of renewable energy for development of futuristic Indian tall buildings. The field of Intelligent Buildings, Intelligent Homes, Building Management Systems (BMS) encompasses an enormous variety of technologies, suitable for domestic buildings, including energy management systems and building controls. Since many of the problems of tall buildings can be solved by intelligent building features, it's high time BMS should be considered in design of tall buildings.

EXAMINING THE EXTERNALITIES OF HIGHWAY CAPACITY EXPANSIONS IN CALIFORNIA: AN ANALYSIS OF LAND USE AND LAND COVER (LULC) AND URBAN HEAT ISLAND (UHI) EFFECT USING REMOTE SENSING TECHNOLOGY (113)

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Transportation is the largest source of greenhouse gas (GHG) emissions and criteria pollutants in California. Highway capacity expansion has typically been proposed as a tool to alleviate traffic congestion and to mitigate GHG and criteria air pollutants. The argument supporting highway expansion has focused on improved vehicle fuel efficiency due to higher speeds, and consequently reduced per mile GHG emissions and criteria air pollutants. However, the efforts to reduce traffic by highway expansion has created a counterproductive outcome because of a phenomenon known as induced travel. In practice, highway capacity expansion reduces the cost of driving by increasing the average speed of traffic, thereby encouraging more people to drive. Ignoring or miscalculating induced travel in environmental review processes for highway expansion projects results in overestimating the congestion reduction benefits of such projects and underestimating the environmental impacts. The objective of this paper is to identify, examine, and quantify the environmental externalities associated with highway capacity expansions through quantitative analyses of land use and cover (LULC), and urban heat island (UHI) effect. We used a quasi-experimental research design to examine the association between new highway investments in California and changes in LULC and UHI while controlling for no-build counterfactuals. Our analysis focuses on four major regions in California: San Francisco Bay Area, Greater Sacramento, San Joaquin Valley, and Southern California. In each region, we selected up to three projects representing various geographic contexts and project types, such as new construction, and capacity expansion. Results indicate striking impacts because of highway construction and capacity expansion projects, such as change of impervious surfaces, vegetation coverage and health of vegetation, surface temperatures, as well as overall land use changes. These significant environmental impacts should be more comprehensively incorporated into cost-benefit analyses for roadway capacity expansion and maintenance decisions.

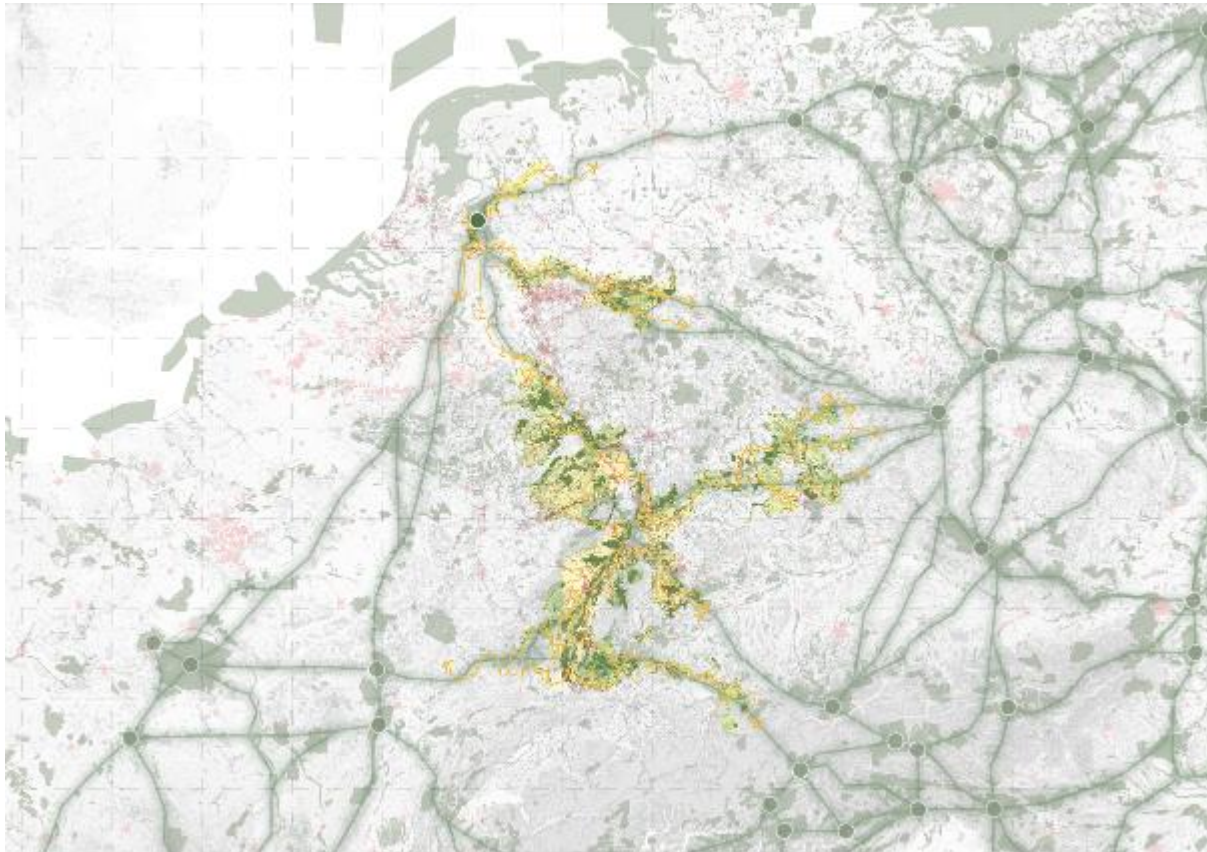
Keywords: Remote Sensing, Environmental Impacts, Highway Expansion, Vehicle Miles Traveled, Induced Travel, Land Use and Land Cover Change, Urban Heat Island Effect

THE ENERGY-ECOLOGY NETWORK FOR THE RHINE BASIN: TOWARDS A SYMBIOTIC RELATIONSHIP BETWEEN ENERGY PRODUCTION AND BIODIVERSITY (166)

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The context of quickened ‘energy transition’ requires investigating the scaling-up of renewable energy in the landscapes most affected by it. This paper investigates how we can accomplish a symbiotic relationship between energy landscapes and ecological considerations under various phases. It demonstrates the conditions of the Rhine Basin during previous ‘energy transitions’. It unpacks an ‘Energy-Ecology’, a fitting concept tool and methodology for the transitional territories of energy landscapes in the Rhine Basin into an age of energetic and climatic instability. Further than the effort to adapt agglomeration zones for the new technologies, the more significant effect of this change will be felt in the interdependent operational landscapes of energy - namely the croplands, forests and grasslands in the basin’s area. The presented project investigates the Rhine Basin watershed for its highly urbanised area. More than 70% of its territory is made of zones outside the cities. (Lagendijk, 2016) These landscapes are constantly being restructured to support major cities’ material and commodity needs. (Brenner & Katsikis, 2020) They are already the focus of many policies and disputes, and the spreading of energy technologies only increases the challenges. This perspective underscores the need for energy as a spatio-temporal project reorganising the links between nature, society and economy with a new adaptation into ecological frameworks. Critically, it means socio-ecological connectivity amongst local communities and on a territorial scale, thus becoming an example of a new backbone of spatial planning. Therefore, an “Energy-Ecology” organises transitional landscapes that surpass current dichotomies between the urban and rural, conservation and intervention, and nature and society, developing hybrid landscapes. These landscapes are where technologies (biological or industrial) for mitigation, restoration and sustainability are reimagined for better integration, thus providing higher resolution to the current ‘energy transition’. In that perspective, an “Energy-Ecology Network” proposal (figure) is a more comprehensive Trans-European Network along the current energy grid with multifunctional corridors where renewable energy technologies are balanced with connection and restoration of landscapes. Several objectives are combined when deploying renewable energy technologies. For example, it connects higher ecological integrity zones to strengthen the basin’s resilience, it aims at maintaining or restoring the connected landscape with alternative energetic-ecological managements, it creates the possibility to design the ecotone between landscapes for energy and ecological purposes, and it addresses the long-term goal of restoring biodiversity in Europe, functioning as a spatio-temporal “stepping stone”. Besides, the work invests in grounding a perspective that overcomes the human-centredness of Earth’s inhabitation. It demonstrates the necessary “retreat” in space and “retirement” in time for the climate adaptation project. Lastly, the project shows it can communicate across disciplines and amplify intellectual experimentation through geospatial intelligence and visual-spatial narrative.



“Energy-Ecology Network” in the Rhine basin with proposed expansion towards the rest of Europe

Keywords: Energy transition, energy-ecology, energy landscapes, territorial design, Rhine Basin

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PLANNING FOR (AND AGAINST) CLIMATE JUSTICE IN THE TEL AVIV METROPOLITAN REGION (259)

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Recent decades have seen a proliferation of research and practice pertaining to the role of urban planning in creating more sustainable cities. As the climate crisis has become an increasingly clear and urgent danger for cities and societies, planning has expanded beyond traditional domains of sustainability to encompass also mitigation of emissions, adaptation and resilience to the increased climate risks and uncertainties. This expansion has also brought in new disciplines and research communities to study how cities address the climate crisis — now commonly referred to as ‘urban climate governance’ (e.g. van der Heijden, 2019) — including the equity dimensions of such plans and actions. However, urban planning still needs to engage much more robustly, in both theory and practice, with the critical idea of Climate Justice (CJ) — which refers to the unequal impacts, responsibilities, and vulnerabilities related to global climate change and to the far-reaching ecological and societal transitions required to address it. Indeed, the climate emergency impacts nearly every aspect of urban life, governance and policy — including housing, livelihoods, food, energy, water, waste, pollution, mobility, green spaces. As such, it exacerbates existing social disparities related to race, ethnicity, class/caste, gender, age, migration etc., while also hugely impacting local communities and everyday lives. While there have been some discussions of CJ in the context of urban climate planning (e.g. Anguelovski et al. 2016, Shi et al. 2016), it is still less commonly discussed in relation to local urban contexts and their socio-political challenges (Bulkeley et al. 2014, Goh 2020, Ranganathan & Bratman, 2019).

To address this gap in both conceptual and empirical terms, I present in this paper a study of a wide range of planning initiatives in the Tel Aviv metropolitan region that relate (explicitly or implicitly) to CJ, at various scales. This includes: (a) formal, mostly “top-down” urban planning efforts, such as Tel Aviv’s Urban Forest Action Plan (at the citywide scale) and its Urban Heat Resilience Accelerator (focused on a particularly vulnerable neighborhood in the disadvantaged South Tel Aviv); (b) informal “grassroots” initiatives of groups of “tree activists” assisted by an NGO supporting more democratic planning processes; (c) government plans that work to undermine CJ, as well as other dimensions of justice — and the activist campaigns that oppose them and offer alternative visions. Here, I will highlight the case study of the ‘One Climate’ (Akleem Ehad / Manakh Wakhed) campaign against a government plan to enlarge a stone quarry at the outskirts of the Tel Aviv metropolitan region, across the ‘green line’ separating Israel and the Palestinian territories, and allow extractivist and polluting industries at the expense of adjacent Palestinian communities.) My investigation highlights the diversity of ways in which urban planning relates to CJ, in both proactive and antagonistic ways; the important role of scale, and the multiplicity of scales by which CJ plays out in urban areas, ranging from neighborhoods to metropolitan regions and beyond; and the need to link CJ to other, longstanding concepts of justice, such as social, spatial, and environmental justice (Fainstein 2011, Schlosberg & Collins 2014, Soja 2013) — in order to be able to plan towards the climate-just city.

Keywords: Climate Justice, Urban Climate Governance, Urban Resilience, Mitigation and Adaptation

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TOWARDS A RESILIENT DROUGHT MANAGEMENT SYSTEM (304)

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Drought is one of the many disasters emerging from climate change. Opposed to other natural disasters which often have a sudden-onset character, droughts are insidious events, however can be just as devastating. Furthermore, they are not only the result of short and long term precipitation deficits, as also human activities can trigger droughts through unsustainable water management. Therefore, drought is considered to be a complex and multidisciplinary phenomenon to manage.

This paper focusses on the situation in Flanders, Belgium, as an example of drought related problems resulting from the interplay between changed weather patterns, deficient water management, reactive legislation, fragmented responsibilities, (absence of) spatial planning etc. Indeed, although in Flanders, the annual precipitation has increased gradually over the last century from approximately 780 to 830 mm, droughts have become more severe. This is partly due to, water use and consumption having altered over time, while legislations remained unchanged. Thus, the reactive decisions from the past cannot be sustained in the long run.

Hence, the first step towards the development of a resilient drought management system is the identification of all the contributing elements and their mutual relations and interactions. To do so, in this paper the possibilities of the actor relational approach are explored. This planning approach makes a distinction between leading actors (e.g. farmers, industry, households), factors (e.g. topography, soil characteristics, infrastructure), (in)formal institutions (e.g. legislation, government plans), and mediators/intermediaries (e.g. spatial planners, researchers). Moreover, it unravels their interrelations and co-evolution between human and non-human elements. In this way drought related questions are contemplated more holistically, which can lead to more resilient solutions (e.g. ecosystem services) instead of symptom or damage control which is often today's strategy.

This paper demonstrates how this approach might be implemented in the Flemish case. In this way, spatial planners can achieve their role as mediators, establishing a resilient drought management system and formulating policy recommendations for further elaboration.

Keywords: Resilient, Drought, Climate change, Actor relational approach

NEW ZEALAND'S FIRST EMISSIONS REDUCTION PLAN: A MISSED OPPORTUNITY (310)

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Aotearoa New Zealand's Emissions Reduction Plan (Te Hau Mārohi Ki Anamata) is the first document providing a strategic direction for de-carbonising the country over the next 15 years. The plan aspires to radically de-carbonise transport in the country by promoting electric vehicles, increasing public and active transport use, upgrading heavy transport and freight, and introducing low-carbon urban planning measures to reduce transport-related carbon emissions.

This paper critically reviews the transport strategies proposed by the plan. It shows that the plan's transport strategies have existed in one form or another in several transport, energy, environment and urban planning documents over the last 20 years. However, these proposals have suffered from slow or no uptake at the city level because of a range of barriers, especially the absence of a sustained and innovative funding framework to support a comprehensive and integrated public and active transport network.

The plan adopted the traditional balanced transport approach of promoting cars (in this case, electric cars), public transport and active transport projects rather than prioritising active and collective transport. The approach, accompanied by allocating substantial funding to encourage electric car uptake, endorses the use of private vehicles and is inconsistent with reducing VKT. This paper suspects VKT may increase as the cost of travel becomes lower if the plan fails to enable congestion charges. Overall, transport policy and planning will continue delivering the necessary roading infrastructure to support EV use despite a high threshold for new investment in roads.

These contradictions raise questions about the plan's capacity to drive a transformational shift in achieving the country's climate change targets. The paper concludes that the transport component of the plan has good ambitions; however, it missed an opportunity to discourage car usage and failed to produce innovations in low-carbon transport funding and set a pathway to accountability to achieve VKT targets. Therefore, it is recommended that the government aggressively adopt methods that discourage car-based transport (even by electric cars) in large cities and investigate value capture as an innovative way of funding low-carbon transport to achieve emission reduction targets.

Keywords: Emissions Reduction Plan, Transport, New Zealand

USING RENEWABLE ENERGY IN PUBLIC TRANSPORT: A GLOBAL REVIEW FROM THE DEMAND AND SUPPLY SIDES (328)

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The use of renewable energy in public transport is an important aspect both from the demand and supply sides. While modal shift to public transport and electrification of public transport, and the use of renewable energy are separately largely discussed in decarbonization literature, there are a few studies that discuss the use of renewable energy in public transport. The use of renewable sources of energy make the public transport services way more affordable especially for the low-income and vulnerable groups, as it substantially reduces the operating cost in the long run (Trade Brains, 2023). From a supply side, since a major share of renewable energy will be used to meet the additional demand of electric public transport fleet, both in terms of improved share of public transport and electrification of public transport, the use of renewable energy expedites the energy transition (ICCT, 2022). Beyond this, even in terms of storage, electric vehicle batteries and redundant vehicle batteries store renewable energy, strengthening the role of transport/public transport in energy transition (EASE, 2020). The study systematically reviews the global literature on public transport and renewable energy. On the database of Scopus, we found a total record of 140 studies until December in 2022. The policy- and practice-related studies are categorized by modes of public transport, such as tram, buses etc (Steczek et al., 2022), type of renewable energy such as biofuel, solar, wind etc (Zambon et al., 2016), wide geographical coverage including both developed and developing countries, and use of scenario modeling and financial modeling as methods. In conclusion, the study sets the future research agenda in the field, reflecting on multiple geographical contexts, highlighting the importance of an interdisciplinary research. While a majority of these studies uses quantitative methods such as scenario planning to calculate GHG emission mitigation, financial modeling, also from the natural science disciplines and Electrical Engineering, there is need for bottom-up and participatory studies that will merge the boundary disciplinary boundaries between Engineering, Transport Planning, Urban Planning, Urban Design, Architecture, in order to also deliver spaces with improved and inclusive mobility, addressing the need of vulnerable groups, and spaces that are remarkable beyond achieving GHG emission mitigation and financial viability. The proposed study fits well in the track as the study develops a future agenda to examine how e-mobility in public transport/mass transit with renewable resources will improve accessibility, affordability and sustainability.

Keywords: Public transport, electrification of transport, renewable energy, energy transition, affordability

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DISTURBED RURALITIES IN THE POST-CARBON ERA: A CASE STUDY OF THE AQUACULTURE-BASED VILLAGES UNDER THE AQUAVOLTAICS POLICY IN TAINAN, TAIWAN (350)

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The climate and energy issues have pushed all of us into the post-carbon era, in which the global north has been committed to develop renewable energy for the goal of Net Zero Emissions by 2050. Taiwanese government is no exception: A new model with the combination of photovoltaics and fish farming, so called 'aquavoltaics', has been proposed and becomes the main policy promoted in Taiwan. The aquavoltaics policy has brought political power and capital to the aquaculture-based villages in South Taiwan and has a great impact on these rural areas.

Based on the case of Qigu district in Tainan, the area with the highest proportion of aquavoltaics land and most frequent protests against relevant policy, this study aims to embody the new environmental, industrial and social issues of rural planning in the context of energy transition in post-carbon era. From the local perspective, this study firstly explores the impact of aquavoltaics policy on these rural villages and then displays the new rurality reconstructed by local actors in the process of interactions and negotiations with the political and economic power under the pressure of renewable energy development. Qualitative methods, including semi-structural interviews with local actors and text analysis on official documents, are mainly adopted.

Keywords: energy transition, rural areas, just transition, renewable energy, governance

THE USE OF NSATS IN MENA REGION: A COMPARATIVE REVIEW (359)

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The battle for sustainable development is said to be “won or lost in cities.” The last decades have witnessed rapid urbanization worldwide (Sharifi, Dawodu, & Cheshmehzangi, 2021a). According to UN forecasts, cities would account for about 68 % of the global population by 2050, up from more than 55 % today (UNDESA, 2018; Kamiya, Prakash, & Berggren, 2020). It is estimated that 90% of future population growth will occur in cities in developing countries (Michalina, Mederly, Diefenbacher, & Held, 2021).

This rapid rate of urbanization is projected to have substantial consequences for making cities “inclusive, safe, resilient, and sustainable,” as defined by the UN Agenda 2030. Particularly, SDG goal 11 promotes the choice of developing cities where all inhabitants have a good quality of life and are a part of the city’s productive dynamics, resulting in shared prosperity and social stability without compromising the environment through sustainable behaviors and planning (Dizdaroglu, 2017; Merino-Saum, Halla, Superti, Boesch, & Binder, 2020; Sharifi, Dawodu, & Cheshmehzangi, 2021a). Rapid and unregulated urbanization, for example, may make it more difficult to mitigate and adapt to climate change due to the resulting increase in energy consumption by expanding cities and populations. Furthermore, many rapidly growing cities, specifically in the Global South, are already challenged by pollution, crime, and socioeconomic changes (Gil & Duarte, 2013; Sharifi, Dawodu, & Cheshmehzangi, 2021a). The significance of cities has been further highlighted in recent frameworks such as the Paris Agreement (UNFCCC, 2015).

A JUST TRANSITION FOR WHOM? ANALYZING TERRITORIAL JUST TRANSITION PLANS (438)

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Wildfires, snow storms and rising temperatures are going hand in hand with rising inequalities, decreasing welfare and political dissatisfaction. Green deals are large scale regulatory and legal frameworks that aim to address both the societal and the environmental challenges of the climate crisis. One of those green deals is the European Green Deal (EGD). The EGD aims to achieve climate neutrality in Europe in 2050 (European Commission, 2019). This requires a massive change in the way industries function, energy is produced and resources are used. The European Commission (EC) has created the Just Transition Fund (JTF) to address the social, employment, economic and environmental impacts of the European Green Deal (European Commission, 2021). In order to receive funding through the JTF, regions have to design Territorial Just Transition Plans (TJTPs).

In this paper, the TJTPs of seven countries will be analyzed and compared. The goal is to understand what kind of just transition is envisioned in the regions. Therefore we scrutinize all the economic, environmental and social aspects of the TJTPs and evaluate what kind of justice is envisioned in the plans. When the transition is meant to structurally change social inequalities, the TJTPs can be seen as transformative (Blythe et al., 2018; Scoones et al., 2020). In order to understand whether these changes are just, I will use four aspects of climate justice. Those aspects are: procedural, recognition, intergenerational and distributive justice (Puaschunder, 2021). The regions that will be studied are located in Austria, Cyprus, Czech Republic, Estonia, Germany, Greece and Sweden. The regions are selected because they were approved by the time this research was conducted. Moreover, they present a mix between North, East and South European countries. For this paper the TJTPs of the seven countries are studied, and interviews with policy makers are conducted.

Based on this preliminary and explorative study, a just transition as envisioned by the European Commission and the EU member states, seems to be mainly aimed at preserving jobs in industries and businesses by decarbonizing them or making citizens more resilient. Moreover, most social policies are directed to support economic goals. Investments in education should be based on the needs from businesses and industries. Investments in social and health care are made in order to attract higher educated and young people to the regions. This raises the question what kind of policies are envisioned for the already unemployed and marginalized? The TJTPs from Cyprus, Czech Republic, Estonia and Sweden have special programs to increase the labor participation of women, youth and vulnerable people. However, most plans seem to lack specific targets to increase the female and minority ownership of SMEs or have special research and innovation activities for marginalized communities. This raises another question. How to provide well-being of the people living in these regions. By persevering jobs and transforming businesses and industries? Which would reproduce old economic structures. Or by providing well-being by directly investing in social policies?

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THE TRANSACTION COSTS OF SUSTAINABLE DEVELOPMENT (443)

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Based on Hardin's observation of the tragedy of the commons, most economists assume that common property rights cause rent dissipation and unsustainable development. In contrast, most environmentalists are convinced that the drive for profit maximisation inherent in private property is the reason for the over-consumption of natural resources. For them, this is precisely what Coase's solution is – an approach leading to privatisation, high economic efficiency and poor environmental sustainability. Yet at least in theory, long term efficiency and sustainability have much in common. In practice, however, abundant evidence confirms that both common and private property as well as Coasean bargaining have often led to major failures of sustainability. This research stresses the importance of a critical provision set by Coase in his seminal work "The Problem of Social Cost" regarding the balance between transaction costs and the expected benefits of a given institutional transformation. In an institutional transformation (change in the structure of property rights), if the transaction costs are greater than the expected benefits, the most economically efficient outcome will not be realised. But then another, less effective transformation may be realised, if for this transformation Coase's provision is satisfied. This research develops the proposition that it is this alternative, suboptimal outcome that causes poor environmental sustainability.

The article defines the terms "best use", "second (or next) best use" and "best user". On this basis, the paper restates Coase's provision and, according to the restated provision, when the transaction costs associated with the institutional transformation *establishing the best use* of a resource are lower than the net benefits of this transformation, the result will be economically efficient *and* environmentally sustainable. However, if the transaction costs outweigh the net benefits of *the best use*, a *second (or next) best use* may be established, which will still be economically efficient, but most likely environmentally unsustainable. This option may be viewed as the main threat to sustainable development.

Keywords: sustainable resource use; transaction costs; Coasean bargaining, environmental value, new institutional economics

URBAN SOCIO-ECOLOGICAL TRANSITIONS: CUI PRODEST? SITUATED NARRATIONS FROM A SICILIAN EX-PETROCHEMICAL TOWN (444)

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This article aims to problematize the concept of just urban transition through the case of Gela, a Sicilian ex-petrochemical town in search of a more just ecological transition. Cradle of cultural transitions over centuries, Gela has been converted into one of the biggest petrochemical towns of Europe in the 1950s by a before state-driven, but today turned into a multinational oil corporation. The transition toward "modern" industrialization it has been totally top-down, relegating the citizens to spectators without any decision-making role, and, furthermore, has been accompanied by a pervasive narrative occupying the public discourse and even the common imaginaries. More recently, the company mobilized a greenwashing transition narrative to support the abrupt stop of production in 2014 with the promise to convert the plant into a green refinery. The consequential labor cut has been the last straw of an already dramatic environmental and health situation due to 60 years of intense industrial presence: all features that make Gela to be an emblematic risk and wasted landscape.

In such a context, the intense multiyear fieldwork carried on by the author with a "small, slow, and street approach" (Privitera et al., 2021), has allowed for collecting a series of "small data" and "toxic autobiographies" (Armiero et al., 2019) that have been used as material to engage with citizens and activists around the creation of a community-led just transition hub. This hub aims to re-center the transformation of the risk landscapes of Gela on ecological and social justice.

As a researcher in action directly involved in the bolstering of this community hub, who recognizes her "situated knowledge" (Haraway, 1991) of the case of Gela, the author intends to discuss the plural and often conflictual conceptions and ways to seek ecological transitions. In particular, the article will present a comparative analysis of the ecological transition discourses, policies, and concrete ideas so far mobilized in Gela, both from the multinational energy company and the activists. It will unveil the paradoxes of the public discourse (in Italy and Europe) regarding the ecological transitions in the light of the power unbalance at stake of who can *actually* decide and lead any socio-ecological transitions, who really would like to do so by achieving at the same time deeper social equity and interspecies justice. In this sense, the article also intends to critically shed light on the contradictions and opportunities for the local democratic systems that the need for ecological transitions has generated, especially in places that are marginalized ecologically and socially, such as Gela and many other places in the world.

Keywords: Green and Just transitions; green washing narratives; community engagement; environmental planning; socio-spatial justice.

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(UN)JUST TRANSITIONS: UNPACKING PARTICIPATORY PROCESSES THROUGH AN INTERSECTIONAL LENS (468)

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The European Green Deal (EGD) seeks to achieve carbon neutrality in Europe by 2050. As part of the EGD, the European Commission conveys solidarity with Europe's most vulnerable regions by providing funds and encouraging regions to create and carry out Territorial Just Transition Plans. Territorial Just Transition Plans are based on the principle of 'leaving no one behind', binding justice and equity to climate change action, and therefore placing marginalized and vulnerable communities as the core priorities of these plans. This highlights the importance of providing meaningful opportunities for participation in order to promote the social acceptance of such plans, and a long-term engagement. However, participation is enclosed with unequal power dynamics and interactions, which can leave out marginalized communities. Yet, little research has been done on the perceptions of marginalized communities and the power dynamics at play in these just transitions.

However and while participation opportunities are often displayed in (just) transition plans and strategies, they can disregard the most marginalized communities (Banerjee and Schuitema, 2022). Including such communities appears to be challenging. Indeed, participatory processes often are arenas for the reproduction of inequalities (Young, 1990; Levine, 2017). Moreover, there is an implicit assumption that these communities are lacking the capabilities to participate (Garcia and Tschakert, 2022). Scholars have looked at how, by disregarding the role of power structures in producing vulnerability, participatory techniques may further marginalize individuals and groups (Ayett, 2010; Levine, 2017). To achieve the societal acceptance of those plans, and thus, a successful just transition and long-term engagement, it is necessary to offer meaningful opportunities for participation, in particular to the affected communities but also to those most unseen and unheard (McCauley and Heffron, 2018; Ciplet and Harrison, 2020; Segreto *et al.*, 2020; Skjølsvold and Coenen, 2021).

Yet, few studies have investigated how the multiplicative and interwoven forms of inequalities between individuals can reproduce unfair or unequal participatory processes in just transitions. Some scholars have called for a more critical analysis of just transitions, often studied through an 'uncritical and celebratory' lens (Ciplet and Harrison, 2020). There is, therefore, a need to further the understanding of who is included in these new sociotechnical systems, who is excluded and how those who are marginalized understand and can participate in such processes (Skjølsvold and Coenen, 2021). By looking at the decision-making tools deployed in such strategies, this research aims at understanding how participation in these plans took place in practice and how marginalized communities and policy officers "make sense" of these opportunities. In this research, I adopt a comparative case study research design of different just transitions regions in Europe. Firstly, I aim to unpack how the just transition, participation tools and marginalized communities are understood in such policies by comparing eight European regions using a critical discourse analysis and interviews. Secondly, I aim to zoom into two specific regions through a more in-depth analysis by using interviews with marginalized communities and visual

ethnographic methods to better understand how such communities and individuals can and want to engage in decision-making.

Keywords: Just Transition, Participation, Marginalised communities, European Green Deal

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ENERGY PLANNING AS A FUNDAMENTAL COMPONENT OF TODAY'S URBAN PLANNING AGENDA: WHAT LESSONS CAN THE STATE OF ILLINOIS LEARN FROM EUROPEAN POLICIES? (471)

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Energy is one of the main components of nearly all processes happening in cities today. More and more businesses, industries, and even regular everyday activities require a stable and uninterrupted power supply. The importance of having constant access to electricity and heat while ubiquitous remote working and studying has reached a new level of importance during the worldwide distribution of the coronavirus disease (COVID-19) pandemic. Huge blackouts and even small temporary interruptions into the everyday course of things cause much more consequence than it was in the pre-pandemic set of things. In this framework, the energy and sustainability goals reach more attention.

After signing a new Climate and Equitable Jobs Act legislation in September 2021 and establishing the State of Illinois (USA) as a "*national leader on climate action*" (State of Illinois, 2021), the processes of the implementation of this act takes permanent attention of legislators, policymakers and customers. The shift that this act could potentially provide represents a new technological foundation for both state and municipal energy planning. The research aim of this study is to explore and evaluate the current state of energy policies using the State of Illinois as an example, expanding the work of James Throgmorton, who made a comprehensive analysis of Midwestern states and specifically Illinois energy policies through the lens of urban planning scholarship about three decades ago (Throgmorton, 1996).

This research explores the historical context of energy legislation and energy planning in the United States with a focus on the State of Illinois and making a comparative study with Denmark – one of the global leaders in the transition to green energy, an innovator in the sustainability realm, and shareholder of European Union's endeavors towards reaching global sustainable goals. The driving similarity is that both Illinois and Denmark now have the same declared goal – to be reliant on 100% renewable energy and have a climate-neutral society by 2050. This paper examines two different approaches to energy planning in the State of Illinois and Denmark. Municipalities play an important role as local energy planning authorities in the design and implementation of future energy systems, so this article will additionally focus on the two largest municipalities in both territories: Chicago and Copenhagen, and how processes are organized there. This comparison is important for apprehending how different policy approaches can either encourage or deter progress in climate and environment protection activities. The final analysis is based on several components, such as (1) *national policies and key state policy drivers*, (2) *the actors and their roles in policymaking*, (3) *the energy planning process*, and (4) *renewable energy initiatives*.

Keywords: energy policy; climate crisis; climate neutrality; governance; environmental planning

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ENERGY COMMUNITIES AS A LEVER FOR TRANSITION: A SURVEY IN THE CITIES OF EMILIA-ROMAGNA (ITALY) (587)

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The processes of support and birth of energy communities are developing with great speed all over Europe (Moroni et al. 2019; Caramizaru et al. 2020). Due to the sudden rise in the price of gas and the prospect of a reduction in its use, the discourse on energy communities has accelerated, reaching the political summits of regional and national institutions. For example, the Emilia-Romagna region in Italy unanimously approved the proposed regional law regulating energy communities and collective self-consumption with LR no. 5 of 27 May 2022.

Energy, and its production, consumption or sobriety in the same, has returned to centre stage in the public debate as a primary, fundamental good (Barbera et al. 2016) and for this reason deserving - if not management - of public planning. However, local-level planning still struggles to understand both the perimeter and the potential - as well as the limits - of energy communities.

While the development of energy communities describes a successful picture in the implemented cases - mountainous areas, island communities and inland areas (van der Schoor and Scholtens, 2019; Lowitzsch et al. 2020) - it is also true that cities present difficulties in their experimentation. Cities are the places subject to the most emissions, but they also have urban architectural stratifications that often make them impervious to the changes required by new forms of production, distribution and consumption of energy. In addition, the urban dimension of neighbourhoods is often insufficient to develop proximity dynamics around issues of interest, preventing the spontaneous aggregation of residents and, consequently, a commitment to the possibility of realising an energy community (Heldeweg and Saintier, 2020). It is precisely to cities that the EU Mission '100 climate-neutral and smart cities by 2030' has been dedicated. The Mission was created to promote actions of various kinds (technological implementation, infrastructure, efficiency, citizen involvement) to enable the selected European cities to accelerate the transition process towards climate neutrality, reducing greenhouse gas emissions to zero by 2030. Of the 36 Italian candidates to play the role of pilot cities, 6 are from Emilia-Romagna region (5 provincial capitals and one union of municipalities). Among these, only Bologna and Parma were selected, together with seven other Italian cities. The candidature process, however, prompted the contending cities to set short-term energy policy objectives, including real actions to reduce emissions, with the increase of renewable energy communities as one of the main actions. The outcome of the Mission Pathway will lead to the winning cities signing a Climate Contract, binding the political parties to a commitment to maintain the targets achieved and to work towards the benefits set by the Mission Pathway. Eligibility requirements for cities include clarification of ambition, i.e., the city's intention to achieve neutrality targets over the whole city (or excluding certain parts of it) built and unbuilt. This is a push for policy-makers to take responsibility for reducing emissions, which in our opinion can only be implemented with a clear horizon of commitment on the part of the administration, enshrined through the incorporation of objectives and targets within planning instruments.

The cities' candidacy dossier can be a good cognitive basis for understanding the cities' orientation towards the formalisation within planning instruments, of CERs. For this reason, this abstract proposes to examine in depth some of the candidatures of the cities of Emilia-Romagna, conducting interviews with the promoters, identifying the political framework envisaged by the Emilia-Romagna urban centres and the asymmetries present.

Keywords: Energy Communities, Climate Neutrality, Urban Transition

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ECOSYSTEM SERVICES-BASED INTEGRATED APPROACH FOR WATERSHED PROTECTION PLANS (600)

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Ecosystems for the well-being of humans and for the adaptation to climate change externalities emphasizes the significance of ecosystem services (ESs) sustainability. ESs are defined as diverse benefits/products/processes that humans derive from ecosystems. The role of natural ecosystems on climate adaptation process is immense as put forward by top level policy makers and scientists (MEA, 2003; TEEB, 2010; IPBES 2019). Because of this reason their diverse impacts need to be highlighted and better integrated into decision making process. ESs can be defined as “the whole of situations, processes, functions, benefits and products offered by ecosystems in order to sustain human life and ensure human wellbeing” (Albayrak, 2012). Millennium Ecosystem Assessment (MEA) Report contributed to disseminate the classification of ESs and after many other key studies in the literature facilitated to integrate the qualifications of ESs in terms of spatial decision-making studies (Daily et al., 2011; Egoh et al., 2008; Fisher et al., 2009; Landers and Nahlik, 2013; MEA, 2003; TEEB 2010). This paper first will elaborate the significance of ESs in spatial decision making and after will evaluate the integration of ESs approach in watershed protection plans which are special implementation and regulative tools in Turkey case.

Watersheds are the areas for providing primarily the very basic ESs to humans and habitat to non-humans and they are representing the diversity of terrestrial ecosystems with their significance into the adaptation process of climate change impacts. Extreme weather conditions, floods, forest fires, water shortage/drought are the key expected impacts of climate change in watersheds. These impacts are influencing settlements and human economic resources in watersheds too. On the other hand, watersheds contribution to human wellbeing is a complex issue and their interaction with settlement development pressures or the scale of other human-use needs to be taken into account under the lenses of ESs approach for the sustainability of natural resources (Menteşe et al. 2021; Tezer et al. 2021). The approach used for watershed protection plans has four steps;

- Identification of ESs provision capacity based on land use land cover (LULC) data and clarify the sensitive areas
- Spatial risks in watersheds (geological, ecological and climate change triggered risks)
- Identification of spatial suitability to development/sensitivity to ES provision
- Integration of suitability/sensitivity spatial findings into green-blue network to be utilized for spatial development decisions

In the methodology of the paper, above outlined content will be exemplified in six watersheds representing different terrestrial and climatic characteristics of Turkey. According to the initial findings, critical ESs may differ regarding to the ecosystem characteristics and locational features of ecosystems/settlements in the selected watersheds. Findings will be elaborated to be utilized for the integration of spatial decision-making process together with relevant spatial planning tools and the results will be discussed in wider contexts and cases from Turkey.

Keywords: ecosystem services, spatial planning, watershed protection plan, climate change adaptation, Turkey

ARE IBA/IBTA SUCCESSFUL INSTRUMENTS FOR REGENERATING MINING REGIONS SUSTAINABLY? (607)

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IBA *Internationale Bauausstellung* has been for more than a century an important instrument of structural change in the regions facing socio-economic and environmental concerns. With the onset of Information Technology being used as a successful tool for urban planning, IBA now has reinvented itself as IBTA *Internationale Bau und Technologieausstellung*. It can be said that IBA and IBTA are constantly striving to have a forward looking in approach.

The IBA-Fürst-Pückler Land was an attempt to reimagine the industrial landscape of the open-cast lignite mining region which was completed in 2010. As part of the vision, several decommissioned and abandoned open cast lignite mines were transformed into pit lakes and therefore becoming Europe's largest artificial lake district, despite the necessary water resources being controversial.

Similarly, the Rheinische Revier is also undergoing a similar process of change with filling up of the open case mines with underground water, albeit driven more with Information Technology. In the context of the climate change and the observed declining ground water recharge in Germany, filling up of the mines with water may not be the most appropriate proposition when thinking of sustainable development. The paper therefore seeks to highlight the limitation and challenges of the IBA/IBTA as a tool for regenerating mining regions and suggest measures and frameworks to address them.

Keywords: IBA, Regeneration, Mining Regions, Lausitz and Rheinisch

STUDY ON THE ACTIVE TRAVEL ROUTE PLANNING FOR AVOIDING OUTDOOR AIR POLLUTION EXPOSURE (626)

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The street network is an important spatial environmental support for providing residents with slow-moving transport trips and outdoor exercise; a good street environment encourages more active travel, which is beneficial to public health. However, the positive health benefits of active travel are partially or completely offset by the negative impact of outdoor air pollution exposure on respiratory health. Therefore, it is important to effectively reduce the intensity of air pollution exposure along the travel route, which will help improve the health benefits. Based on the air pollution exposure assessment model and the optimal route selection model, this study proposes an analytical framework that can support the prediction of air pollution exposure and applies it to street running route optimization decisions. The framework emphasizes the reduction of air pollution risk exposure and the enhancement of greenspace (e.g. parkland, etc.) exposure. The prediction of the spatial and temporal distribution of air pollution exposure is mainly based on historical data from Hong Kong air quality monitoring sites, including concentrations of PM, SO₂, NO₂, and O₃. The Air Quality Health Index (AQHI) proposed by the Hong Kong Environmental Protection Department is used as an indicator of the overall air quality status. The supported 3D built environment for active travel is mainly based on 3D maps from the Hong Kong Geographical Data Station, road network and traffic flow data, and point of interests. The temporal granularity of the traffic flow data will be aligned with the air quality, together for the air quality modeling and prediction. The 3D maps will be used primarily to extract information of terrain elevation and building height. This study aims to predict the air pollution exposure and the metabolic equivalent, as a proxy of health benefits, of different road running routes to support optimal decisions among several scenarios. Algorithmically, air pollutant concentrations and distributions will be predicted using a combination of a land use regression model (LUR) and a BP neural network algorithm. Individual pollution exposure will be predicted using a 'fixed group tracking design' model. A decision tree model will be used for the route selection. Finally, the study validates the rationality and good application of the analytical framework with a case study of Hong Kong, China.

Keywords: Active travel, Routing planning, Air pollution, Land use regression model (LUR), BP neural network algorithm, Decision tree model

MODELLING AN ENERGY SCENARIO REGIONALLY: THE DIGITAL TOOLBOX FOR TRANSITION (627)

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Governing the Energy transition on a regional scale still is a complex task. There are a lot of approaches and already a lot of tools - but the cases study areas are heterogenous, usually one or more “puzzle stones” are missing to empower and accelerate the cooperations processes. This was the motivation for the research team (consisting of universities, companies, and NGOs) to try something new.

The main and most important result of this research project, funded by the Austrian Climate Fonds, was an energy map as a web-based interactive tool. Among its features are the spatial collection of energy needs, resource offers, existing and future (energy) technologies as well as the logging of actors and their energy transition measures involved. Our tool also offers the possibility to optimize the use of regional renewable resources and to determine the regional added value of renewable energy technologies. The energy transition needs a lot of data, often planners only have them scattered or mixed online and offline at hand.

That is not the case with our energy map tool anymore, because all contents, which are often very dynamic especially in energy transition processes, are always stored and retrievable via your ID (user, password) as a "project" in the world wide web. Our interactive web map tool also offers flexible data management features - you can work “fast and easy” with default benchmark data that is stored backend, but (if available) you also can overwrite the defaults and use highly specific number data instead. All results are visualized and can be shared over a stable html address with others.

During the 2023 AESOP congress, we will give a live web map demonstration in an unconventional way - instead of PowerPoint slides, we will lively develop a small “energy region” along the wishes and interests of the audience and monitor the energy balance features together. After that, we’re looking forward to discuss the pros and cons with the audience, and of course we also can judge if the results would be realistic and helpful in general energy transition processes.

Some screenshots from our web map tool:





Keywords: Energy Transition, Regional Planning, Energy Balances, Energy Scenarios, Visioneering

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PLANNING FOR RESIDUAL WASTE IN A CIRCULAR ECONOMY: BARRIERS AND OPPORTUNITIES (631)

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We face serious strategic challenges with the future supply of both aggregates and critical elements. At the same time, we must also sustainably manage continued multimillion tonne annual arisings of industrial, mining and mineral wastes. Recently, focus has turned to moving towards a Circular Economy, yet many residual wastes continue to be landfilled despite often containing valuable resources including critical metals, soil macronutrients and mineral components which sequester atmospheric CO₂.

This paper presents the barriers and opportunities of a novel approach to landfill design, the “ASPIRE waste repository concept” where ore-forming processes are engineered in, so that the valuable components of dormant waste can be recovered and the resulting decontaminated residues used as aggregate. This is a re-conception of landfills as “temporary storage systems” or “resource banks”. At the same time the land is revegetated, providing a space for wildlife and people. The concept ultimately seeks to end of the current “linear” landfilling of wastes in favour of reuse as aggregates and ores as opposed to displacing any existing economically viable and sustainable recycling technologies for mineral-rich wastes.

However, there are several important engineering and policy hurdles that remain to be solved, for example, how the proposed technology fits with current waste management and planning policy. It is also unclear how the local communities and the waste management sector would respond to this re-conception of landfills.

This paper draws on a review of legislation, policy and academic literature, as well as stakeholder interviews to present the factors that may act as barriers or opportunities to the ASPIRE concept. It seeks to answer the questions: what are the factors that are likely to act as a barrier to the adoption of the ASPIRE concept in the management of industrial, mining and mineral wastes? And what opportunities exist to facilitate the adoption of the ASPIRE concept?

The findings of the review have been structured according to their Political, Economic, Social, Technological, Environmental and Legal factors in a PESTEL analysis. This analysis was used to frame in-depth, semi-structured interviews with twenty stakeholders from the waste management, engineering and environmental management sectors. Following a thematic analysis of the interviews in NVivo, the PESTEL analysis was refined to include the views of stakeholders.

We found that there are significant opportunities for the ASPIRE concept, particularly in current policy towards a circular economy and the liabilities associated with the long-term storage of waste in landfills. There are also opportunities for complementarity if the repositories were designed to maximise biodiversity, recreation and/or energy generation. There was also an appetite from the stakeholders for the technology in principle. However, the policy analysis and stakeholders’ interviews highlighted a number of barriers that would need to be overcome in

order for the ASPIRE approach to be acceptable to local communities, regulators and the industry. These include the need to demonstrate the environmental performance of the repositories and the long-term efficacy of the resource recovery. If these could be addressed, the ASPIRE concept could provide a practicable circular economy solution for materials that would otherwise go to conventional landfill, thus at minimum shifting landfill disposal and treatment for recycling at the base of the waste hierarchy towards the circular economy.

EXPLORING LOCAL SPATIAL ORGANIZATION OF OFFSHORE WIND ENERGY AND COASTAL FISHERY: INSIGHTS FOR JUSTICE FROM CHANGHUA, TAIWAN (637)

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The justice issue in energy transition concerns its distribution of benefits and burdens to society and environment. Space has been acknowledged as the underlying factor of distributive justices, by exploring the location and the relationships constituted by space. Such focus has revealed how space might contribute to recognition of a right to energy, and the interdependence of energy sector and economic growth. For example, Bouzarovski and Simcock (2017) note the inavailability of energy service for vulnerable groups resulted in the spatial differentiation of infrastructure, and increase their poor health. Balta-Ozkan, Watson, and Mocca (2015) find uneven development of economic activities between urban and rural areas in relation to the forms of spatial differentiation during low carbon energy transition. However, there are further extents of spatial impacts that cause geographical disparity and change beyond energy sectors. Moreover, understanding a just energy transition is about more than mapping the settings of an energy system economy. Instead, understanding the spatial interrelations (Sovacool, 2021) and time scale (Williams and Doyon, 2019) in places is important to assess impacts and benefits in such a societal change process.

In response to justice issue of contemporary renewable energy transition from a geographical perspective, the study aims to explore the impacts of the relationships between the spatial organization of offshore wind energy and coastal fishery activities by a case study of Changhua in Taiwan. In Changhua area, 11 offshore wind farms are developing and will bring 4.47 GW capacity in 2025~2026. The spatial relationships and future prospect between offshore activities has been re-arranging through a dynamic process and practices. This study build up the analytical framework through the concepts of justice and space related to energy transition. During planning and construction stage of offshore wind farms in Changhua, the spatial interaction between coastal fisheries and offshore wind farms is explored by the analysis of primary data and secondary documents. The primary data was collected by semi-structured interviews with fishermen. The government reports, environmental impact statements and public news from developers served as secondary documents. Based on the analysis of spatial interaction, the potential environmental risk and benefit distribution is illustrated during the development of offshore wind farms in Changhua.

Keywords: offshore wind energy, coastal fishery, local spatial organization

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GREEN ENERGY RESOURCES AND OPPORTUNITIES IN AZERBAIJAN (767)

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In modern times, as the world population rises, so does the demand for energy to power our homes, businesses, and communities. Innovation and expansion of renewable sources of energy are key to maintaining a sustainable level of energy and protect our planet from climate change. Green energy plays a key role in the energy transition due to its low environmental impact. It offers an alternative to non-renewable energy and helps fight global warming by not producing greenhouse gases or increasing carbon emissions. The science is clear: to avoid the worst impacts of climate change, emissions need to be reduced by almost half by 2030 and reach net zero by 2050. Apart from environmental pollution and climate change, green energy has amazing potential for transportation, society, economy, agriculture, the world, and so on. As a result, the demand for new and sustainable forms of energy and the transition to a "green economy" continues to grow day by day, becoming one of the most urgent challenges worldwide. According to the International Energy Agency, by 2024, energy production from renewable sources in the world will increase by 50 percent compared to 2018.

In recent years, several important steps have been taken in this direction in Azerbaijan. It is known that until now, Azerbaijan has ensured its energy independence at a high level by using traditional resources - oil and gas, and has turned from an energy importer to an energy exporter in a short period of time. Big projects are being implemented in the direction of strengthening energy independence through renewable energy sources. One of the main priorities of Azerbaijan is a clean environment and a "green growth" country. In general, it is aimed to increase the share of renewable energy sources in the production capacity of electricity to 30% by 2030 in our republic. Thus, the potential of renewable energy sources, which are economically viable and technically feasible, is estimated at 27 000 MW, including 3 000 MW of wind energy, 23 000 MW of solar energy, 380 MW of bioenergy potential, and 520 MW of mountain rivers.

The total power generation capacity of Azerbaijan is 7542.2 MW, and the capacity of the power plants on renewable energy sources, including large HPPs, is 1304.5 MW, which is 17.3 % of the total capacity. Hydropower capacity is 1154.8 MW (30 stations, 20 of which is SHPP), wind power capacity 66.1 MW (7 stations, 2 of which is hybrid), bioenergy capacity 37.7 MW (2 stations, 1 of which is hybrid), solar energy capacity 45.9 MW (12 stations, 2 of which is hybrid).

In addition, contracts have been signed with several companies for the creation of a "Green Energy Zone" in the liberated areas of Azerbaijan from 2021. Within the framework of the implementation of the instruction on the establishment of the "Green Energy Zone", investigations are being carried out to study the solar, wind, biomass, thermal, geothermal, and another renewable energy potential of the liberated regions, to determine the coordinates of the territories, as well as to provide energy supply by building wind and solar power stations, as well as hydropower plants on reservoirs, lake, and small rivers. About 25% of Azerbaijan's internal water resources falls to the share of the liberated territories, which is approximately 2.56 bcm annually. In particular, it should be noted that there is a favorable potential for the implementation of solar energy projects in liberated territories. As a result of the observations,

the relevant areas with favorable solar radiation were identified. The potential of solar energy in the liberated territories is estimated at more than 7200 MW. The analysis shows that the wind power potential in these areas is around 2000 MW.

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BIODIVERSITY AND SPATIAL PLANNING: PASSING THE WORD ACROSS SCALES AND SECTORS (785)

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Transformative change has been widely recognized as the paradigm shift needed to address the multiple crises facing humanity today. Despite its importance, the growing body of literature, and urgent calls from the international community, it remains unclear how society can enable, accelerate, or achieve cross-sectoral transformations. Biodiversity-related policies depend on multilevel governance processes, emerging from the interaction between multiple actors, processes, and institutions, from global to local scale. Spatial planning is a critical arena for transformative change. While land use and land cover changes have a major effect on biodiversity loss, spatial planning transformative potential - when based on a systemic vision, knowledge, dynamics, emancipation, negotiation, and governance - can prevent such loss. However, there is a gap between global biodiversity conservation targets and national and subnational policy implementation, which is largely referred to as the resulting conflict between sectoral interests and to which spatial planning has not been able to respond. Against this backdrop and using a textual data analysis, this research starts by exploring key concerns arising from the mainstream European policies for biodiversity (Green Deal; Biodiversity strategy 2030) and two of the most emblematic EU spatial development policies (ESDP; Territorial Agenda 2030). Considering the Portuguese case, different meanings to which biodiversity is considered within the planning system are investigated and compared to those EU policies. Through the lens of different policy mechanisms and planning scales, this paper deepens the context in which the implementation gaps occur aiming to scope the transformative potential of those instruments towards an integrated approach and a multi-level governance for biodiversity conservation.

Keywords: Biodiversity, spatial planning, transformative change, textual data analysis.

Funding

The author is supported by a PhD Research Grant (2021.08395.BD) through FCT – Fundação para a Ciência e a Tecnologia, I.P.

ANALYSIS OF LANDSCAPE CHANGE CAUSED BY NOVEL RENEWABLE ENERGY SOURCE: AGRIVOLTAICS (809)

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Energy transition aims to decarbonize energy supply at socially acceptable costs, to mitigate climate change. The European Council strives to reduce greenhouse gas emissions by 55% until 2030, compared to 1990 levels (EU Council, 2023). Agrivoltaics is a relatively novel renewable energy technology and considered one of the promising solutions. Agrivoltaics combine food and energy production (using photovoltaic technology), create multifunctional landscapes and enable large-scale sustainable energy supply. The development of agrivoltaics, like other solar power plants, changes the landscapes where people live, work and recreate (Oudes et al., 2022). Understanding landscape change caused by agrivoltaics is important, because these changes play a significant role in the public acceptance of renewable energy technologies (Enserink et al., 2022). Public acceptance is vital for a timely energy transition. To this point, it is unclear how agrivoltaics change landscape. The main objective of this paper is to analyse the landscape changes induced by agrivoltaics.

Our case study examines three built agrivoltaic power plants (AVPP) in the Netherlands (Figure 1).



Figure 1: Map of the Netherlands with the location of three agrivoltaics examined in this case study, depicted with yellow circles.

The AVPP were selected due to their differences in elevated support structure and the different orientations of photovoltaics arrays: Lochem has south orientation, Babberich east-west orientation, and Culemborg vertical orientation with bi-facial photovoltaic arrays (Figure 2). Data was gathered from peer-reviewed literature, grey literature, satellite, photogrammetry imagery as well as during field work and interviews with farmers.



Figure 2: Photographs of the studied agrivoltaics. Photographer: Dirk Oudes.

We examined the landscape changes making use of nine indicators. Six indicators are general landscape change indicators from the Netherlands Environmental Assessment Agency (Kuiper and Spoon, 2020): *land use*, *buildings outside built-up areas*, *implementation of hedges*, *historical linear landscape structures*, *relief* and *openness*. Another three indicators are specific to agrivoltaics: *implementation of vertical structures* on which the PV panels rest, *abolishment of plastic foil* used to protect crops and *implementation of vegetation* – other than hedges.

The development of all three agrivoltaics resulted in landscape changes, yet different for each type of AVPP. Indicators *buildings outside built-up areas*, *openness* and *implementation of vertical structures* showed the most significant changes on multiple sites (Table 1). On one site, the use of *plastic foils* stopped and another site *land use* changed. *Vegetation*, *hedges*, *relief* and *historical linear landscape structures* were not affected.

Table 1: Number of agrivoltaic cases and changes in landscape indicators (total of 3 embedded cases).

| | Babberich | Culemborg | Lochem | Total |
|--|-----------|-----------|----------|-------|
| Landscape indicator | | | | |
| Buildings outside built-up area | X | X | X | 3 |
| Openness | | X | X | 2 |
| Implementation of vertical structures | | X | X | 2 |
| Use of plastic foil | X | | | 1 |
| Land use | | | X | 1 |
| Implementation of vegetation | | | | 0 |
| Implementation of hedges | | | | 0 |
| Relief | | | | 0 |
| Historical linear landscape structures | | | | 0 |
| Total | 2 | 3 | 4 | |

Preliminary results show that the implementation of *vertical structures* and (auxiliary) *buildings* for the AVPP affect the *openness* of the landscape. Developers, policy makers and others involved, together, need to minimize landscape change to maximize public acceptance. Further research is needed to understand the potential landscape impact of the different types of agrivoltaics and to develop strategies that mitigate aversive impacts of agrivoltaics. This way, agrivoltaics can become a sustainable contribution to the energy transition, mitigate climate change and help realizing the European Green Deal.

Keywords: agriphotovoltaic, solar energy, public acceptance, energy transition, multifunctional land use, landscape indicators

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BLUE—GREEN INFRASTRUCTURE: AN OPPORTUNITY FOR SUSTAINABLE INDIA (824)

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The biodiversity and ecosystem services are adversely affected by the non-sustainable way of life and have a negative impact on economic and social activities that are dependent on these services. The provision of integrating green infrastructure with land use planning in urban areas can result in benefitting the biodiversity and enhanced delivery of ecosystem services. The fast pace of urbanization is responsible for having more and more impervious built areas aggravating not only the rain water run-off but also contributing to the urban heat island effect. Flooding of streets during incessant rainfall in monsoons is a common problem all across urban areas in India. The natural drains get filled up to construct either buildings or other amenities like parking lots or roads or playgrounds. Pervious areas get converted to impervious areas thus reducing the rate of rainwater percolation. The man-made drains also often get choked due to lack of solid waste management leading to accumulation of plastic waste in drains alongside roads.

India being a developing country, is going through major structural and functional changes, which have tremendous impact on the population growth. Thus, affecting the overall housing scenario such as additional housing demands, changes in housing typology and occupancy rate, increased land value, emergence of slums, etc. The unplanned developments lead to many adverse environmental and health impacts such as increase in pollution level, degradation of water bodies, decrease in groundwater level, heat island effect, etc.

The study aims to improve the environmental quality by implementation of green infrastructure wherever possible. Green infrastructure, which is also known as Blue-Green infrastructure, is a network providing the “ingredients” for solving urban and climatic challenges by building with nature. It is practice applied to meet some objectives such as multifunctional use of natural and semi-natural spaces and reducing the overall impact to the environment. It is an opportunity to use the resources efficiently while creating a healthier environment that improves human health, builds a better environment, and provides cost savings.

The conclusion is based on the literature available stating the tools and techniques used to measure the impact of green infrastructure and how it can be used to obtain sustainability.

Keywords: Green infrastructure, sustainable city

RECLAIMING URBAN NATURES: THE RESTOR(Y)ATION OF THE LA RIVER AND THE EMSCHER IN THE RUHR VALLEY (867)

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This contribution aims to sketch out the contrasting ways in which ‘urban nature’ – and specifically urban rivers and creeks - have been reclaimed by different groups in postindustrial societies. The revitalization, re-naturalization, and restoration of our local waterbodies is one of the hallmark successes of postindustrial urban planning – yet the actual processes unfold in very different ways. I will compare the narratives and policy discourses around two major ‘green gentrification’ cases, namely the still-ongoing revitalization of the LA River in my adopted hometown of Los Angeles and the recently finalized revitalization of the Emscher River in my native Ruhr Valley.

Keywords: Urban nature, greening, ecological restoration

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RIVER CORRIDORS AND REHABILITATION PRACTICES IN MULTI-LAYERED CULTURAL LANDSCAPES: BERGAMA SELINOS RIVER REHABILITATION PROJECT (868)

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Cultural landscapes and river corridors are two interrelated and complex systems that hold significant importance for human societies and their cultural heritage. Along the cultural axis, humans, natural environment, and built environment form cultural landscapes through mutual shaping influenced by both anthropogenic and natural factors over time. According to this definition, it would be appropriate to consider river corridors, which have been influenced and shaped by both communities and the environment for thousands of years, as a component of cultural landscape. Therefore, it is clear that the improvement of practices in river corridors requires a multi-faceted approach that encompasses cultural, natural, and human elements. Thus, this study aims to discuss the role of integrated approach in practices in river corridors, which are part of the cultural landscape, and evaluate contemporary river restoration projects.

The methodology of the study comprises four stages: dual literature review, determination of the factors related with cultural landscapes and river corridors separately, testing factors on the case study, and generating recommendations. It begins with a review of the literature on cultural landscapes, providing an overview of the historical development process of the term and determining basic parameters that needs to be considered by including the publications of the organizations that are actively involved in the protection and planning of these areas. After that, study focuses on the river corridors, their problems and emerging approaches to these problems and the planning and urban design parameters that should be considered. The study then goes on to explore the value of the river corridors as a cultural landscape area. In order to examine the results from literature review, Bergama, which is a city shaped by culture and nature together and has a multi-layered cultural landscape feature listed on the UNESCO World Heritage List, constitutes a good example. So that, The Bergama Selinos River Rehabilitation Project serves as a case study for the examination of river corridors and cultural landscapes together. The study concludes by emphasizing the need for a comprehensive and integrated approach to the study of river corridors as cultural landscapes.

In conclusion, the paper argues that cultural landscapes and river corridors are intimately connected, reflecting the dynamic relationship between human culture, history, and the natural environment. It is crucial to understand this relationship to preserve and protect these areas for future generations, and to ensure that their ecological, cultural and historical significance is not lost.

Keywords: cultural landscape, river corridor, river rehabilitation, Bergama, Selinos River

MEASUREMENT OF CARBON EMISSION AND SPATIAL OPTIMIZATION STRATEGIES IN THE METROPOLITAN RURAL AREAS: THE CASE OF SHANGHAI (889)

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The realization of the carbon emission peak and neutrality is the macro trend of the world's future development. The existing studies on it mostly focus on regional and urban scales, but lack of discussion on that in rural areas. Although the total amount of carbon emissions in rural areas is relatively small, it covers a vast area and has many types. So its carbon emission is an important source that cannot be ignored. Among them, the construction and development speed of metropolitan rural areas is relatively fast, and the urban high-carbon lifestyle is also constantly reproduced in the metropolitan rural areas, so the demand for emission reduction is more urgent. This paper takes 108 villages and towns in Shanghai as an example to carry out research on carbon emission measurement and spatial optimization strategies in rural areas in metropolitan areas. Firstly, the rural carbon sources are sorted out from three aspects of agricultural space, ecological space and town and village construction space, and the rural carbon measurement model is established.

Then, combined with the multi-source data such as POI data, OSM buildings and roads data, this paper sorts out the spatial representation index of the three dimensions of functional business form, land use and transportation network of each township in Shanghai. The functional business form dimension includes various POI density, such as residential services, companies and enterprises, and POI mixing index; the land use dimension includes development intensity and spatial density index; the transportation network dimension includes road network density, intersection density and street segment density index. Through ArcGIS platform, correlation analysis is conducted between the above three indicators representing the spatial dimension of rural areas and the carbon emission values of towns, to identify the main spatial influencing factors of rural carbon emissions, and then to propose strategic suggestions for rural spatial low-carbon development.

Research Findings

The spatial indexes that are significantly related to the carbon emissions in villages and towns include: POI density, land development intensity, road network density and other indicators.

In the dimension of functional business form, the increase of overall POI density in towns and villages will bring higher carbon emissions to a certain extent, but the moderate agglomeration of functional distribution (POI mixing degree) is conducive to improving the phenomenon of high carbon emissions in towns and villages.

In the dimension of land use, the higher the intensity of rural land development, the higher its carbon emissions. However, the carbon emission of individual towns with strong economic development in Shanghai is lower than the average level of towns and cities in the whole city, because of its reasonable industrial structure and types.

In the dimension of transportation network, the increase of road network density, that is, the increase of vehicle traffic space, leads to the increase of carbon emissions in towns and cities.

ASSESSING RISK AND ENHANCING RESILIENCE IN DATA-SCARCE URBAN CONTEXTS: CASE STUDIES FROM SOMALIA (920)

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Enhancing resilience is a crucial objective for cities in climate change hotspots, such as coastal and flood-prone urban areas. The complexity and interdependence of systems, coupled with limited resources and data scarcity, make building resilience a challenge, especially for medium-to-small cities and for fast changing environments. The urgent need to develop spatial planning methods adapted to the conditions of countries with weak planning systems facing climate change and rapid urbanization find an excellent summary in the words of Spaliviero et al from 2020: *"Experience in Africa shows these are also the cities where most risk is accruing and where the majority of population growth is felt. Bridging this gap to build resilience requires new decision-support tools that can operate on data that is not comprehensive but good enough"*

With the aim of providing a comprehensive overview that captures the main factors determining risk and supports planning, this study employed a tailored mixed-method approach in the contexts of Garowe and Kismayo, two cities in Somalia experiencing rapid urbanization and water-related climate impacts. The approach applied in this study is based on existing and shared risk-assessment tools to analyse risk in data-scarce urban contexts, to test their applicability to such environments, and to adapt them to increase their reliability in such cities. We adopted the IPCC's definition of risk combining hazard probability, exposure, and vulnerability following EU's INFORM Methodology.

To compensate for the limited availability of data, the risk assessment process based on hydrological hazard analysis was supplemented with data sources collected and surveyed on site, including interviews with community representatives from each neighborhood. The aim of these interviews was to capture local knowledge of the neighborhood and identify the basis of vulnerability, rather than relying solely on data-intensive knowledge.

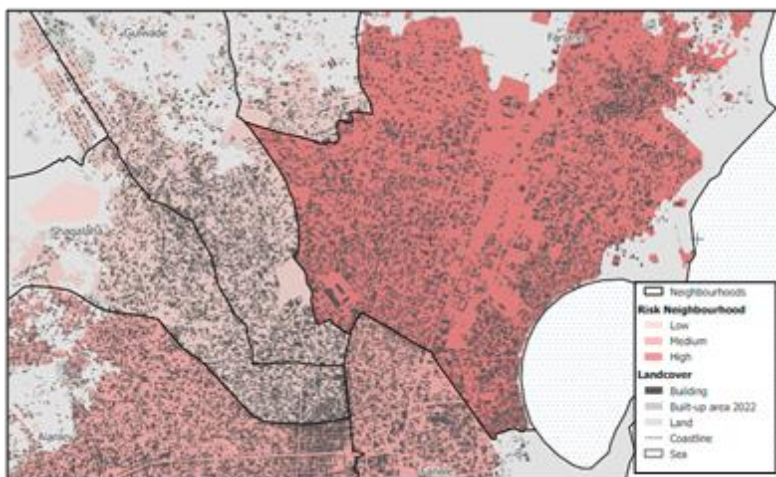


Figure 1 Risk of population, Kismayo

The results of these interviews helped to inform the development of a set of social vulnerability indicators, enabling potential decision-makers to not only be aware of the level of vulnerability in a specific neighborhood but also understand where to direct policy support. Additionally, the interviews with experts and community representatives helped assess the vulnerability of different types of buildings (e.g., markets, factories, schools, religious buildings, and water points) within the specific social and economic system of the context.

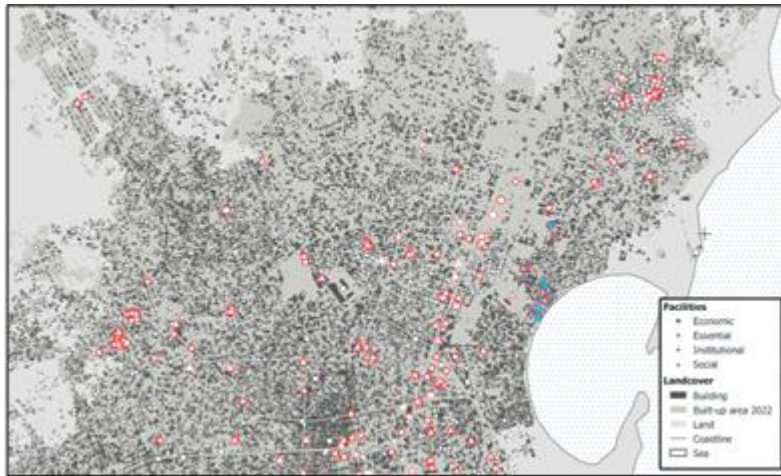


Figure 2 Risk of facilities, Kismayo

Overall, this study highlights the importance of using a mixed-method approach to assess risk, especially in data-poor contexts. By engaging with local communities and integrating different kinds of information sources, researchers can better understand the complex social, economic, and environmental factors that contribute to risk. On the other hand, in the fast-paced process of urbanization in developing contexts, it is essential to provide accurate and context-specific information to support planning, while also ensuring it is delivered timely. This information must be able to facilitate the implementation of interventions and policies, even in the short term. This can be particularly challenging in rapidly developing contexts where data collection and analysis can be difficult due to limited resources and time constraints.



Figure 3 Heatmap of risk, Kismayo

Keywords: Resilience; Risk assessment; Planning; Climate change

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A CONTEMPORARY APPROACH TO GREEN CITY PLANNING: ANKARA GREEN CITY ACTION PLAN EXPERIENCE (921)

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Cities are dynamic and vital parts of society and the main engines of social, economic and technological development. However, rapid urban growth has vastly increased demand for resources (EBRD, 2020), which, in turn, affects the environment as well as the quality of life of urban residents.

The concept of sustainability refers to the necessity of a long-term perspective to reduce the demand for environmental resources. It further explains the need to make the necessary changes to achieve goals for spatial, social, and economic development (Newman and Kenworthy, 2000). Global warming, the greenhouse effect, and increasing consumption of non-renewable resources constitute the main challenges of global environmental problems (Low, 2003).

According to the Intergovernmental Panel on Climate Change (IPCC), to keep global warming below 2 °C, emissions of carbon dioxide (CO₂) and other greenhouse gases (GHGs) must be halved by 2050 (compared with 1990 levels). Many European countries have adopted national programmes aimed at reducing emissions. EU-level policies and measures include:

- increased use of renewable energy (wind, solar, biomass) and combined heat and power installations;
- improved energy efficiency in buildings, industry, household appliances;
- reduction of CO₂ emissions from new passenger cars;
- abatement measures in the manufacturing industry;
- measures to reduce emissions from landfills (European Environment Agency, 2020)

Resilient cities are better at handling natural and human-made disasters, absorbing the impact of economic, environmental, and social hazards, and promoting well-being and inclusive and sustainable growth. How best to tackle urban challenges and secure a better, more sustainable, and resilient future for cities and residents, from energy resilience to innovative technologies to sustainable infrastructure investments are the key concerns. With COP27, it is critical to explore how cities can lead the transition to a low-carbon and climate-resilient economy (EBRD, 2022).

For the sustainable development of green cities, it is critical to recognise the relationship between environmental aspects and economic and social issues. This thinking is also very much in line with the UN's 2030 Agenda for Sustainable Development and the Sustainable Development Goals and particularly the Goal 11 calling for governments to make cities and human settlements inclusive, safe, resilient and sustainable (EBRD, 2020).

The European Bank for Reconstruction and Development (EBRD) Green Cities takes a broad approach to identifying and prioritising environmental challenges and connecting them with infrastructure investments and policy measures (EBRD Green Cities, 2023a). To achieve this, the Green City Action Plan (GCAP) methodology allows cities to apply a rigorous and comprehensive approach to identify priority environmental challenges (EBRD Green Cities, 2023b). The EBRD has

developed the EBRD Green Cities programme, which strives to build a better and more sustainable future for cities and their residents. The programme achieves this by identifying, prioritising and connecting cities' environmental challenges with sustainable infrastructure investments and policy measures (EBRD, 2020).

One example is the Ankara GCAP, prepared under the management of Ankara Metropolitan Municipality (AMM) within the scope of EBRD Green Cities Programme. The Ankara GCAP aimed to develop actions to overcome priority environmental challenges Ankara is facing. Ankara GCAP starts with a technical assessment of city's baseline considering all environmental aspects and sectors (i.e., air quality, green areas, energy, transport), and followed by defining priority environmental challenges of Ankara that are;

- Air quality
- Climate change mitigation
- Adaptation and resilience
- Water quality and efficiency
- Waste management
- Conservation of ecosystem and biodiversity
- Soil and groundwater quality.

Later on, the vision, pillars (environmental protection, decarbonisation, resource efficiency and circular economy and resilience) and strategic objectives were defined to solve the challenges. Finally, 28 sector specific actions were defined including explanations, benefits and financial details. In line with the goal of Ankara to become the "green capital city", a significant number of stakeholders participated in every stage of the Ankara GCAP process. Stakeholders led the way in determining and prioritising the challenges of Ankara and the actions to address them.

Consequently, this research aims to reveal the significance of one of the contemporary approaches -GCAP- to deal with climate change impacts and sustainability concerns.

Keywords: Climate change, Sustainability, The Green City Action Plan, Ankara

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SOLAR ENERGY EXPANSION IN PORTUGAL: A RECENT TREND IMPACTING FARMING AND FORESTRY (972)

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The shift to renewable energy sources is undeniable for carbon neutrality and represents a strategic policy goal for sustainable development. In the context of Europe's post-pandemic recovery and present energy crisis, the energy transition has the potential to be an economic and regional development lever. At the same time, it is a challenge for traditional planning approaches and tools, which may be inefficient in dealing with the speed of change and lack enough articulation (Koelman, Hartmann and Spit, 2018, 2022). In 2022, the European Commission launched new initiatives to improve alternative energy production (e.g., REPowerEU, EU Solar Strategy), and Member States revised licencing procedures and environmental impact assessment frameworks to attend to comply with the new commitments. This trend aims to speed the energy transition and will lead to an increase in land consumption for power generation forcing land-use/land-cover (LULC) changes, which influences the long-term viability of the transition to renewables (Scheidel and Sorman, 2012; Cole *et al.*, 2022). Renewable energy production infrastructures require more land than fossil fuels due to lower power densities (van Zalk and Behrens, 2018). LULC can be a constraint to the decarbonization of energy systems and land-efficient sustainable options must be ensured. Research on monitoring land consumption linked to energy production is scarce in Portugal. The goals of this study, which focuses on the dynamics of LULC changes produced by the expansion of solar photovoltaic (PV) plants in Continental Portugal, are twofold: (i) measure land consumption for solar production based on the last LULC class; (ii) identify the most typical land-use trajectory profiles that occur due to solar panel conversion. Concerning data, the Portuguese official thematic series of LULC maps (Carta de Uso e Ocupação do Solo, 1995–2018), as well as a geographic database of solar PV plants (2005–2022), were employed for this purpose. Using Geographic Information Systems intersectional analysis measured transitions by LULC type for present and near future solar plants (based on licensed and pending licenses), while combinatorial analysis determined the most common trajectory profiles. According to the results, agricultural and forest lands were the most significantly converted to solar energy production. The largest growth happened after 2018, and based on the planned polygons (licensed and pending licencing), the conversion of forest areas is likely to increase. These findings raise concerns for spatial planning in the context of a sustainable energy transition. To minimise the externalities of decarbonization, LULC should have a more preponderant role in location selection, which contradicts the most recent policy options of deregulating the sector, and a greater articulation of energy and environmental policies with spatial planning instruments is required.

Keywords: energy transition; renewable energy production; land use/land cover dynamics; solar photovoltaic plants; integrated planning.

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Acknowledgement

This research was supported by the Portuguese Foundation for Science and Technology, I.P. (FCT) through Centre of Geographical Studies (UIDB/00295/2020 and UIDP/00295/2020), as well as by the doctoral Grant PRT/BD/154418/2023 of André Alves financed by FCT, and with funds from the State Budget, under MIT Portugal Program.

DISTRIBUTED ENERGY GENERATION AND URBAN PLANNING: EVIDENCE FROM POLAND AND ARGENTINA (987)

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Origin and essence of the problem. The development of the energy supply model, referred to as "distributed energy production" (also: "distributed generation"), has historically been driven by two trends observed in the modern energy sector: slower growth in demand for energy and the emergence of energy-efficient and less harmful to the environment technologies of small-scale energy production. However nowadays, there is an increase in the demand for electricity related to the development of technology in the 4.0 economy, based on the development of digital technologies and the dissemination of their use on both the supply (production and services) and demand (consumption) side of the market. Its development is fostered by the popularization and decrease of investment costs of photovoltaic installations, as well as financial support for this process by the state. Distributed energy production is often based on the use of local (so-called "off-balance") energy resources, including renewable energy resources (RES), therefore it is advisable to analyze the possibility of implementing this concept as consistent with the sustainable development paradigm and responding to the challenges of the energy sector and energy policy resulting from the need to mitigate climate change by transforming the energy sector towards low-emission sources. With this in mind, it can be predicted that in the long-term perspective of civilization development – in the economic dimension – the competitiveness of economies and their ability to innovate and to sustain development will depend on the ability to ensure sustainable and diversified supplies of clean energy, which also indicates distributed generation as a likely a significant trend in the development of the energy sector.

Territorial dimension. Considering the nature of the sources used in energy systems based on distributed energy sources, attention should be paid to the territorial dimension of the processes of development of distributed energy generation systems. By nature, they will be small sources connected by a network of transfer and distribution infrastructure. These can be local networks of small energy producers covering a commune, region or functional area, whose cooperation (in order to create a network) will require appropriate infrastructure and territorially oriented support from the public sector. Such a model of development is completely different from traditional systems, i.e. based on large sources of professional energy enterprises, whose development is more sectoral and non-territorially oriented, i.e. it is related to business development strategies created and implemented by large energy companies (concerns) with monopolistic or oligopolistic nature, with little or no cooperation with territorial communities. It can therefore be said that the development of systems based on distributed energy production will require much greater involvement of territorial authorities (and cooperation between municipalities, cities, towns, communities, municipalities within functional areas) in order to create appropriate conditions (including infrastructure) for the development of such systems. This means that the energy policy must become the subject of activity of local and regional authorities and it cannot be treated by sectoral approach, but as an integral aspect of the general

development policy of a given city, municipality, local community or region. This, in turn, implies – in particular – the need to integrate local energy policy and spatial policy, in connection with the objectives of other policies, such as: environmental policy (in terms of reducing carbon dioxide emissions during energy generation; reducing energy losses in distribution and consumption processes), social policy (in terms of reducing energy poverty), transport policy (reducing energy consumption in the transport of people and goods), etc. The spatial dimension of energy policy and its connection with spatial policy results from the fact that, as indicated by numerous studies, the spatial development structure of settlements, the way land is built, has a huge impact on the demand for energy – the more dispersed the buildings, the settlement network (urban sprawl case), the greater the demand for energy as a result of losses in the transmission and distribution process and as a result of increasing energy consumption during transport, movement of people, transport of goods. It should be noted that this dependence occurs in particular in traditional, highly-centralized energy systems, but in systems with distributed energy production (i.e. where – by nature – the source generating energy is closer to the recipient) the effect of the increase in energy demand due to the dispersion of buildings still occurs and is also important. What is more important, however, the development of distributed energy systems may – potentially / hypothetically create new problems and challenges of a spatial and environmental nature, consisting in the fact that the possibility for a single entity (household, enterprise) to have its own energy source, i.e. independent of supplies (supply side) from the centralized network, may lead to the dispersion of buildings, in particular residential buildings, in the suburbs / suburban areas. The development of distributed energy, based on RES, i.e. environmentally friendly energy sources, may therefore generate a kind of "sub-urbanization impulse", and thus generate a different type of negative environmental effect in the form of sprawling buildings – so called urban sprawl. This may also be facilitated by the current trend of the dissemination of the remote model of work, use of services, trade, etc. The impact of the development of distributed energy on the real spatial pattern (model) of urbanization will therefore be strongly related to the effectiveness of instruments controlling urbanization processes, and thus to the effectiveness of spatial planning. This, in turn, implies the need for a deeper integration of spatial planning and energy planning at the level of a territorial unit (municipality, city, region). The development of integrated planning / integrated resource planning methods therefore becomes a necessity.

Planning policy and instruments. Experience with the use of integrated resource planning instruments is limited in both Poland and Argentina, albeit for different reasons. In Poland, despite the passage of 34 years from the political and economic transformation and the transition from centralized, sectoral planning and development management to a decentralized model based on territorial self-government, the energy sector (consisting of large, professional, commercial companies producing energy in a centralized manner) still has a strong oligopolistic position. The energy policy of the state is poorly integrated with the general development policy, as well as the climate policy and environmental policy. This is also reflected on the local and regional scale, where the impact of general development policy and spatial planning on the transformation of the energy sector is negligible. Energy plans of local communities and municipalities are of marginal importance for the development of energy sector based on distributed generation and renewable resources. For many years, they were developed "under the dictation" of large commercial power plant companies. It should be noted, however, that the

transformation of the Polish energy sector, so far slow, may significantly accelerate not so much under the influence of climate policy commitments and European Union political pressure in this respect, but rather geopolitical challenges related to the Polish economy cutting itself off from imports of hydrocarbon fuels from Russia and the energy crisis.

In Argentina, the development of energy systems based on distributed energy sources is strongly conditioned by the controlling role of the state/ public sector, as well as the structure of the country's spatial development with a large share of agricultural land. In particular, Argentina's low scores in terms of the share of renewable energy in total energy production and consumption are due to low levels of political will and a weak regulatory framework as well as economic and financial aspects. An example, that explains the weakness of the regulatory framework is the lack of complementary legislation setting rules and obliging agencies to implement renewable energy programs and projects.

Keywords: distributed generation, distributed energy production, distributed utilities, distributed utilities analysis, energy policy, integrated resources planning, urban planning, spatial planning, public sector, municipalities, Poland, Argentina

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TRACK 16: TERRITORIES UNDER PRESSURE: GEOPOLITICS AND PLANNING

IS RURAL SEDUCTIVE OR THREATENING? TOWARD A RE-FRAMING OF THE “RURAL MYTHOLOGY” IN TWO NORTHERN ITALY TERRITORIES HIGHLY SPECIALISED IN AGRICULTURAL PRODUCTION (260)

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This contribution calls for a re-framing of the dominant and essentially positive mythology that structures discourses and planning policies as regards rural territories. In the long run, a taken-for-granted seductive narrative has led to the construction of the imaginary of the countryside almost as an “Eden”, with planning tools conceiving rural areas primarily as contexts to be protected from the growth ambition of cities and infrastructures. Yet, today this vision is being severely challenged in territories that have undergone massive land-use and socio-economic changes as a result of the intensification of specialised, export-oriented agricultural productions (Brenner and Katsikis, 2020). In what we call “territories of monocultures”, specialised agro-industry has triggered significant environmental, landscape, and social impacts, as well as health issues connected to the massive use of chemicals. Frictions and contradictions between different narratives, values, and territorial aspirations (i.e. economic development, promotion of tourism, landscape conservation, and citizens’ demand for a higher quality of life) have here become evident through growing social conflicts and protests.

However, the impacts generated by the expansion of monocultures have been given little academic attention within urban studies so far. In particular, the contemporary debate on planning does not adequately consider the land-use modifications caused by specialised agriculture, and hence the rising social demands for public intervention. Research on the territories of monocultures has two aims: i) to re-frame the urban/rural dichotomy, in both planning theory and practice, by stressing the need to manage the negative impacts of agro-industries on urban settlements; ii) to reflect on the evolution of the rural mythology from an “agrarian romanticism” (Patel, 2016) to a mental space that offers seductive geographies for recreation and tourism, till different scenarios for a renewed quality of life that balances farmers’ and citizens’ needs (Vallerani, 2021).

To do this, this study adopts a qualitative research method. Through the analysis of planning documents and interviews with key actors, this contribution investigates two cases of premier territories of monocultures in Northern Italy, where specialised agriculture is currently generating increasing conflicts between environmental movements and local producers (Basso and Vettoretto, 2020). The first case, located in the Veneto Region, is the hilly production zone of the globally known Prosecco wine, recently recognized as a UNESCO World Heritage Site; the second coincides with the most important mountain valleys for apple production: the Non-Valley in the Trentino-Alto Adige Region.

Two conflicting narratives take shape: on the one hand, the dominant mythology that frames the successful productive countryside as a *bel paesaggio* (beautiful landscape), a nice place to stay (for tourists) and live (for locals) linked to the imaginary of Made in Italy; on the other, the different perspective – mainly promoted by grassroots citizens movements – that sheds light on the unsustainability of such productions, from both an environmental and social perspective. This last issue calls for a general reflection on the role of planning tools in addressing the interactions between agricultural and residential zones more effectively.

The first narrative refers to the sustainability of production (especially from an economic perspective), energy savings, the beautiful landscape created through agricultural techniques, and the opportunities for tourism promotion; the second focuses on the quality of life, public health related to intensive agro-industry, environmental, landscape, and cultural issues. Empirical evidence clearly shows a clash among the aforementioned mythologies.

In conclusion, different interests and values have led to an evolution of the meaning of rural. In territories of monocultures, this can no longer coincide with the imaginary of a “peasant countryside”, but with a context where agro-industry also generates significant impacts on human settlements and needs thus to be regulated.

Keywords: rural mythology, monocultures, capital-intensive agriculture, urban-rural, social conflicts

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SPATIAL MOBILITY OF THE INHABITANTS OF THE COUNTRIES OF NATO'S EASTERN FLANK IN THE EVENT OF A MILITARY CONFLICT ON THEIR TERRITORY (337)

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The geopolitical conditions and security issues in Europe dramatically changed as a result of Russia's annexation of Crimea (18 march 2014), the instigation of the dirty war in Donbass, and finally, the invasion of Ukraine (24 February 2022). This situation has led to forced migration of the population, which has significantly increased since the end of February. According to UNHCR data (*UNHCR - The UN Refugee Agency*), nearly 5.89 million people have fled from Ukraine's territory since the beginning of the war. By far, the largest number of refugees have crossed the Polish-Ukrainian border, exceeding 3.3 million people (as of May 2022), while Romania has occupied the second place (ca. 757, 000 of refugees from Ukraine). In addition to the widely understood problems of mass migration of people, it is worth noting that the issue of relations between the Russian Federation and Western countries, which have never been easy, now appear to be the worst since the collapse of the USSR. Migration of refugees from Ukraine (especially in Europe) has proven to be a major logistical problem. Transport systems were not capable of accommodating such large traffic flows, resulting in bottlenecks, among other things. Therefore, it is extremely important to take all measures to facilitate the evacuation of civilians.

The purpose of the research was to identify the characteristics (including the size, direction, mode of transport) of spatial mobility of population of four selected cities: Suwałki (Poland), Galati (Romania), Michalovce (the Slovak Republic) and Nyíregyháza (Hungary), resulting from the need to evacuate in the event of armed aggression on their territories.

The research were conducted female adults (18+) and men over 60 years of age. In total, 1600 surveys were conducted, 400 in each city (Suwałki, Michalovce, Nyíregyháza, Galati). The choice of cities was related to their location and importance in the event of the expansion of the armed conflict in Europe. Questionnaire were consisting of two main parts. The first part covered general information about the socio-economic characteristics of the respondent and his household. The second part consisted of questions relating directly to the declared transport behavior in the event of armed aggression.

There is a research gap concerning this topic in the literature. There are no studies related to the procedures of mass evacuation of population, its size, scale or directions. Therefore, this study is intended to fill this gap and, using the example of the cities selected for the study in the four countries, determine, among other things, the extent of evacuation and its directions. The results obtained on the basis of the conducted research, have an applied dimension: they will help to develop appropriate strategies for the authorities responsible for effective evacuation in the event of an armed conflict. The knowledge gained from research into military conflicts related evacuation may enhance our ability to not only communicate risks more effectively, but also to create policies on planning the evacuation process with a level of detail sufficient enough to encompass the majority of scenarios.

This research has been supported by the Polish National Agency for Academic Exchange under the “NAWA Urgency Grant programme”.

Keywords: planning evacuation, resilience, military conflict, crisis management, CATI

Websites:

UNHCR - The UN Refugee Agency, <https://www.unhcr.org/> (access date: 20.06.2022)

THE ROLE OF MENTAL STRUCTURES ON IRAN DEVELOPMENT PROGRAM REALISATION (579)

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Iran has the longest history of development planning among undeveloped countries, but Iran is still in the group of developing countries. Before the revolution five development plans and after the revolution six development plans (called five-year plans) have been implemented and the seventh program is about to be compiled, but none of them have been successful. The estimates of the Research Center of the Islamic Council indicate that only 30 to 35 percent of the total development plans have been realised. This article tries to analyze the failure of Iran's development plans.

Research required data have collected through interviews with development planners and some documents. Grounded theory has used to analyze the collected data. The findings indicate that the economic development plans have not been realised so far, because:

- According to the semantic-paradigm theory, the success of the development theory is related to the effectiveness of its political thought, but the political ideologies hidden in the development programs used in Iran are not suitable for its conditions.

- Human action is contextual, economic factors are placed in the framework of social and institutional relations. Human action is path dependent, past decisions, actions and economic interactions enable and constrain current and future actions. Human action is contingent, in the sense that agents' strategies and actions may deviate from existing development paths. Economic action in the open systems are not fully determined and cannot be predicted through universal spatial laws. Action in open systems is not fully predictable and therefore cannot be adequately conceptualized through deterministic mechanisms or theories. So, the epistemology of social sciences is critical realism, but proper epistemological perspectives are not used in Iran.

- Several factors play a role in encouraging and mobilizing people to carry out activities, including: providing human security, effective property rights, reward system, meritocracy and voluntary participation of people. A proper reward system encourages creativity, initiative and innovation in society. According to Oglu, the reason for the incorrect implementation of economic policies and the failure of countries to achieve development lies in one word: the politician's dilemma: maintaining the efficiency or maintaining the government of a certain group, but the system of rules and rewards in Iran does not encourage the motivation of people and those who are responsible for implementing programs.

Keywords: Development Programs, political thought, methodological perspective, motivation System, Iran

THE EVOLUTION OF COLLECTIVE HOUSING UNDER LARGE-SCALE URBAN PLANNING FROM EUROPE TO SHANGHAI IN MODERN HISTORY (802)

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As one of the earliest port cities in modern China, Shanghai's urbanization is accompanied by the process of colonization, which is full of competition for space rights. The large-scale land planning in modern Shanghai was accompanied by the competition between China and The west in space and resources. The northern Shanghai area was first selected by the city government under the Kuomintang regime, and tried to reconstruct the urban structure of Shanghai through a large-scale construction plan for the northern area (Wei Shu, 2011), in order to counter the colonial status of the foreign powers in the concession. Due to the turbulent war environment, modern northern Shanghai has successively experienced the 'Great Shanghai Plan' led by the Nationalist Government, the 'New Shanghai Plan for the Rejuvenation of the Japanese Puppets' by the Japanese colonists, and the 'Great Shanghai City Plan' of the Nationalist Government after the victory of the Anti-Japanese War. Under the influence of wars and political power games, northern Shanghai controlled land through centralized power, and realized urbanization through large-scale urban construction plans.

The turbulent social environment has brought serious housing problems. The large-scale construction plan produced a different type of housing than the concession in terms of housing. With the development of industrialization, these houses built in batches in a standardized way are undoubtedly influenced by the Western Modern Architecture Movement. In the 19th and 20th centuries, the concentration of population to cities in the West due to the industrial revolution caused serious housing problems, accompanied by social problems such as class differentiation. Western modern planning theory, combined with the emergence and development of new social theories, urban problems force cities to choose greater power to intervene in urban management and construction. As H.P. Berlage said, 'The housing problem can only be solved through mass production.' (Panerai, P., 2004) At the same time, the accumulation of capital and the development of industrialization provide conditions for large-scale construction plans. As a result, large-scale land construction plans have been launched in many European cities, and housing, as an important element of urban space, has greatly affected the changes in urban structure. This article chooses collective housing as the research point, relying on the three large-scale urban plans of Shanghai in modern times. First of all, by investigating the architectural space of collective living in modern northern Shanghai, it summarizes its morphological characteristics. And select a special case from it—The Japanese Puppet Huaxing Bank House Complex designed by Maekawa Kunio is an important case of modernist architectural practice in East Asia, focusing on its morphological characteristics and time-space pedigree. Then, find the prototypes from the collective housing produced by the European large-scale land plan, and summarize the correlation between European and modern Shanghai collective housing forms under the large-scale land operation. Collective residential space is the materialized expression of the social conditions, political system, and economic forms at that time. Through the method of case comparison, the impact of collective living on the urban spatial structure is discussed.

Keywords: Large-Scale Urban Planning, Collective housing, Prototypes, Modern Northern Shanghai

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REFLECTIONS ON THE INTERNATIONAL ARCHITECTS' PRACTICE IN SHANGHAI'S URBAN TRANSFORMATION (818)

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Due to rapid economic growth, China has experienced a construction boom and rapid urbanization. With China's deepening reform and open-up, the emerging market has attracted a batch of foreign architects. At the same time, inviting prominent international architects to design some flagship projects is one of the political strategies to enhance the city's global image. The study takes Shanghai as an example, which is one of the first few places that international architects flocked to. Meanwhile, since Pudong's development and opening up in the 1990s, Shanghai has undergone significant spatial transformations, such as inner-city redevelopment, Huangpu riverside redevelopment, and new town development. The city profile has been enhanced, but the historic landscape was irreversibly damaged, which resulted in the urban policies' shift. Since 2014, the Shanghai municipal government has implemented the construction land "negative growth". The city has entered a new phase of urban transformation and regeneration. In 2015, Shanghai Municipal Government issued "Shanghai Urban Renewal Implementation Measures", which indicates the beginning of Shanghai's transition from "large-scale demolition and construction" to "organic renewal".

Given that the majority of international architects' projects in Shanghai are public ones in critical sites, this to some extent reflects what kind of "international space" and the urban image is pursued in Shanghai's urban transformation. Most previous research has approached projects by renowned international architects in Shanghai from an architectural perspective, but there is little critical reflection on the interactions between the practice and the whole process of urban transformation.

Based on the quantitative and qualitative research methods, the paper would first provide an overview of typical international architects' projects within Shanghai's development aspirations. From 1986 to now, Shanghai has published three editions of the master plan. The research would interpret these documents to better understand why certain kind of international architects was introduced and certain space was created at different stages of Shanghai's socioeconomic development. Moreover, the paper would also analyze the urban implications of prominent international architects' projects. Besides enhancing the urban image in pursuit of urban competitiveness, if and how did these projects benefit the locals, especially in the current period of people-oriented development? If and how did these projects respect or redefine the urban context?

In the end, the conclusions would highlight the interactions between international architects' practice and urban transformation. And the findings would have certain practical significance in conducting international architects' projects and managing the urban historic landscape in Shanghai's new-round urban transformation.

Keywords: international architects' projects, urban transformation, urban planning policies, urban context

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TRACK 17: PLANNING FOR POST-PANDEMIC WORLD

SPIRITUALITY: A BOND IN POST-PANDEMIC WORLD (61)

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Governments, during the Covid-19, has focus on infections, probabilities of contracting the virus, using masks, the distance, but what about the connection with the mountains, rivers, the inner peace, reconstruct new forms of desire when a human share times with the family and friends?

Technology can be an obstacle, but also a bridge for humanity. For example, every day we can find new videos about spirituality on the web. And if we have the option about surfing the web, we need to breath consciously while we navigate through the World Wide Web.

We need to remember that our inner web requires dedication, air, and despite of adversity, we do have genetic, spiritual, emotional potential which make us able to transform what is necessary to persist in the best possible way; the epigenetics discoveries has shown us that Science is also bond to Spirituality, and many other human connections, and beyond the humanity, is a connection with the whole system.

Even in Physics we have learn about the Interconnectivity Theory, and this is the base of every living form: to look for connections. So, in a Post-Pandemic World, we need to learn new lines of bonding with the living system, taking care of the rest and with a lot of sense of gratitude.

The actual situation with the Bird Flu Virus and the families of coronaviruses are warnings to stop so many actions, but also, we need to recognize what we have forgot. In this context, spirituality is a path which permits to the humans connect with the present, without fear, but with confidence on the universe.

Keywords: Spirituality, Covid-19, Inner Peace, Connection, Resilience

HEALTHY CITIES: THE VISION OF THE WORLD HEALTH ORGANIZATION, THE ROLE AND EXAMPLES OF URBAN PLANNING AND MONITORING INDICATORS (109)

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The World Health Organization's vision for Healthy Cities, perhaps, especially in the transition from pandemic to normality, is the key to a more sustainable, resilient and healthy future (Bush & Doyon, 2019) for Metropolises (Adlakha & John, 2022). The social inequalities created by the rapid increase of the population in the urban environment, carried away by the economic crisis and the problems created by Climate Change (Giles-Corti, Lowe, & Arundel, 2019), bring to the surface particularly topical the role of Urban Planning in Healthy Cities (Cole et al., 2017), (Dixon et al., 2007) , and what it can do to address all urban environment problems, such as transportation, access to green spaces, air quality (Ewing & Cervero, 2017),(Yang, Wang, Zhou, & Wang, 2018) and in general the pressures created on the environment by anthropogenic activities (Su, Pi, Xie, Cai, & Weng, 2017). Initially, reference is made to the strategic texts of the World Health Organization for Healthy Cities and which directions it defines to be followed both at European and global level, with the ultimate goal of achieving a single global health care (Bush & Doyon, 2019),(de Sa et al., 2022),(Sallis, Frank, Saelens, & Kraft, 2004). Then, due to the pandemic (Afrin, Chowdhury, & Rahman, 2021), both the role of Urban Planning in cities is analyzed, as well as two selective examples of the coexistence of Urban Planning and a Healthy City (Adlakha & John, 2022). These examples are the City of 15 Minutes (Airgood-Obrycki, 2019), but also the City of Sponge (Arup, 2021), where overall they show ways to approach policies to address issues of urban interest such as air pollution from transport, noise pollution, lack of open green spaces, lack of equal access to city services, non-support of the local economy, waste of a city's water and unsustainable utilization (Maes, Zulian, Guenther, Thijssen, & Raynal, 2019),as well as the overall sustainability and resilience issues that arise as a whole (Pozoukidou & Chatziyiannaki, 2021).

Finally, as tools for monitoring, evaluating and feedback on implementation policies for healthy cities, but also for environmental policies in general, some sets of indicators are presented, either autonomous or complex, which stem from the European Union and its official studies, as well as from the World Health Organization and the World Health Observatory and the general literature review.

Keywords: Healthy Cities, 15 Minutes City, City of Sponge, Urban Planning, Post-pandemic cities

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ARE WE MOVING ONLINE? AN ANALYSIS OF COVID-19 IMPACTS ON E-SHOPPING AND WORK FROM HOME (WFH) AND ITS CONSEQUENCES FOR URBAN PLANNING (120)

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The COVID-19 pandemic and its "stay at home" necessity blurred the work-life boundaries, forcing the implementation of behaviours that were already detectable before but to a much greater extent and in a short amount of time. The first COVID-19 lockdown was termed "the largest work-from-home" (WFH) experiment (Banjo *et al.*, 2020), with the flexibility in office hours and savings in transportation being among some of the first advantages found in WFH (Purwanto *et al.*, 2020). The implementation of neighbourhoods' social networking apps (Perez, 2020) fuelling a sense of community that also spread to shopping in local independent small shops (Li, Hallsworth and Coca-Stefaniak, 2020) and engaging in physical activity in the neighbourhood and nearby parks (Yang and Xiang, 2021) pointed to other advantages in WFH. In the first year of the pandemic, it seemed we were headed forward into leaving traffic jams and back to living in small neighbourhoods or even moving to the countryside. However, since the first quarter of 2022, most countries have now lifted most restrictions in the face of the global decline in reported severe cases and deaths. We may now start assessing how much of these "pandemic behaviours" were due to sheer necessity and how much will become prevalent as part of the new "post-Covid normal". Therefore, by analysing data from a panel shopping and travel survey of 400 respondents (implemented in January-February 2020 and March-April 2022) and a follow-up in-depth interview focused on WFH, e-shopping, and residential preferences from a sample of 30 individuals, we expect to gain insights on change that may have affected living and working spaces. For example, can we expect the emergence of new commercial centralities near people's residences, as many companies have kept the possibility of WFH? Or is it that WFH allows for a broader engagement with e-shopping (e.g., because of having more time for pre-purchasing and the option to schedule the deliveries at any time of the day)? Results from research may ultimately contribute to identifying new patterns of consumption and activity in general and also help guide future practices of obtaining and processing information during a crisis or disruptive event.

Keywords: COVID-19, e-shopping, work from home

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SOCIO-INSTITUTIONAL RESPONSE TO THE PANDEMIC CONTEXT: TRENDS IN THE ORGANISATION, MISSION AND TARGET GROUPS AND TERRITORIES OF INFLUENCE (121)

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The sudden appearance of the COVID-19 pandemic, caused a drastic alteration of the world's population daily life, creating a difficult social, economic and health context. Over the past two years, COVID-19, has been the focus of all the news, studies and research.

However, there is little research available on the impact of this pandemic on the institutional systems of countries, regions and metropolitan areas.

Governments and institutions needed to adapt and respond to the challenges posed by the pandemic situation by reorganizing themselves internally, rethinking their missions and innovating in their strategies. A year after the beginning of this pandemic, the MetroGov3c - Governance in the Lisbon Metropolitan Area project decided to carry out a online survey addressed to private, associative or other institutions, that develop activities in this area, in order to get a first reading of how they felt and reacted to this completely disruptive context.

The objective of this paper consists in an analysis of the responses, thus contributing to a study of the solutions found by the metropolitan institutional system, targeting the difficulties that organizations have experienced, the strategies they have developed and the way they began to face their future. In order to explore the data provided by the entities, ordinal regression models were developed.

Regarding the impacts felt "In the Organization", it was concluded that the question "Internal functioning" has a significant impact on the dependent variable "Overall impact on the internal functioning of the entity". This finding is relevant since the impact on internal functioning was smaller in entities that experienced a negligible impact on their total spending.

In the impacts felt "In the mission" it was possible to conclude that the variables ascending, descending and horizontal institutional articulation are considered statistically significant in relation to the dependent variable "Global Impact on Governance". It is also interesting to conclude that the smaller the impact on the effects felt in the multi-level relationship with entities of similar or lower hierarchical level, the more likely the overall impact on governance was strong.

In the ordinal regression referring to the dependent variable "Overall impact on the Organization's Mission", the only statistically significant variable was "Degree of compliance", where for each unit increased in the level of "moderate impact, possibly not yet fully known its extent", it is predicted a decrease in the probability of the dependent variable to position itself at a higher level of perceived impact, relative to its reference category.

Concerning the impact "On Target Groups and Territories of Influence", the ordinal regression was implemented, with "Overall community /territorial impact" as the dependent variable. The independent variables "Feeling of isolation and loneliness" and "Family tensions" showed statistically significant impact. It can be concluded that for every unit increased in the response to one of the significant categories of the variable "Feeling of isolation and loneliness", it is expected a decrease in the probability of the dependent variable being positioned at a higher level of felt impact, relative to its reference category. On the other hand, it can be concluded that the lower the impact felt on family tensions, the more likely the overall impact on the community/territory is to be strong, relative to its reference category.

As expected, the entities felt a great impact on both their internal functioning, their role as an organization and also on the target group and territories of influence in which the organization's mission focuses. It is clear that major changes have emerged that have benefited the day-to-day operations of the entities, such as the use of communication and information technology and the reorganization of work processes.

Keywords: Socio-institutional response; Lisbon Metropolitan Area; Pandemic; COVID-19; Ordinal Regression

PLANNING FOR SHORT-TERM RENTALS IN A POST-COVID ENVIRONMENT: LESSONS FROM AUSTRALIA (170)

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Short-term rental properties through platforms such as Airbnb have quickly become popular in cities around the world. However, the rise of short-term rentals has led to acrimonious debates in the planning community. On one hand, local residents oppose the rapid 'touristification' of their communities, and argue that short-term rentals generate undue pressure on local rental markets, leading to loss of affordability. On the other hand, both hosts and guests benefit from the flexibility of short-term rentals, allowing visitors to 'live like a local' for a period of time that sits somewhere in between a hotel stay and a longer lease. In this presentation, I focus on the issue in Australia from an urban geographic perspective. The presentation is foregrounded with a quantitative overview of the growth of short-term rentals in Australia. It then focusses on the changes that have taken place during the COVID-19 pandemic, due in large part to Australia's international border closure, and local lockdowns that prevented interstate movement. The presentation concludes by laying out the new landscape of short-term rentals in a post-pandemic world, with a view to suggest pathways for policy and zoning that suit the realities of how short-term rentals have been embedded within, and alongside, longer-term rentals.

Keywords: Airbnb; Short-Term Rentals; Post-COVID City; Sharing Economy; Housing

HOW DID THE COVID-19 PANDEMIC IMPACT URBAN COMMERCIAL CENTERS? A MULTI-STAGE ASSESSMENT OF SHANGHAI'S COMMERCIAL CENTERS (216)

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Urban commercial centers are concentrated areas for residents' consumption activities and carry people's daily leisure and shopping activities. The COVID-19 epidemic has had a significant impact on residents' living behavior and travel behavior. Taking a typical commercial center in Shanghai as an example, this study explores the recovery of commercial centers after COVID-19 by comparing and analyzing five consecutive months of data in 2019 and 2020, using residents' consumption behavior mined from Internet location service data.

The study is divided into three main Stages: The Early Stage of the Outbreak, the Recovery stage of the epidemic, and the post-epidemic era, and the two main dimensions of residents' visit intensity and source range are analyzed. Firstly, at the Early Stage of the Outbreak (the first 3 months), the rigidity of the commercial centers is explored by measuring the weakening of their intensity and the reduction of the scope of their sources. secondly, during the recovery phase (3-6 months), the resilience of commercial centers is explored by measuring the degree of recovery of commercial centers during the epidemic. Then, in the post-epidemic era (6 months after the stabilization of the epidemic), the resilience of commercial centers is explored through a comparative analysis of the post-epidemic period and the normal situation without the epidemic. Finally, the relationship between the strength of resilience of each class of commercial centers in the post-epidemic era and the functionality and diversity of commercial center services is explored.

The overall results show that in the six months after the impact of the epidemic, the activity of commercial centers still has not recovered to the average value of the 2019 normalization period, and the number of visitors to commercial centers has recovered by about 64% on average. The results in multiple stages show that the Early Stage of the Outbreak greatly impacted all commercial centers. The impact on both the intensity of resident visitation and the change in the scope of origin was greater for low-grade centers; while the impact on the intensity of resident visitation was greater for high-grade centers, but the impact on the scope of origin was not significant. High-grade commercial centers are more rigid in terms of the scope of services. The flexibility in the recovery stage of the epidemic varies widely among commercial centers, with the best recovering commercial center centers showing 1.5 times growth, but there are also commercial centers with only 17% growth. In the post-epidemic era, commercial centers have gained a better recovery in terms of numbers and scope of services, but there is a large difference in the increase or decrease in the scope of services among different commercial centers.

Further exploration of the reasons revealed that the resilience of commercial centers is related to the functions and services of commercial centers. Commercial centers with a diversity of retail functions, more experiential services, and higher network ratings had greater recovery in the service scope of their centers, even exceeding the pre-epidemic situation.

Keywords: COVID-19 pandemic; urban commercial centers; Internet location service data; consumption behavior; Shanghai

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DIFFERENCES IN PANDEMIC EXPERIENCE ACCORDING TO HOUSING CONDITIONS: PEOPLE WHO LIVE IN HOUSE OR HOME (225)

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The COVID-19 pandemic has caused havoc all over the world. In addition to an individual's physical health, it has affected various psychological problems such as stress, depression, and anxiety. The impact seems to have a long-term and more chronic effect on some individuals or specific communities. The impact is long-term and more chronic for some individuals or specific communities. Moreover, the long-term impact seems more chronic for some individuals or specific communities. For example, during COVID-19, the stay home policy caused "corona blue" for people in poor residential conditions due to stuffy indoor life. In other words, the role of residential space has diversified as it used to stay only during sleep or weekends has been changed to where most of the day is spent. This change became an opportunity to recognize the house as an emotional space by forming an attachment not only as a physical space but also as a space for expressing oneself.

However, these houses' 'psychological' function does not apply to everyone. Some people still do not experience the psychological functions of house, rather the narrow area of the house or poor residential environment may act as a tremendous stressor. Furthermore, some report that family friction or divorce rates increase depending on the residential condition. Therefore, this study thought there was a limit to the role a house could play when the housing standard was not satisfied, and accordingly, it divided into house and home. The study aims to confirm the difference in experience during the pandemic between people who think their house is a shrine to their homes and people who live in physical houses. It means this study assumed that people living in the 'house' would be vulnerable to the impact of COVID-19 itself and social changes in the aftermath.

In order to check the degree of shock and track the changes, this study uses the Korea Welfare Panel Survey data from three points; 2018 before the pandemic, 2020 right after the pandemic, and 2022 when social changes have progressed. This study confirmed how satisfaction with housing and family relationships and life as a whole and the intensity and persistence of individual trauma change depending on the housing situation in experiencing the pandemic. As a result, these changes are more significant problems for the poor housing situation or the housing vulnerable groups. It has been confirmed that people living in the 'house' mainly include low-income families, elderly households, and low-aged households classified as housing vulnerable groups. In addition, the worse the housing, the greater the range of change in the satisfaction of the residential environment. The longer people stay home, the more dissatisfaction they have not usually felt. Moreover, throughout the Stay home period, living in a 'house' revealed more problems with depression and family relationships, indicating that narrow areas and poor environments lead to personal stress and even ruin relationships with the closest people. Through these results, this study is expected to identify the housing gap revealed by COVID-19 and induce discussions on future housing policy intervention and pandemic plans.

Keywords: Housing welfare, Housing standard, Housing vulnerable groups, COVID-19

DOES NEIGHBOURHOOD ENVIRONMENT MATTER FOR PEOPLE-CENTRIC STREET TRANSITION? AN ASSOCIATIONAL STUDY OF GLOBAL PANDEMIC-INDUCED STREET EXPERIMENTS (270)

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Introduction

Pandemic-induced street experiments (e.g., pop-up bike lanes, outdoor cafes, shared streets) emerged globally during the COVID-19 lockdown and economic recovery period (Glaser and Krizek, 2021; Gregg et al., 2022; Mehta, 2022). Over the past three years, these experiments underwent distinct development trajectories. Some converted temporary implementations into permanent structures, whereas other projects ended shortly. This study aims to understand what neighbourhood environments are conducive to longer-lasting street experiments. We hypothesise a positive association between supportive built environment indicators (e.g., diverse urban functions, high intersection density) and pandemic-induced street experiment current statuses (e.g., permanent, ongoing, ended). Our findings may contribute to the explanation of people-centric street transition.

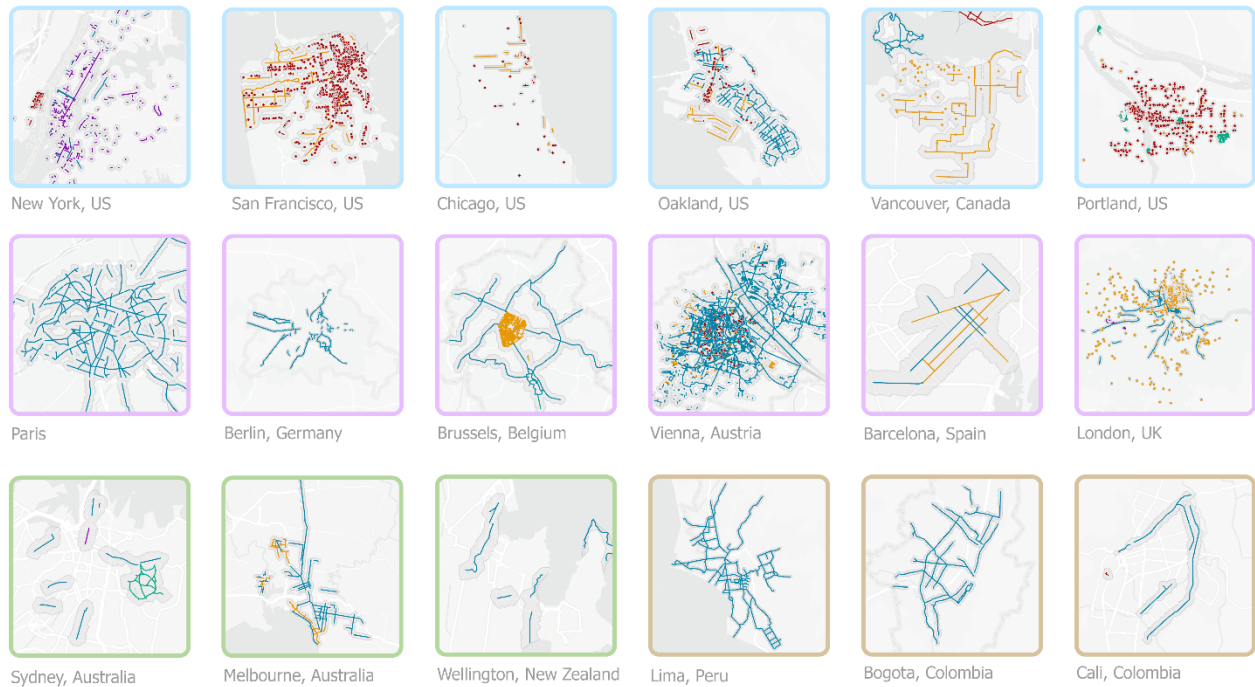
Method

Global mapping of pandemic-induced street experiments: We mapped locations of 540 pandemic-induced street experiments across 230 cities based on source information provided in Shifting Streets Dataset (Combs et al., 2020). Figure 1 shows some examples.

Street-level built environment indicators: We include population density, intersection density, link-to-node ratio, street closeness centrality, betweenness centrality, amenities density and amenities diversity. The built environments were computed based on the 15-minute walking area isochrones for each street segment. To account for city-based differences, we used relative values of built environment indicators as variables (Figure 2). The isochrones were our unit of analysis.

Street experiment outcomes: The current status was collected through case-related news reports, press releases, and social media as of January 2023. It included ‘permanent, expanded, ongoing, ended, and cancelled’ statuses.

Statistical analysis: First, we conducted multinomial logistic regressions to analyse the stabilisation of the street experiment. The explanatory variables were the built environment indicators. We further applied geographically weighted models to explain spatial clustering and dispersion in street experiments. Finally, we examined the patterns by world region, policy, and experiment type.



Street experiment types in 36 case cities

- New_Reclas**
- 1 Outdoor commerce
 - 2 Park & greenspace
 - 3 Shared street
 - 4 Bike accommodation
 - 5 Street closure
 - 5 min walking catchment area (~417m)

Geographic regions

- North American cities
- European cities
- Oceanian cities
- South American cities



Figure 1. Demonstration of global pandemic-induced street experiments



Figure 2. Closeness centrality in percentile ranking at city level

Results:

Our preliminary results, for example, showed the link to node ratio has a negative association towards the outcomes. The higher link-to-node ratio, it turns out, leads to more likelihood of ending a street experiment site. These streets should be busier roads with better connections in the network. Intersection density, however, did not turn out to influence experiment outcomes. We are still pending detailed results that are at a more granular level, in which we intend to identify national variations and type variations.

Discussion and conclusion:

This study provides an understanding of why some street experiments that emerged from the pandemic could stay and why some ended from the aspect of the neighbourhood environment where the experiment took place. Scholars speculated a critical juncture towards a people-centric street transition from these street experiments. In a greater scope, our study questioned a global pattern and can contribute to the answer of the 'critical juncture'.

Keywords: Tactical urbanism, street experiment, built environment, global study, people-centric street

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POST-EPIDEMIC ARA COMMUNITY MICRO-REGENERATION OF ACTIVE HEALTH INTERVENTION: A CASE STUDY OF TONGDA COMMUNITY IN WUHAN, CHINA (276)

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Under the fast-paced modern urban life, unhealthy lifestyles such as insufficient physical activity are common among Chinese residents, and the sub-health and chronic patient population is expanding, further increasing the risk of residents infected with epidemic diseases. As the spatial carrier of urban residents' daily life, the physical environment of the community largely determines the physical health status of residents. Therefore, under the background that community renewal has become the core issue of urban construction in China at present, community micro-regeneration from the perspective of active health intervention has gradually become the focus of improving residents' health by creating high-quality healthy living environment to meet the health needs of residents' physical activities, so as to actively prevent and control diseases.

According to the literature research, the daily physical activities of residents in the community can be divided into three categories: necessary activities, optional activities and social activities. Necessary activities are relatively fixed and cannot be easily increased. Meanwhile, optional and social activities, which depend on high quality physical environment conditions, are the effective way to increase physical activities. "Active health intervention" refers to the intervention of residents' optional and social activities through the optimization of space environment design, to expand the scope and intensity of activities and to enhance the willingness to go out and interact, thus promoting physical activities and achieving the effect of disease prevention and health improvement.

The improvement of outdoor environment quality can stimulate residents' potential physical activity demand and guide their healthy behaviors from two aspects: path and place. Firstly, by optimizing the walking environment, residents can expand their activity space; secondly, by improving the attraction of the places where they stay, residents can extend their activity time. Accordingly, the active health intervention in community space should start from optimizing the walking environment and improving the attraction of public place, which can be divided into six aspects: road connectivity, environmental safety, spatial amenity, functional complexity, well-balanced layout, and characteristic quality.

Taking Tongda Community in Wuhan, China as an example, based on questionnaire survey and in-depth interviews, this paper summarizes the current community spatial negative characteristics of active health intervention, and proposes 6 design concepts of "reshaping a connected and accessible road system, building a safe and reliable walking environment, forming a pleasant and identifiable travel space, enriching the commercial service functions, building a well-balanced public activity space system, and creating a high-quality activity site with local culture". Accordingly, it put forward 10 measures from the perspective of active health intervention, including connecting roads, strengthening driving and parking management, renovating road pavement and accessibility facilities, protecting pedestrian right of way, upgrading lighting and security facilities, establishing community identification system,

beautifying greenway system, reconstructing of existing idle buildings, upgrading commercial facilities along the street, and guiding stall economy. It provides a new research perspective on how to better promote the health of community residents in the micro- regeneration of old residential areas in China, and provides a reference for the construction of healthy communities with active health intervention.

Keywords: China, residents' health, community public space, micro-regeneration, active health intervention

THE OVERLOOKED: IMPACTS OF COVID-19 MEASURES ON THE LIVELIHOODS, MOBILITY AND ACCESSIBILITY OF MARGINALISED GROUPS (296)

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The pandemic has inarguably affected the lives of all city inhabitants, socially and economically. Shutdowns of economic sectors and facilities, as well as mobility constraints that resulted from governmental measures to curb the spread of the pandemic, have affected the accessibility and livelihoods of all city inhabitants, some more than others. This research, therefore, investigates the impact of the pandemic on the livelihoods of marginalized groups as a result of constraints in mobility and access to infrastructure and services as well as (loss of) income opportunities. We categorize marginalized groups based on key components that generate or amplify accessibility-related exclusion. These are understood to include, but are not limited to, low income, higher age, gender, physical and mental disabilities, and homelessness, which intersect with race, class, and sexual identity.

The debate on issues of equity, justice, and quality of life in relation to urban mobility (Churchill and Smyth, 2019; Lubitow, Abelson and Carpenter, 2020; Lucas *et al.*, 2018), advocates for improved urban mobility for both social inclusion and people's livelihood and well-being. This debate has identified multiple dimensions of social exclusion (Church, Frost and Sullivan, 2000) that involve physical, economic, temporal, spatial, psychological, and information aspects. Inclusive mobility has certainly been challenged by the pandemic (Koehl, 2021). However, the extent to which people's livelihoods have been affected due to reduced accessibility and the emergent opportunities or challenges of virtual access is yet to be determined.

COVID-19 has brought a disruptive new dimension to the link between accessibility and inclusion. The pandemic meant that not only those who must be present at work face new risks and disadvantages compared to those who can more easily work from home, but also those who depend on public transport to get to work face a double burden. The same is true for users of social services, dependent on organisations and facilities that provide consulting, health care, food, and shelter.

This research gives insight into the complex ways in which the pandemic and lockdown roles have affected their livelihoods through both direct mobility restrictions and indirect effects on the functioning of other infrastructures and services as well as access to income-generating activities and the specific ways marginalised groups have been able to cope with these effects. We compare the different situations and lockdown regulations of the Ruhr region, Germany, Cape Town, South Africa, and São Paulo, Brazil. Through expert interviews with providers of social services and operators of critical infrastructures, the study offers an understanding of the disruptions and the impact on various levels of society and the economy (macroscopic). In addition, narrative

interviews with marginalised groups show the direct and indirect impacts of these disruptions on a household level (microscopic).

The research's output will be policy recommendations to guide political and administrative practices on reducing mobility-related vulnerabilities and inequalities, thereby increasing the resilience of marginalised groups based on lessons learned across the participating cities. We intend to assess the impacts of sudden changes on the livelihoods of marginalized groups to build upon and advance new perspectives and insights that inform the appropriate and effective responses to support continued mobility and accessibility for the benefit of the livelihoods of marginalized groups in order to enhance their resilience.

Keywords: social resilience, marginalised groups, exclusion, accessibility, livelihood

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AMPLIFYING WEAK SIGNALS IN CLIMATE- RESILIENT URBAN PLANNING (331)

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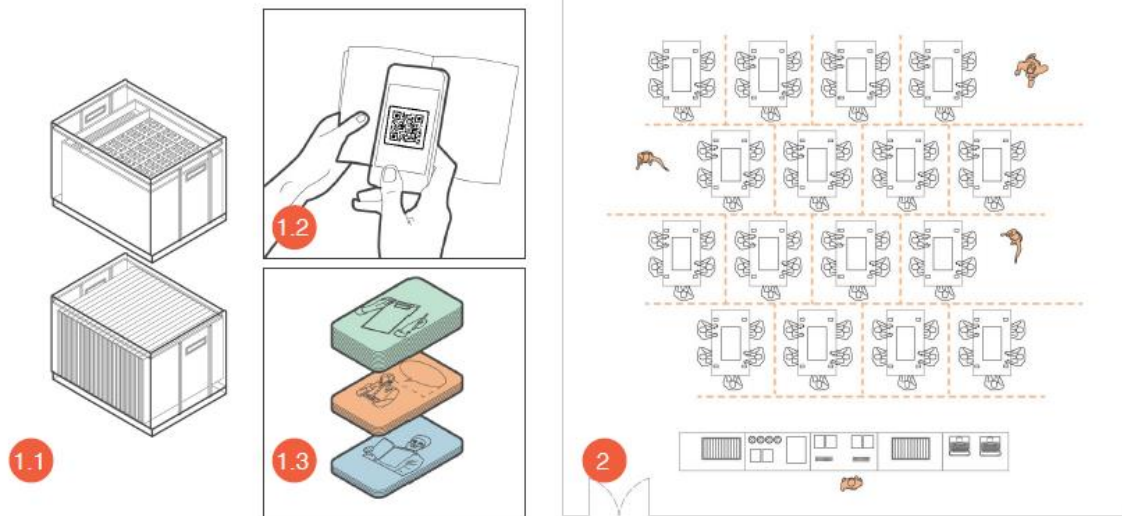
The impacts of climate change on the built environment and socio-ecological inclusion are two shared concerns central to the design and planning of just transitions in cities. In this context, transdisciplinary convergence processes and knowledge integration are required but risk alienating peripheral actors and their knowledge. Moreover, there is a paucity of insight into effective methods for the inclusion of these so-called ‘weak signals’ from peripheral actors that carry the potential to change the course of the transition. Design thinking is lauded as a means for navigating complexity and accelerating integrative learning. We report on an experiment to develop new design methods for engaging peripheral knowledge in transitions of the built environment towards climate-resilient cities.

This project was conducted by academics within the Resilient Delta Initiative, a research and education partnership developing methodologies for convergence to address societal challenges within the Rotterdam delta region. The project explores methods for distributed engagement and knowledge integration beyond the typical small-group setting. The development of these methods was conducted in a 2-part workshop setting with 79 MSc-level students from 36 countries participating in the 2022 Summer School ‘Planning and Design of the Just City’ at Delft University of Technology. The Hague’s Scheveningen Harbor was introduced as the case study site and an urban resilience expert presented the city’s official heatwave strategy as a baseline for the amplifying weak signals workshops.

We introduced a building block methodology (Figure 1) as a modular architecture for constructing the amplifying weak signals (AWeS) methods. The students used the building blocks to construct their AWeS method consisting of a peripheral actor, knowledge type and one or more design instruments. After designing their methods, the students conducted fieldwork at Scheveningen Harbor. A week later, they participated in a simulated strategy-making session where they integrated the peripheral knowledge they collected into the city’s baseline heatwave strategy. Data collected from workshop materials, group MIRO boards, and two ex-post surveys were analyzed using Atlas.ti. We were mainly interested in the following questions:

1. What are the (dis)advantages of different combinations of design instruments, actors and knowledge types?
2. To what extent did the inclusion of the peripheral knowledge shift the baseline strategy and what were the issues and parameterized knowledge included in this shift?

Preparing for the Workshop



Playing Cards with descriptions of the building blocks of the method, along with physical materials like stationary and scrap material, and a printed booklet with links to online resources were made available to the participants.

The room was arranged as shown, with each participating group assigned a table. A larger table with more materials was present at the rear end of the room.

Fig. 1 Building block methodology and workshop setup.

Out of around 900 possible building block combinations, 18 methods were created by the students. While final analysis is ongoing, key findings are emerging. For example, the majority of issues elicited by the methods were classified as either built environment issues or social factors. Building on this, the new heatwave strategies showed the integration of new social issues rather than a drastic departure from the baseline strategy of the city. This study shows that eliciting socio-ecological factors from peripheral actors – when done using an appropriate method – can produce knowledge that can be congruent with resilience strategies produced through convergence among experts. In our talk, we discuss the research findings and their application in the production of guidelines for facilitators to integrate peripheral knowledge in convergence processes. Ongoing work to develop the guidelines in the form of an open access, interactive repository of knowledge elicitation methods for climate-resilient urban planning will also be previewed.

Keywords: Urban resilience, design methods, heatwaves, peripheral actors, knowledge convergence

ATTEMPTING RURAL REGENERATION IN BORDERLINE SETTLEMENTS OF POGONI AFTER COVID-19 (335)

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Since March 2020, Covid-19 pandemic has caused an unprecedented social, political and economic crisis throughout Europe and the world. The fear of confinement due to lockdowns led many citizens to flee to rural areas, where they stayed throughout the several Covid-19 waves. However, at the end of the lockdowns, they returned back to the cities. On this occasion, an interesting discussion on the consequences of urbanization and the desertification of rural areas is brought back to light.

An important number of Greek rural areas have been degraded, isolated and abandoned. Furthermore, they have not yet been the subject of specialized spatial planning and analysis, as priority is given mainly to urban centers.

Through the case study of the broader community of Pogoniani in Epirus, the possibility of reviving rural settlements is investigated. This particular community consists of four borderline rural settlements and represents an important example of an area close to the Greek-Albanian borders that faces severe problems of abandonment and isolation. In the past, these four villages of Pogoniani were important cultural and educational centers of the region. However, the increase of urbanization, the economic crisis and the absence of initiatives for maintaining an active population in the area, led to the population's reduction, as well as the cultural degradation. Therefore, this work aims to highlight the importance of a thorough study of the course of the desertification and isolation of the Greek countryside.

The experience of the pandemic change brought new opportunities for rural development, a fundamental factor in achieving the SDGs. For this reason, this research sets out to investigate the character of a modern management of the rural areas and contribute to the revival of these isolated communities, following the values of urban and regional planning. Through an *in situ* observation of the broader community, a SWOT analysis, as well as the presentation of national and international case studies of rural regenerations, the project examines whether the pandemic has created a window of opportunity for regional authorities to create new and efficient strategies and policies regarding rural settlements. In a world that continuously changes, there is a constant need for communities to meet new challenges, adapt and prosper in turbulent times.

The subject of this paper is considered critical and needs immediate attention, as rural areas gather most of the planet's natural capital, which is currently being depleted and degraded. In fact, the UN's World Social Report 2021 calls for a review of rural development aiming to end the gap between rural areas and urban centers, as well as better protecting the health of the planet.

Keywords: rural regeneration, decentralization, desertification of settlements, post-pandemic rural planning

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THE RELATIONSHIP BETWEEN NATURAL RESOURCES AND CHILDREN'S INTERACTION WITH NATURE IN EXPERIMENTAL PRIMARY SCHOOLS: A STUDY ON ENVIRONMENTAL SETTINGS AND CURRICULUM IN TAIWAN'S EXPERIMENTAL PRIMARY SCHOOLS (406)

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Children's intellectual development has always been the most important part of education and the traditional education method in Taiwan tends to make children lack understanding of the neighborhood and the right to interact with the community, which in turn affects their development. In recent years, Ministry of Education has been aware of this issue and has made adjustments to it. The Ministry tries to learn from experimental education to improve children's development, and has promoted the "Outdoor Education Implementation Program" to encourage schools to take students outside of school and expose them to nature. However, since 2019, the COVID-19 epidemic has spread around the world, causing negative impacts and hindrances to the implementation of the "Outdoor Education Implementation Plan". It also drastically reduced children's opportunities for outdoor activities and interaction with nature. Compared with the traditional schools, experimental schools introduced natural resources into school spaces earlier. Therefore, we hoped that through the study of the adjustment strategies of experimental schools, reviewing the assistance and restrictions that can be provided by natural environment. It is not only to take care of children's developmental rights, but also to let the vulnerable groups obtain the right to participate in environmental planning. Since elementary school is a national compulsory education in Taiwan. it is a relatively fair and equal field regardless of social status background Therefore, we choose Taiwan's experimental primary schools are selected by surrounding environment and ecological education concept as the reference object. At the same time, we also considered the time, frequency and place of children's exposure, and translated them into a visualized axial map. With questionnaire interviews for students and parents as the basis for development status. Compared with the differences in the impact of children's interaction with nature during the period of epidemic. In the future, it will provide a basis for Taiwan's traditional education on the impact of the epidemic and the adjustment of campus and surrounding environment planning.

Keywords: Campus space planning, Child development, Natural resources, Experimental Primary School, Epidemic situation

COMMUNITY-BASED SOCIAL CAPITAL AND ECONOMIC RESILIENCE OF SMES IN IRAN: THE ROLE OF SOCIO-ECONOMIC AND BUILT-ENVIRONMENT CHARACTERISTICS OF THE NEIGHBOURHOODS (434)

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This research is funded by the Urban Studies Foundation research grant on the ‘Pandemic and Cities’ call. This multidisciplinary study investigates the impact of community-based social capital (CSC) on the economic resilience of Iranian small and medium enterprises (SMEs) during the pandemic and how this relationship changes with various socio-economic (e.g., age/income distribution, ethnic diversity) and built-environment characteristics (e.g., land-use mix, density, connectivity, and mobility) of the neighbourhoods in which SMEs reside. This study contributes to providing a deeper understanding of the social and economic dimensions of pandemics on people’s lives and places by demonstrating how the power of community can be harnessed to create resilient local economies and neighbourhoods.

Research Context:

Iran is among the top 10 most severely affected countries by Covid pandemic, both in terms of the death rate and economic downturn [1]. Unlike developed countries, the government in Iran was unable to provide much-needed financial support for businesses during the pandemic. Even prior to the pandemic, due to sanctions, Iran was in its weakest economic state of the last three decades. The pandemic further intensified economic pressures and had a significant negative impact on businesses, exacerbating spatial and economic inequality [3]. During the pandemic and in the absence of government financial supports, social capital that SMEs had established with their community remained among the few channels that could potentially help them throughout the pandemic and acted as a glue that held the community together.

Research Objectives:

This study has four main objectives:

- 1-** To provide a definition, conceptualisation, and measurement for SME’s community social capital (CSC) at the neighbourhood scale that captures the multifaceted nature of this complex phenomenon.
- 2-** To investigate the impact of structural and relational CSC on different dimensions of SME’s economic resilience (i.e., resistance, recovery, and adaptation) during the pandemic.
- To investigate the moderating role of the **3-** ‘built-environment characteristics’ and **4-** ‘socio-economic characteristics’ of neighbourhoods on the impact of CSC on SMEs’ economic resilience during the pandemic.

Methodology:

This study adopts a mixed-methods approach and constitutes of two analysis phases. In the first phase, we purposefully selected 6 neighbourhoods from Isfahan –the third largest city in Iran– to represent various socio-economic features (e.g., deprivation levels and income distribution) and built-environment characteristics (e.g., density, land-use mix, and distances from the city centre). In each neighbourhood between 6 to 8 interviews were conducted with the SME owners (40

interviews in total). In the second phase, the initial pool of variables for measuring CSC and economic resilience (obtained from the literature) were refined by including the emerging factors from qualitative analysis in the first phase. We used the developed survey to collect data from 150 SME owners in the 6 selected neighbourhoods. Using structural equation modelling we analysed the relationship between CSC and economic resilience of firms and tested the hypothesized moderating effects. The SCS framework is presented in Figure 1.

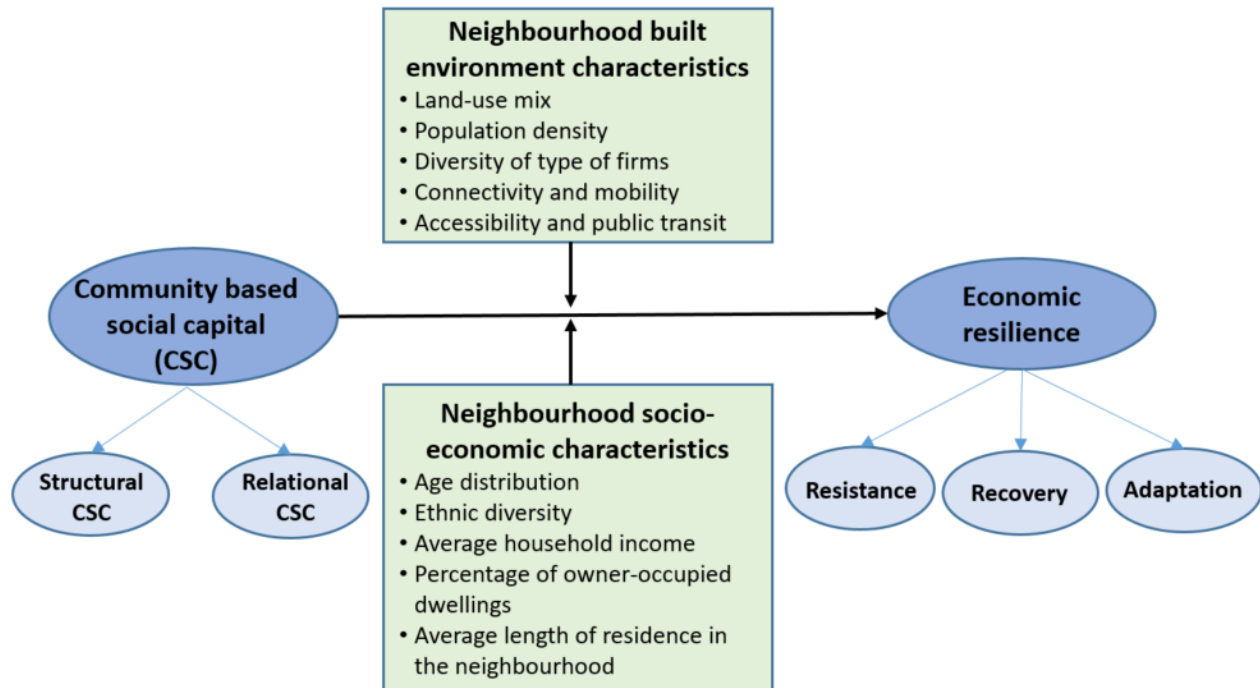


Figure 1 CSC Framework

Findings:

We found that the socio-economic and built-environment characteristics of the neighbourhood can change the way CSC affects SMEs' economic resilience (amplifying certain CSC benefits or exacerbating damage). For instance, this effect varies in inner-city neighbourhoods with better connectivity and mobility (compared to outer-city neighbourhoods), disadvantaged and peripheral neighbourhoods (compared to affluent ones), in neighbourhoods with localised economies (compared to more centralised ones), or in neighbourhoods with more land-use diversity and higher population density. Our findings have implications for other countries, as Iran reflects wider patterns within the SMEs sector in the low- and middle-income countries.

Keywords: Community-based social capital, resilience, small and medium enterprises (SMEs), socio-economic characteristics, built-environment characteristics

PLANNING THE 15 MIN CITY-THE CASE OF CHANIA (480)

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Sustainable urban mobility policies focus on the promotion of cyclists and pedestrian networks. The basic idea of these plans is to make cities friendly for pedestrians and cyclists with the development of networks that connect urban uses important in the urban citizen's daily journeys.

The allocation of public spaces and functions is an important factor that can shape sustainable cities in the field of urban mobility. The proximity of public uses and areas supported by compact urban development, with residence areas, and their easy accessibility is decisive for the achievement of sustainable cities. So, compact urban forms combined with the "proper" allocation of public uses can be a tool for the promotion of cycling and pedestrians.

The current paper will examine the possibilities of a typical Greek city, Chania, to be developed as a 15minute city. The city is chosen as it combines dense development in its historic center, and sprawled development in its borders, so these contradictions are decisive for its sustainable mobility development. Its inhabitants and visitors mostly use cars for their daily needs fact that is caused by the lack of pedestrians and cyclist networks and the fragmental way public uses and areas have been diachronically developed in the city. Research will examine the positions of public uses and areas, their connections with mobility networks and it will evaluate their accessibility. Finally it will propose strategies for the development of sustainable urban mobility and it will examine the prospects of the development of public uses and areas in a way which will promote sustainable urban mobility.

Keywords: 15 minute city, post pandemic cities, Chania, urban planning

CHANGES IN URBAN SPATIAL STRUCTURE CENTRALITY AFTER COVID-19 PANDEMIC IN SEOUL, SOUTH KOREA (500)

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Historically, cities in general have been systematically designed to respond effectively to factors that threaten the health or security of their residents. Modern urban planning, however, also seeks to construct an urban space that can respond effectively to new infectious diseases. Empirical evidence from the previous pandemic shows that both the outbreak and spread of infectious diseases correlate highly with population density. Thus, during a pandemic, it is common for government health authorities to implement various non-pharmaceutical interventions to break the links that facilitate the spread, and one of these in particular, social distancing, has a great influence on urban space. The core effect of social distancing on urban space lies in the change in the centrality of the urban spatial structure. This study investigates how the urban spatial structure centrality changed before and after the COVID-19 pandemic using de facto population data of Seoul. Specifically, as a clustering analysis, I performed a descriptive spatial analysis and spatial autocorrelation analysis, and as a centrality analysis, I conducted a directional distribution analysis and density gradient analysis. The results of my empirical analyses of the de facto population data before and after the COVID-19 pandemic confirmed that, first, the overall density of the de facto population in the three downtown areas of Seoul decreased regardless of weekdays/weekends and daytime/nighttime; second, the clustering phenomenon of the de facto population density in the three downtown areas as a whole was fading; third, the centroid and directional distribution of the de facto population density moved southeast regardless of weekdays/weekends and daytime/nighttime; fourth, some of the density gradients of the de facto population density in Seoul showed that the centrality of the CBD (central business district) and the GBD (Gangnam business district), which was clear before the COVID-19 pandemic, weakened. This study is significant as the first empirical study to investigate the relationship between infectious diseases and urban spatial structure centrality in South Korea. In addition, from an academic perspective, it has implications in that the centrality of the urban spatial structure was defined in two dimensions and measured operatively.

Keywords: urban spatial structure, urban centrality, de facto population, population density, COVID-19 pandemic

POST COVID19 TOPIOGRAPHY: EVALUATION OF A NEW DYNAMIC MODEL OF CITY OPERATION (588)

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The effects of the Covid pandemic were apparent in almost every aspect of not only the economic sector and the social activities but also day-to-day life, leading to a global reconsideration of the way developed cities function under these new circumstances. In order to promote social distancing, the cities shifted to a more localised and multicentral operating system. Nevertheless, limiting commuting and serving the immediate needs of the city user at a short distance from their place of residence is not only a goal of the recent health policy. The energy crisis that emerged from the ongoing diplomatic and international conditions, along with the demands of the strategy towards battling climate change, equally promotes the research for the optimal operational model of the modern city, regarding trivial functions and needs, car use, networking, and communication.

The model of a polycentric city formation is neither new nor unfamiliar. Urban planning theories developed throughout the past century present clear arguments, highlighting both the advantages and the disadvantages of this operational model. However, a contemporary polycentric city theory can serve an additional and apparently very urgent scope, the strategy for a greener environment-friendly urban space, that promotes the battle against climate change. The polycentric models of the 20th century studied possible formations of the cities searching the optimal size, use distribution, town plan and population of future cities aiming to determine which theory best serves the city user as an individual, in a predefined area. During this period, the discussion about the environment, both natural and urban, focused on matters of resource exploitation rather than protection or prevention. Today, given the turn towards a more viable sustainable environment with a more user-friendly city formation that subjects to the principles of sustainable mobility, as well as the technological means available, the implementation of a structure with multiple centres, a mix of functions and extended networking, can produce a new urban topiography that derives from the environmental principles of the 21st century.

This paper examines this theory building on this shift that occurred during the pandemic. Using the gained experience of the way the city and its users adopted the measurements and required precautions during the pandemic, it investigates the possibility of a new dynamic model for the cities, using an updated polycentric theory, enhanced with aspects of new technology and sustainable development principles, in a way that facilitates a sustainable, climate and user-friendly urban environment. As part of an ongoing research, the main objective here is to evaluate this emerging model using the economic theory, and specifically a cost-efficiency analysis, to establish a foreseeable outcome and determine and quantify the possible benefits on an environmental, economic, and social level. The analysis applies an ex-ante evaluation and uses simulation techniques and indicators to define the cost-effectiveness ratio, combined with mental mapping activities, in order to promote people inclusion in the decision-making process.

This research uses an interdisciplinary method, applying economic models on the city formation theory, aiming to reach results that can contribute to overcoming the challenges contemporary urban planning strategies and practices are invited to address, regarding urban environment sustainability, climate change and people activation and inclusion.

Keywords: post-pandemic city, urban environment sustainability, people inclusion

GREEN HEALTHY MATERIAL FOR HERITAGE-RICH URBAN DISTRICTS: A THEORETICAL FRAMEWORK FOR POSTPANDEMIC WORLD (678)

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Nowadays, in post-pandemic era in a world of turbulence, it is essential to search for an integrated planning to address the emerging in uncertainties. It is economic, social and environmental sustainability, altogether; that makes it possible for citizens to live in a healthy city. The research is to pave the way for adaptability of urban planning for the turbulent futures. The research aims to develop a theoretical framework to understand the possible threats and to organize a planning procedure for a healthy environment by the means of adoption of proper materials. The research question is “how adoption of proper green material in urban design might reduce the level of vulnerability and enhance the resilience of urban spaces in case of pandemic?”

The theoretical background and the literature review of the research highlights the role of the green chemistry and bio-material in the material in preparation of new living spaces. The literature emphasizes on the role of material selection on the amount of remaining viruses and bacteria. Therefore, the research methodology is set to address the process of selection of the best material category in the urban design projects.

The theoretical framework of the research is based on the priorities of successful intervention in the historic context and contemporization of heritage-rich urban districts. Sustainable development is based on the awareness of man towards himself and towards the natural resources of the earth, and he wants a sustainable lifestyle for all people and is against excessive consumption, waste of resources and disregard for future generations and heritage. The city and the paradigm of sustainable development can be introduced as the basis of the theoretical foundations of the research. Sustainable urban development should be seen as an integral part of a broader goal of achieving global sustainable development, a global agenda of environmental protection, intergenerational equity, social justice and geographic equity.

Based on the analytical methodology of the research, the case study should be analyzed comprehensively. The case study of the research is the historic districts of Tehran in which a considerable number of invaluable heritage sites are located. The research is to compare two different scenarios: 1- The conventional material selection in the urban design process for intervention in the historic districts of Tehran as an historic context for promote tourism and excursion. 2- The smart material selection in the urban design process based on the quality of material and level of sanitary in the surfaces in the case of exposure to viruses and bacteria.

The results of the research highlight that the lifetime of virus depends on the surface material. Therefore it suggests a smart procedure for selection of surface material in the design process. The research outcomes clarify how do we learn from pandemic era to emerge stronger and plan more resilient cities and regions.

Keywords: postpandemic planning, new living spaces, healthy material, bauchemie, green chemistry, heritage-rich urban districts, future urban design

RESIDENTIAL DISSONANCE OF TELEWORKERS, ITS IMPLICATIONS ON RELOCATION AND IMPACTS ON URBAN SPRAWL IN A POST-COVID WORLD (684)

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The Covid-19 pandemic and its associated measures of social distancing were a massive boost to the generalization of teleworking. Telework ceased to be a niche activity and currently several countries and companies are making legislative, regulatory and contractual modifications to regulate telework and make it a common working practice. A wider popularity of telework is expected to produce relevant spatial and mobility impacts which are not yet totally understood. Despite more than 30 years of research about telework, there is still no consensus about its effects on travel behavior, location patterns of teleworkers and of the firms employing them. As a result, this upsurge in telework will definitely impact the spatial organization of cities. Although there is a relative consensus that telework engagement is associated with suburban living and suburban preferences, there is contention about the possibility of telework induce urban sprawl. Recent research undertaken in the Lisbon Metropolitan Area - LMA (de Abreu e Silva, 2022) has concluded that the intention to telework is associated with longer commutes and with suburban residential preferences. These results support the hypothesis that telework is essentially a mechanism to cope with longer commutes and, as such it doesn't lead directly to sprawl. But it could help individuals with suburban residential preferences to move away from more central areas. In this context, for teleworkers living in areas with characteristics different from their preferences, telework could create the opportunity to align their location with their preferences. In this context the concept of residential dissonance, the lack of correspondence between the current and preferred residential location, a term first used in the transportation/land use literature by Schwanen and Moktharian (2004) is of paramount importance. This work main objective is to analyze the magnitude of residential dissonance of potential teleworkers in the LMA and its effect on residential relocation. As a result, this work aims to make a decisive contribution to the ongoing debate about the effects of teleworking on urban sprawl. To achieve this objective an online survey conducted in the LMA in 2021 (de Abreu e Silva, 2022) will be used. This survey collected data on residential location, preferences, satisfaction, perceptions about telework, telework practices and intention to engage in telework. Residential dissonance indicators are built and its influence on the likelihood of teleworkers matching their residential preferences with their actual location will be analyzed. The obtained results will be discussed with a focus on its implications for urban form in the post-COVID city with a particular attention given to urban sprawl implications and the possible policies to counteract it.

Keywords: Telework; residential dissonance; residential relocation; urban sprawl; post-COVID cities.

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ASKLEPIA REVISITED: LESSONS FROM THE ANCIENT GREEKS' HEALING ENVIRONMENTS AND IMPLICATIONS FOR THE PLANNING OF SALUTOGENIC CITIES AND PLACES (695)

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The recent pandemic has brought the issue of urban vulnerability to the fore, and with it, a resurrected interest in the degree to which cities are prepared to prevent and resist unexpected large scale health issues of global salience. As various forces – such as climate change and human encroachment into natural wildlife inter alia – begin to shape and alter both human and non-human habitats, there is a recognition that the frequency of pandemics may likely increase (and other so-called ‘natural events’). This calls attention to the need for better knowledge and policy reactions to articulate patterns and dynamics along with their effects on cities. At present, planning measures tend to be ‘reactive’ and mainly based on financial, technological, and infrastructural responses. However, little focus has been on with the design and planning of cities and how they can help to prevent health issues before they become embedded in an unrelenting fashion.

Looking back through history, it is possible to identify approaches that frame a more holistic response to cities linked to health and wellbeing issues. This is the case of the ‘Asklepia’ – an ancient Greek spatial arrangement conceived as a ‘healing environment’ – that suggests a heuristic and stimuli for ‘preventive medicine’ based on how the built environment situates individuals and society in space and its functioning. In the ‘Asklepia’, there is no illness if individuals are harmonised with the natural and living cycles and thus, the Asklepia can be conceived as a ‘health-lab’ aimed at restoring and maintaining connections with nature, society, and active living; a spatial experiment that corresponds with the creation of preventive environments for healthy lifestyles.

Observations on ongoing (post-covid) cityscapes from the perspective of the Asklepia may help to identify the salutogenic environments that have otherwise dropped off from health agendas. On this basis, we articulate the lessons from the Asklepia with the understanding of cities as ‘preventative medicine’ (as proposed by Corburn, 2015), and highlight nine key health resources – *environmental quality, social cohesion, integrated housing, affordable goods and services, active mobility, contact with nature, education, emotional stimulus, and connection with the living cycle* – as the basis for a re-imagined resurrection (and redefinition) of health-environment relationships. The conclusions underline a wake-up call to both adopt environmentally but also importantly, health driven development pathways in in post-covid era, wherein the restoration of health is moreover, the result of positive interactions with the environment at physical, psychological, mental, spiritual, and social levels, as observed in the ancient Greek’s Asklepia.

Keywords: Asklepia, Salutogenesis, City design and Planning

HOW DO DENSITY, EMPLOYMENT AND TRANSIT AFFECT THE PREVALENCE OF COVID-19 PANDEMIC? A STUDY OF 3,141 COUNTIES ACROSS THE UNITED STATES (726)

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Existing literature has examined the effect of the built environment on the coronavirus disease (COVID-19) pandemic. This research aims to extend the literature by relating the pandemic prevalence with density, employment, and transit factors at the county level. We employed multilinear spatial-lag regressions and time series clustering analyses using Smart Location Database of 3,141 counties across the United States. Our results show that: (1) Density, employment, and transit variables yield heterogeneous effects to infection rate, death rate, and mortality rate. (2) Pedestrian-oriented road density is positively correlated to the prevalence of COVID-19, every 0.011 miles/acre increase is associated with 1% increase in the infection rate. (3) A consistently negative correlation is observed between jobs per household and infection rate, while decrease in unemployment rate leads to increase in the death rate. (4) The combined results of time series analysis suggest that areas with low auto-oriented intersection density but high pedestrian-oriented road density are more susceptible to the impacts of pandemics. This again stressed the significance of pandemic prevention attention needed to be placed in the suburban and rural areas with low population density that existing literature emphasized.

Keywords: Coronavirus pandemic; Built environment; Road network density; Access to transit; Employment rate

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ERASE AND REWIND: RETROSPECTIVE ON THE IDEAL NEIGHBORHOOD MODELS FROM THE LAST CENTURY TILL PRESENT (730)

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Planning vibrant residential environments has been an ongoing quest and discourse in the field of urban planning. Plenty of models have been developed to outline the principles to guide residential developments addressing the housing needs and responding to the socio-ecological problems of their time. The founding model is coined with Perry's self-contained, walking-distance Neighborhood Unit developed early in the 20th century. The model implemented in many new town developments was later criticized mainly for its physically deterministic approach and anti-urban layout fostering social segregation (Rohe, 2009). Based on the criticisms of the earlier models, New Urbanists developed the Planned Unit Development (PUD) in the 1960s that has been transformed into Traditional Neighborhood Development (TND) and Transit-Oriented Development (TOD) models after the 1980s. These new translations added the notions of 'mix-use' and 'mass transit' into the ideal neighborhood models which were the missing components for attaining vitality. Besides their wide acceptance in Anglo-Saxon culture, there have also been cultural or context specific translations of general models such as the '*wijkgedachte*' model developed by the group Opbouw (the Rotterdam section of the International Congresses of Modern Architecture/ CIAM) in the 1940s. The common ground of these models is their reliance on the principles of proximity and self-sufficiency for creating a vibrant neighborhood and a sense of community. The neighborhoods of the 20th century developed based on these ideal models are now facing socio-spatial deprivation often leading to the stigmatization of these environments. In our age of mobility, urbanites are less dependent on their proximate environments as a resource base for their needs with the developments in infrastructure and communication technologies. The principles of proximity and self-sufficiency have lost their significance. Yet, the mobility constraints during the Covid-19 pandemic re-evoked the importance of proximity as well as vital residential environments. These discussions culminated into the 15–20-minute city models which have been implemented in major cities around the world after the pandemic. The 15-minute model proposed initially by Moreno in 2016 is founded on the principles of 'proximity, density, diversity and digitalization' (Moreno et. al, 2021). Learning from this crisis, neighborhoods should be recalibrated as a critical scale for the post-pandemic future of cities. In this regard, this research makes a retrospective critical evaluation of the ideal neighborhood models from the 20th century till present, based on their similarities and contradictions, success and failures, to derive insights and implications. Integrating these insights into the recent discussions will enable resilient design of neighborhoods for the future.

Keywords: Neighborhood Planning, Neighborhood Unit, 15–20-minute city

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ANALYSING URBAN VULNERABILITY THROUGH URBAN MORPHOLOGY IN ESENKENT AND GÜLSUYU NEIGHBOURHOODS IN ISTANBUL DURING THE COVID-19 PANDEMIC (737)

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During the Covid-19 Pandemic, people had restricted mobility options; for this reason, they could not go very far from the areas where they lived. Since their travel circle is limited, people had to cope with all the difficulties of their living areas, not only in buildings but also in neighbourhoods, and learned by experience how resilient their place is against problems. Although these situations vary according to each settlement, every residing region had negativities, albeit in different subjects according to the resilience of the areas. Urban resilience, in short, means that all city organisations, individuals, and institutions can adapt and survive no matter what. On the other hand, urban vulnerability is a compound that refers to the decrement in the city's ability to resist, adapt and recover against aspects of urban life in the future. Urban resilience and urban vulnerability are complementary concepts within the topics they cover. Therefore, they cannot be considered independent issues from each other.

Urban vulnerability witnesses a current debate on the unequal distribution of opportunities in the city. The issue of urban inequality, with its many dimensions, such as economic and social, can only be completed by including the title of spatial disparities. The importance of urban vulnerability in residential areas has come to the fore again during the pandemic, and it is understood how crucial it makes our cities resistant. The physical injustices experienced by residents during the Covid-19 pandemic have led to the need to rethink the production process of cities. The main purpose of this study is to examine vulnerability differences, which can be considered the opposite of urban resilience, of Esenkent and Gülsuyu neighbourhoods in Maltepe, Istanbul, through urban morphology. Although they are adjacent neighbourhoods with almost the same population density, they have different spatial vulnerability rates. The reasons leading up to this disparity need to be explained. Additionally, by examining the relationship between socio-economic and spatial vulnerability, the reflection of the space's social dynamics on the spatial dimension of the city was discovered. Therefore, the physical factors causing this difference were analysed towards urban morphology with the space syntax method on the data taken from OpenStreetMap.

As a result of the study, the importance of how spatial vulnerability in urban areas is not only dependent on the population but how it is placed will be explained. The effect of urban morphology on other city dynamics has been proven based on the difference in urban vulnerability in residential areas with the same other characteristics. It has been observed that the transportation network, which is the carrier structure of the city, and the differentiation in the building form cause different vulnerabilities in the two settlements with the same density. Thus, this research will draw attention to the generation of physical space in urban planning and design in future and will provide a rethinking of spatial production and urban development scenarios in increasing the resilience of cities.

Keywords: Covid-19, urban form, urban morphology, urban resilience, urban vulnerability

MANAGING THE PANDEMIC CRISIS IN URBAN PLANNING: EXAMINING CONFLICTS, POWER IMBALANCES, AND URBAN ACTOR'S NEEDS (821)

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The COVID-19 pandemic has brought the concept of social distancing to the forefront of public consciousness. However, this new reality has also highlighted the increasing control and isolation imposed by institutions on urban populations. These developments have exacerbated an ongoing crisis in the production of public space in urban environments, leading to a growing interest in co-production in public spaces as a solution. Yet, co-production remains more of a buzzword than a tangible strategy for citizens to actively participate in shaping and defining the spaces they use. Instead, public spaces are increasingly subject to control mechanisms, such as privatization and commercialization, surveillance, security measures, and social control protocols.

In this context of conflicting interests, public space is crossed by a variety of control mechanisms: privatization and commercialization of spaces which gather together only “those who can afford to consume” (Carmona, 2010); surveillance through artificial intelligence for the purposes of data gathering (Zuboff, 2019); safety and security measures aimed at preventing military as well as terroristic attacks and which, however, also hinder the uncontrollable livability immanent in public spaces (Schuilenburg, Peeters 2018); ultimately, with the pandemic, the variable of social control was overimposed and expressed with the explicit trenching of public squares and the transformation of space into a predetermined itinerary for controlling human flows. It is in this framework which, in parallel, co-construction and co-design processes for the supposedly shared production of public spaces have proliferated and aspire at reimagining the interaction between citizens and other stakeholders, and the formal actors of urban governance.

In such a saturated space of conflict, however, public spaces are not truly co-produced but rather re-produced, leading to a palimpsest of conflicts and power imbalances between urban stakeholders.

This mechanism of reproduction of public space entails conflict in unexpected ways, it shifts power balances and opposes urban stakeholders with contrasting needs. The city of Bologna serves as a case study, where the struggles of the homeless population, increased by the economic crisis of the pandemic, and restaurateurs claiming public spaces to make up for commercial losses, highlight the complexity of co-production in urban environments. The historic porticoes of Bologna, peculiar spaces of private ownership and public use, add another layer of complexity to these struggles, as conservation, commercialization, and collective appropriation intersect.

Interpreting the way people use (and struggle for) space in the city unravels interconnected needs, unexpected relationships, magmatic interactions between the built environment and the way people inhabit it, and eventually contributes to both theory and practice of co-producing cities. It is not, therefore, an exercise of style: it is an interpretive science with which to generate preparedness for future challenges (Lakoff, 2017). Preparedness is the adaptation and resistance

to shocks, crises, risk, where "risk" deserves to become a piece of the city's overall planning that incorporates the concept of resilience and widespread adaptability.

The present contribution will produce a photographic inquiry of the signals (Keck 2020) of space reproduction by urban actors in Bologna and explore alternative approaches to managing risk in post-pandemic cities. By uncovering the interconnected needs and relationships between the built environment and its inhabitants, this study seeks to contribute to the theory and practice of co-producing cities. The ultimate goal is to inspire a shift in urban planning from a focus on control to one of adaptation, coexistence, and governability, in order to prepare for future challenges and ensure resilience in post-pandemic cities.

Keywords: Urban conflicts, power imbalances, urban planning, pandemic

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WHAT CAN MUNICIPALITIES DO IN SHAPING THE URBAN FOOD SYSTEM: CASE OF ISTANBUL (831)

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In recent years, cities have become essential actors in food systems due to various reasons such as increasing population, urbanization, environmental destruction, exacerbating climate crisis, food insecurity, and public health concerns. Additionally, the multidimensional crisis that emerged with the recent COVID-19 pandemic and the resulting job and income losses have increased food insecurity and made food a major urban problem. The increasing role of cities, also called the "new food equation" by Morgan & Sonnino (2010), pushes local governments to prepare holistic policies regarding the food issue in many world cities. This set of policies, also defined as urban food strategies, is now an effort to create food policies to improve cities' public health, ensure social justice, and support environmental sustainability. This study evaluates urban policies by considering the Food System Approach on an urban scale. The Food System Approach emphasizes the interrelated nature of global problems in agriculture and food. Issues such as production methods, consumer behavior, food safety, climate change, use of natural resources, and socio-economic trends in the food system are interconnected and interact. In this sense, the food system approach is different from interventions made to a single part of the system and from noncommunicative/introverted approaches that do not consider its effects (for example, interventions aimed only at increasing food security). At this point, the food system approach offers an integrated approach by mapping the interactions between different subsystems, enabling the smart implementation of solutions at other scale levels. Here, it makes optimum use of existing feedback mechanisms and multiplier effects by looking at the relationship of its subsystems with each other (Berkum et al., 2018). The study aims to analyze the structure of the current situation in terms of the authority, role, and responsibilities of the local government in terms of food system activities and outputs of the food system within the framework of the Food System Approach. In this study, the roles and duties of different sub-units of the local government are determined, and problems and obstacles are identified. Although there are various studies on urban food policies and the role of local governments in the international literature, as Morgan & Sonnino (2010) points out, the lack of case studies on the changing role of local governments reveals the need for more studies. The study is expected to fill this gap in the literature with the Istanbul case study.

Keywords: urban food policies, food planning, Istanbul.

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EXAMINING THE IMPACT OF THE COVID-19 PANDEMIC ON THE SPATIAL DISTRIBUTION OF CATERING PLACES: A CASE STUDY IN TANGSHAN, CHINA (860)

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During the COVID-19 lockdown periods, most residents had to stay at home, and apart from essential facilities, other amenities were closed. Catering places were no exception (Honey-Rosés et al., 2020; Mathieu et al., 2020), while as the daily essential needs, some of them integrated with digital systems for taking away (e.g., Deliveroo and Meituan), which impacted the spatial distribution. Therefore, what is the impact of the COVID-19 pandemic on the spatial distribution of different catering types? This study takes Tangshan city center in China as an example. The POI data of 10 different catering types, about Catering related places, Chinese restaurants, foreign restaurants, fast food restaurants, leisure catering places, coffee shops, tea houses, cold drinks shops, pastry shops and dessert shops, from the classification of source area business model and food category of food POI data by AMAP, with their locations in 2019 and 2022 were collected by development API (Application Programming Interface) provided by the map manufacturer on the network, to explore the changes during the COVID-19 pandemic. Through the Space Syntax analysis, we examine the Integration and the Choice properties at 400m, 800 m, 1200 m, 2000 m, 5000 m, 10,000 m and n, selected 400m, 800 m and 1200 m as representative for the micro-scale; 2000 m and 5000 m for the meso-scale; 10,000 m and n for the macro-scale. And then, the results of Space Syntax were analysed with the changes of the spatial distribution of 10 catering types (POI data) between 2019 and 2022. The study found that during the COVID-19 pandemic, the relation between the distribution of most catering types and the Choice and Integration properties decreased at all scales. However, during the pandemic, the distribution of the cold drink shops is more related to the Choice and Integration properties at the macro and mesoscale. In general, the highest relation between the distribution of catering industry and the integration and Choice properties is at the micro-scale. However, at the same scale, Fast-food restaurants and catering-related places are less related to in the Choice and Integration properties during the pandemic. This study contributes to understand the spatial changes of different catering types in relation to spatial configurations, and provides a basis for urban design after the COVID-19 pandemic.

Keywords: space syntax, the COVID-19 pandemic, catering, daily life

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GREEN SPACES AS STRATEGY FOR INCLUSIVE URBAN REGENERATION (887)

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The acknowledgement of the importance of urban green spaces is well established, and recently the new challenges of building healthier and more liveable cities have drawn attention to these areas. The recent COVID 19 pandemic and the need to be confined indoors has further highlighted the need for cities to be endowed with a network of urban green spaces capable of guaranteeing the inhabitants spaces for leisure, socialization, and interaction with others and with nature. On the other hand, urban green spaces have a high capacity to improve urban environments and mitigate climate change (e.g. regulating pollution, flooding, heat waves). Moreover, the desire to change the supply chains of cities and to produce proximity food has given rise to some experiences of creating community urban gardens that allow the production of food, contributing to the economy of each one, in addition to fostering new interactions between neighbours and fostering the sense of community.

In Portugal the small average size of cities and the existence of old green areas in most cities allows the inhabitants to have easy access to green leisure areas. However, most of these spaces are historical spaces, with a limited use and conditioned by their own spatial features since they were designed for little more than walking and meeting. Regenerating these green spaces with the involvement of community can be an opportunity for spatial improvements but also behaviour change of citizens pursuing better liveability and social innovation. Citizens have crucial "common knowledge" that can make it easier for planners to understand local values and resources that may not be distinct to an outsider. Public participation is key to understanding the desires and needs of the community to certify that green spaces are well-suited. Citizen's participation can also improve self-esteem, sense of belonging, fundamental to the sense of well-being of communities.

Based on the case of Coimbra, an old city that was the first capital of the country, we intend to analyse the green spaces, their use and communities' perception, through surveys and mapping of existing spaces. The focus is on revealing shared values of local communities, but also common needs as a starting point for setting up participatory urban regeneration strategies. After we intend then to cross these spatial and social data with other case studies, revealing challenges and opportunities of improving the quality of life of the population through the regeneration of these green spaces with the communities.

Keywords: Urban regeneration, green spaces, citizens participation, inclusive city

DIFFICULTIES, MECHANISM AND DEVELOPMENT STRATEGIES OF URBANIZATION IN INTERPROVINCIAL AREA: CASE STUDY IN HUANG-HUAI REGION OF CHINA (891)

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Though belong to one country, provinces in China are the highest-level administrative regions with relatively independent fiscal and taxation power, and “rigid boundaries” are formed between provinces, resulting in obvious border effect. The interprovincial border regions are often restricted by “administrative area economy”(An, 2004), and lag behind the average level of the province in economic development. The development of these regions is not only an economic issue, but also about social justice and stability.

Huang-Huai region is a typical cross-border region located between Yellow River and Huaihe River, and among the cross of Shandong province, Jiangsu province, Anhui province and Henan province. Its urbanization level was only 51.62% in the year 2020, lagged 12 points to that of China and its GDP per capita was only 7427 US dollars, only 67% of the national average level. The region has obvious border characteristics, such as poor economy, lagged urbanization and large out-migration. Although Huang-Huai region is far away from the central cities, but still has a high population density. Based on this issue, we take Huang-Huai region as a case for this paper to discuss the urbanization difficulties, mechanism and development strategies.

The paper analyzes the urbanization of Huang-Huai region from four aspects: the geo-spatial marginalization, the economic marginalization, the political marginalization and the sociocultural marginalization. Using the census data and China Migrants Dynamic Survey data, through empirical investigation in villages and towns of Huang-Huai plain, the paper tries to summarize its characteristics of urbanization and points out its development dilemma, interpret the mechanism. And then, several regional cross-border integration strategies and policy recommendations are proposed.

Studies show: 1) “Migration-urbanization” plays an important role. Due to its marginal location, connection between cities in Huang-Huai region and their provincial capital cities is weak, most of the population in the southern part flows to Yangtze River Delta, and the northern, to Beijing-Tianjin-Hebei Urban Agglomeration. 2) The contribution of industrialization to “local urbanization” is limited. Due to its marginalization in economic, the off-farm employment that local cities and towns provided is insufficient, a large number of urbanized population was not employment-oriented, but driven by basic education or resulted from administrative adjustment. 3) The differences in population and economy between cities, as well as between urban areas and county-towns, are relatively small. Due to the political marginalization, Huang-Huai region has been neglected in national and provincial unbalanced development strategies, the whole region is homogeneous, showing a low-level and balanced urbanization pattern. 4) The label of “Huang-Huai” is an identity that locals are eager to get rid of(Honig, 1992). A severe brain drain phenomenon raised as a result of sociocultural marginalization.

Then in light of the latest trajectory of urbanization in Huang-Huai region, the regional integration strategies are proposed from getting rid of the four-fold marginalization, including to strengthen its economy with labor-intensive industry, to establish a trans-provincial regional governance system, to cultivate large city centers and even metropolises, to excavate the ecological and cultural values of its thousands years of history, and to strengthen cultural integration.

Keywords: border region, urbanization, marginalization, Huang-Huai region, China

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LEVERAGING SPATIAL CAPITAL FOR PANDEMIC-PROOF LIVING ENVIRONMENTS (973)

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Studies suggest that communities with greater social and economic capital are better equipped to deal with crises such as the covid-19 pandemic (Kiruthu, 2014; Pitas & Ehmer, 2020). Although social, economic, and cultural capital influence the impact on a community during a pandemic, it is spatial capital that anchors the community to a physical space. Depending on access, ownership and control of physical space, spatial capital becomes an enabler or a discriminator. It plays a critical role in creating, sustaining and shaping spatial inequalities. However, spatial capital has been scarcely studied in urban planning and even less so in terms of its operationality in research and practice.

Through this study, we redefine spatial capital and propose a novel operational framework - AURA - to measure the ability of different groups to Access, Utilize, (right to) Refuse and Adapt the spatial capital. The framework is used to understand how spatial capital has affected varied communities' abilities to endure the impact of the pandemic by examining the scale, typology and user relationships of various spaces before, during and after the covid-19 pandemic.

Methodologically, the paper will review existing theory arriving at initial framework indicators to analyse the forms, roles and attributes of spatial capital on a neighbourhood scale. We will then conduct a comparative analysis of case studies in selected neighbourhoods in Mumbai, India and Rotterdam, the Netherlands. The case study research will consist of a grounded approach and multi-perspective analysis to examine spaces of various scales, ownership and functions to understand how groups generate, use and engage with spatial capital. The inferences and lessons from the case studies will further help modify, upgrade and develop the analytical framework as a tool for broader use. The further stages of work include identifying weak spots in the neighbourhoods and formulating evidence-based spatial suggestions that contribute to making healthier cities for all.

As observed globally during the ongoing pandemic, the already marginalised and vulnerable communities have suffered the greatest negative impact, bringing a renewed interest in the issues of spatial and social justice. By bringing evidence from the most vulnerable neighbourhoods of two diverse contexts, we add an empirical perspective to the evolving knowledge of spatial capital. We hope the framework can serve as an analytical and decision-making tool for contexts beyond the two countries to help reduce spatial inequality and contribute to ongoing efforts towards just and equitable cities.

Keywords: Spatial capital, Spatial inequalities, Post-pandemic city, Just City

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