

HEAP DEVELOPMENT IN THE RUHR METROPOLIS
THE 'MOUNTAINS OF THE RUHR' AS PLACES OF IDENTITY

Anne Budinger¹, Hanna C. Schmitt¹, Maria Ze¹, Olivia Karulska¹, Tino Wenning¹

¹ Regionalverband Ruhr (RVR)

1. Introduction

For decades, the Ruhr region in Germany was shaped by the coal mining industry. In the late 19th and early to mid-20th century, industrialization and accompanying urbanization processes turned small villages into large cities. In consequence, the Ruhr region became the largest industrial agglomeration in Europe with coal mines being both the main employer and an essential identity-forming feature.

As of today, the Ruhr region has undergone another set of decades of structural change. Former industrial sites were re-cultivated and renaturated and by now, the region no longer understands itself as the 'Ruhr region' but as the 'Ruhr Metropolis'. Within all the change, however, there is one constant – a special kind of *place* that remains: the heaps. As former collection points for coal mining overburden and the collieries' slag, they are now the 'Mountains of the Ruhr', a vital element of Green Infrastructure (GI) of the Ruhr Metropolis and still an anchor of identity for 5.1 million people.

The regional planning authority of the Ruhr region, the Ruhr Regional Association (German: 'Regionalverband Ruhr' short RVR), is responsible for the preservation and development of open space and GI. Currently, the RVR develops 46 slag heaps and will take over several more in the near future (cf. Website RVR, 2022). The exciting challenge for the RVR is now to make the 'Mountains of the Ruhr' usable for the region's inhabitants, to foster the ecological value of this special GI in the overall open space system and to bring together cultural preservation and strategic development.

This paper offers insights into the transformation processes of the Ruhr region (see section 2), the change in identity of its slag heaps and the planning and development of heaps as an anchor of urban GI (see section 3). Recent findings on the narrative and *place*-making of heaps are presented, highlighting both the storyline for the 'Mountains of the Ruhr' and the individual character of the heaps (see section 3.3). Thus, this paper offers an empirical example of the shift in meaning of *place*, which creates identity, drives ecological restoration, and is one milestone of the green transformation of the Ruhr Metropolis (cf. RVR, 2021).

2. Transformation processes

Similar to the rust belt in the US, the Ruhr region has undergone a tremendous structural change over the last 300 years, which is why the Ruhr Metropolis has extensive transformation experience. Change is the region's 'normal state' and so nowadays, after decades of industrial and post-industrial transformation, the region is currently shaping its 'green transformation'.

2.1 Post-industrial Transformation of the Ruhr region

After decades of industrialization, in the late 1950s, the importance of coal and steel began to decline. Due to a growing competition on the world market for coal as well as the availability of cheaper energy sources like gas and oil, prices for coal began to drop. For the Ruhr region, this trend resulted in a halving of the number of coal mines in just one decade, known as the so-called 'death of the coal mines'. Shortly after, in the 1970s, the worldwide steel crisis led to an unemployment of ¼ of the workers in steel manufacturing industries within another mere decade. (RVR 2018, p. 4)

So by the end of the 1980s, the two former core industries and main employers of the Ruhr region, were strongly diminished. Luckily, the Ruhr region initialized the process of structural change towards the knowledge-based and service sector rather early. In the 1960s, the first Universities were founded, bringing research and innovation into the region. (RVR 2018, p. 4)

Other catalysts of post-industrial transformation were the International Building Exhibition (IBA) Emscherpark, which took place from 1989 to 1999, and the accompanying 'Ecology Programme Emscher Lippe' (German: 'Ökologieprogramm Emscher Lippe', short: ÖPEL). The aim was to support the renewal of the Ruhr region, especially regarding its ecosystems. 5 billion Deutsche Mark (former German currency, about 2.5 billion Euros) were granted to the region in order to reshape and re-naturalize the whole Ruhr Metropolis. (Internationale Bauausstellung Emscher 1996, p.7)

A core focus of the IBA Emscherpark was on the greenways of the region.¹ The greenways are a very characteristic GI for the Ruhr Metropolis, as they run vertically in between the densely populated cities of the region and are one reason for the founding of the RVR in 1920 by Robert Schmidt. The initiative of the IBA was to qualify these greenways into lively *places* of both work (in the park) and recreation, of biodiversity and arts. In this context, special attention was payed to the development of the heaps (RVR 2018: 5 and Internationale Bausausstellung Emscherpark 1996, 10 pp.), as shown in section 3.

The post-industrial structural change was the start of a shift in meaning of GI in the Ruhr Metropolis and especially its heaps. Although the inhabitants of the region understood the transformation processes quite early as they experienced them in their everyday lives, it took the IBA Emscherpark to also change the perception of the Ruhr areas for people from outside the region. While the Ruhr region

¹ Another core project of that time was the revitalization of the highly polluted river Emscher, which is in fact to be finalized by the end of this year (2022).



was perceived to be a 'gray' region with smoking chimneys, environmental pollution and little green spaces for many decades (RVR 2018, p. 4), the image changed over the years to a 'green' metropolitan region with universities, colleges and technology centers.

Nowadays, as many of the 5.1 million people living in the Ruhr Metropolis are second- or third-generation immigrants, the region is diverse and rich in culture. Diversity also shows in flora and fauna, as former *places* of mining and steel industry today are habitats for many species, resulting in a unique ecology also known as 'industrial nature'.

2.2 Green Transformation in the Ruhr Metropolis

As described above, the green transformation of the Ruhr Metropolis roots in the post-industrial structural change and especially the IBA Emscherpark. However, in 2020, the region decided to foster the green transformation also on a strategic level by agreeing on a common vision: the Ruhr Metropolis wants to become the greenest industrial region of the world.

Certainly, this vision entails more than the color 'green': it stands for sustainability and resilience, for facing today's and future challenges and about guaranteeing a good, 'livable' life for the people of the Ruhr region. (Website RVR 2022) Although this vision is ambitious, the region has good preconditions: 74 percent of the Ruhr area are vegetated and even in densely populated areas, green spaces make up more than 50 percent. (RVR 2021, p. 10) Moreover, within the past 30 years, the share of public green spaces has doubled, a trend, which is to be continued (RVR 2021, p. 22).

2.2.1 Green Infrastructure Strategy as an instrument for the green transformation

In order to bundle and extend activities for the green transformation, the RVR decided to formulate a GI Strategy. The GI Strategy serves as an informal instrument of regional governance and thus complements formal regional and land-use plans through agreements on qualities for existing and future GI in the region and its 53 municipalities. It contains regionally-shared visions for the core topics of GI and sets qualitative and quantitative goals for their achievement. It also acts as a strategic framework for the bundling of existing and the promotion of new 'green' projects. (Website RVR, 2022)

The GI Strategy aims at a target-oriented and participatory planning and implementation of GI. Through networking events, thematic working groups and online white-boards, the region's stakeholders collaborate on the Strategy's formulating and thereby shape their own future in the Ruhr Metropolis. (Website RVR, 2022)

The GI Strategy consists of four parts: First, an analysis part, which gives insight into the specific prerequisites of the Ruhr Metropolis regarding its spatial characteristics, its distinctive GI potentials and the several stakeholders shaping the GI in the region. Second, a so-called "Green Charter", comprising the mission statement and visions for the future development of GI in the Ruhr Metropolis, set by its stakeholders. Third, qualitative and quantitative goals for each vision and last, a concept on



the implementation and monitoring of these goals. (Website RVR, 2022) The GI Strategy is to be passed as a resolution by the Ruhr parliament in 2023.

Vision for green spaces and heap development in the Ruhr Metropolis

As the heaps of the Ruhr Metropolis are one anchor of GI, their future development is one important topic of the GI Strategy. Under the vision of a strategically developed network of Green Infrastructure that guarantees quality of life for all inhabitants of the region, the heaps are one core element. As such, the vision for the heaps is that they are to be preserved and developed in their collective function as the 'Mountains of the Ruhr' as well as in their individual, identity-establishing character.

One of the goals of the Green Infrastructure Strategy is the 'Conquest of the Heaps'. It aims at the rehabilitation of as many heaps as possible for purposes of recreation, leisure and tourism. In turn, some heaps are to be developed solely for nature preservation purposes and shall not be accessible for the public. The RVR has the remit to formulate a utilization concept for all heaps in its possession, as described in section 3.3.

3. Slag heaps as PLACES of identity

As described in section 2, the Ruhr Metropolis is constantly under transformation and with it the change in meaning of certain *places*, such as its heaps. In the following, focus is set on the transformation of the heaps, the history of them becoming anchor points of the region's green space system and the outlook on their future strategic development.

3.1 Heaps as restricted and dangerous PLACES

Coal mines and slag heaps are inseparably as the latter mostly consist of mining overburden - meaning the non-coal material as a byproduct of coal production. This is why since the very beginning of industrialization and mining activities in the Ruhr region slag heaps formed. And with the forming of slag heaps, the landscape of the initially flat Ruhr region began to change, giving birth to the 'Mountains of the Ruhr'.

As the slag heaps were needed in close proximity to the coal mines and as was housing for the miners, most heaps were and still are located in the middle of housing areas. All the time the coal mines were in operation, the slag heaps were, like the coal mines themselves, restricted areas. They were part of the industrial grounds and therefore closed and forbidden *places*. Also, the heaps were considered both dirty and dangerous. It was forbidden to walk the heaps as for one they could have still been burning from the inside and for another the material would most likely have been polluted, both being a considerable danger.

3.2 Revitalization and opening of the heaps

During the IBA Emscherpark, the heaps were discovered as GI potentials. Once created as conic rock piles, the heaps were re-modelled into walkable landscape structures. Polluted material was removed



and greening and forestation began. After decades of restriction, the slag heaps were made accessible to the public and especially to the people living in close proximity. For the first time, the heaps were no longer a barrier but a connecting element.

Opening up those former forbidden *places* resulted in a huge benefit for the people living in the Ruhr region. The IBA Emscherpark initiated the promotion of the slag heaps as highlights of the region and created new *places* of identity with different kinds of utilization. Art installations were placed as landmarks on some of the bigger heaps, creating a feeling of 'coming home' for people living in the region. These landmarks are still visible from long distances and are also special *places* to visit for travelers. (Ganser 1999, 60 pp.)

3.3 Strategic Heap Development

Since the heaps were opened to the public, they have experienced an extensive use. Cultural interventions like sports competitions, open-air concerts and other events take place in these amazing *places*. (RVR, 2021)

Today, more than 20 years after the IBA Emscherpark has ended, the region is entering a new phase of change for the heaps: mining activities have fully ceased in the Ruhr region and the last slag heaps are finally filled and in the process of being vegetated. Additionally, the heaps of the IBA require modernization. The RVR uses this window of opportunity to acquire the remaining heaps not already in its possession in order to strategically develop all heaps in the Ruhr Metropolis.

For the first time, both the GI Strategy and a utilization concept for all heaps provide the strategic framework of the future heap development. As a first step, the heaps were categorized regarding their potential use: either for tourism due to their regional significance, for recreation due to their local significance or for nature preservation with ongoing restricted use. As a second step, all heaps are analyzed regarding their potential for renewable energy production. As a third step the region decided to assign a frame concept for those heaps with touristic potential and regional significance, which is introduced in the following.

3.3.1 Touristic Frame Concept

With the planned acquisition of the remaining 23 heaps and the recent categorization of all heaps, a necessity for a concept including the slag heaps with regional significance was asserted. The Austrian consulting and planning office 'pronatour' (www.pronatour.at) was commissioned in the year 2021 to create a new storyline for the touristic heaps and to promote the uniqueness of every single heap. (RVR, 2022)

The result is as simple as brilliant: People of this region live in the "Tops of Ruhr" and every top - meaning each heap - has its own story to tell as well as its own character.

Each touristic heap has a unique setting and is to be equipped with play areas, interventions and other highlights, depending on its character. Physical elements are planned to connect the heaps with each other and virtual elements make it possible to interact with visitors on other heaps. Every heap top shall have areas to rest and invite for a picnic. Furthermore, the 'Mountains of the Ruhr' are to be extended in their potential for mountain biking. A network of mountain bike trails is to be built, connecting different slag heaps and inviting bikers to spend several days in the 'Mountains of the Ruhr'. Last but not least, all heaps shall be equipped with homogeneous signs and points of information that promote an easy orientation on the different heaps. (RVR, 2022)

Every heap shall have its own profile. The heap 'Hoheward' for example with its already installed 'horizon observatory' may be called 'the heavenly heap'. As a visitor, one can experience the sky and the stars, read a sundial and become an amateur astronomer. The heap 'Tetraeder' – potentially called 'the breathtaking heap' - is suggested to become a highlight for families, with a designed slide way down the heap, which will increase the quality and duration of the visitors' stay. The famous landmark on top of the slag heap, the triangular pyramid shaped walkable sculpture, is and will be a *place* of identity not only for the city of Bottrop but for everyone crossing it. (RVR, 2022)

4 Conclusion - Heaps as the 'Mountains of the Ruhr'

The heaps have always inevitably characterized the landscape of the Ruhr region. However, during several transformation processes the heaps underwent a fascinating shift in their identity: The heaps transformed from former forbidden 'gray' *places* to anchor points of today's 'green' infrastructure. Together with the greenways, the heaps now form a backbone of the region's green transformation. And the 'Mountains of the Ruhr' are highly positive *places* of identity for the inhabitants of the Ruhr Metropolis, whose motto is: home is where me slag heap is.

References

Ganser, Karl 1999: Liebe auf den zweiten Blick. Internationale Bausausstellung Emscherpark. Harenberg Edition, Dortmund.

Internationale Bauausstellung Emscherpark (Editor) 1996: Internationale Baussustellung Emscherpark, Gelsenkirchen.

RVR – Regionalverband Ruhr 2018: Small Atlas Metropole Ruhr

RVR- Regionalverband Ruhr (2022): Nutzungskonzept Touristische Halden. In press.

RVR – Regionalverband Ruhr (2021): People.Nature.Space. Green Infrastructure in the Ruhr Metropolis. Factbook Green Infrastructure. Website: https://www.rvr.ruhr/fileadmin/user_upload/01_RVR_Home/02_Themen/Umwelt_Oekologie/Offensive_GI/AbschlussberichteOGI2020/2021_Factbook_GI_engl.pdf (last accessed 10 January 2022).

Website RVR (2022): Halden und Landmarken. Abraumhalden werden zu Orten für die Freizeit. <https://www.rvr.ruhr/themen/tourismus-freizeit/halden-landmarken/> (last accessed 14 January 2022).

Website RVR 2022: Green Infrastructure Strategy. <https://www.rvr.ruhr/themen/oekologie-umwelt/gruene-infrastruktur/green-infrastructure-strategy/> (last accessed 18 May 2022).