

ZOLLVEREIN PARK – A PARK EVOLVES

Outdoor facilities of the UNESCO World Heritage Site of the Zollverein coal mine and coking plant

1. HISTORY – ZOLLVEREIN IN TRANSFORMATION

1.1. THE DEVELOPMENT OF THE PARK

„Zollverein Park is a vision and a foreshadowing of a new kind of landscape that possibly does not exist yet as such and for which we are just beginning to find the right words and terminology.“⁽¹⁾

This is how Stefan Rotzler, landscape architect from Zurich, Switzerland, describes the Zollverein Park in the book „Zollverein Park – Staub, Stille und Spektakel“ (EN: Dust, Silence and Spectacle), published in 2017. Already 30 years ago, after 140 years of industrial use, when

the origin of this new type of park in the 1990's:

„There are forgotten landscapes nobody cares about nor cares for. These landscapes can be found everywhere: in the country side and in the cities, they are a forgotten no-man's-land, flora and fauna are hidden and are entirely left to themselves.

There are rarely people around, except for a few kids and teenagers who ran away from a sheltered home, or for a few ‚bizarre insiders‘, who see these forgotten landscapes as unrefined treasures.

The area of the former settling ponds of the former

Fig. 1
A funnel landscape modeled from overburden, former settling ponds for coal sludge in the center of the UNESCO World Heritage Site between the coal mine area and the coking plant form the nucleus and today's center of the park.
(on the right © Claudia Dreyße, 2014)

Fig. 2
With the sculpture ‚Castell‘ by the sculptor Ulrich Rückriem, the so-called landfill becomes a place of art.
(bottom left © Claudia Dreyße, 2013)

Fig. 3
Four other sculptures illustrate the opposition to the landscape, its references, its history, and its transformation.
(bottom right © Claudia Dreyße, 2014)



this 100ha area of Zollverein coal mine and coking plant in the north of Essen was no longer needed, the development of the Zollverein Park began. The park had no name at that time, and secretly started its hidden growth behind opaque walls.

Harald Fritz, who at the time was one of the managing directors of the Planergruppe Oberhausen, writes about

coal mine Zollverein is such a landscape: off the beaten tracks, difficult to reach, walled in and protected by fences. For the ‚bizarre insider‘ it is a park, a diverse open space in the immediate vicinity of an exceptional industrial monument. A park with sparse forests, dark shrubs, water expanses, and open, wide spaces revealing the view from the tree-shaded paths. Over the course of just a few years, the park has developed

amidst coal mines and coking plants, almost all by itself. Admittedly, excavator drivers have dredged coal mud pits, slopes have been levelled and heaps have been dumped; pipelines have been laid, steel lattice masts been installed, cooling towers have been erected and chimneys been built, railway embankments have been poured and tracks been laid.

The park at Zollverein is only a park if you are willing to get involved with it, to accept its terms, and to take possession of it with a great sense and understanding.“⁽²⁾

The subsequent composition of four other sculptures by Ulrich Rückriem illustrate the opposition to the industrial landscape and its heritage. The forgotten landscape becomes a ‘sculpture forest’, and the visitors turn it into a park.

1.2. A NEW DYNAMIC

A demolition was then no longer an option and the solution and credo now is: ‘conservation by conversion’. The Design Centre NRW located in the former boiler house (by Sir Norman Foster with Heinrich Böll and Hans Krabel), the Casino restaurant in the former low-pressure



Fig. 4
Planners inspect the wilderness during the workshop procedure prior to the creation of the master plan Industrienatur Zollverein by Agence Ter
(© Harald Fritz, 2002)

This forgotten landscape is now part of the Zollverein Park, it is its nucleus. A funnel landscape modelled from overburden, from former settling ponds for coal sludge located in the centre of the UNESCO World Heritage Site between the coal mine and the coking plant. After the decommissioning of the colliery in 1986, a complete demolition of the facilities was considered, although the building ensemble of Shaft XII had been declared as historical monument in the very same year. The heap landscape could be used as a building rubble landfill, which could subsequently be planted with oaks and beech.

However, in the spirit of the Internationale Bauausstellung IBA (International Building Exhibition) Emscher Park in the Ruhr area of the 1990's and under the roof of the Bauhütte Zeche Zollverein Shaft XII GmbH, there is another option. At the initiative of some people, who recognize the value in the decommissioned plants that are to be preserved for the future, the sculptor Ulrich Rückriem places the monumental granite sculpture ‚Castell‘ in this forgotten landscape. This turns the so-called landfill into a place of art, a space of nature and culture, a destination for seekers as well as for people just interested.

compressor house (by Heinrich Böll and Hans Krabel), the exhibition Sonne, Mond und Sterne (EN: Sun, Moon and Stars) for the IBA Final in the former mixing plant, and last but not least the ‚Kunstschacht‘ – centre of life and work of the artist Thomas Rother in the former machine hall of the shaft 1/2/8 – prove the viability of this concept at the end of the 1990's. The conversion at Zollverein is gaining momentum and is becoming more and more an illustrative example of the role of art, culture and design in the structural change of the Ruhr area. And finally, in December 2001, the entire ensemble of the former coal mine and coking plant Zollverein is getting listed as UNESCO World Heritage Site.

This new dynamic calls for strategic and conceptual planning. In 2002, Rem Koolhaas (OMA) presents his Zollverein Master Plan with the central element of the ‚walled city‘, an outer ring that encloses the core of the monument. This Master Plan consistently follows the concept of ‘conservation by conversion’, but also gives new impetus through the implementation of ‚attractors‘ in the outer ring. New life shall be breathed into the terrain, the reprogramming of existing buildings shall be fuelled only by little external intervention.

In 2003, after a workshop procedure, the Karlsruhe office Agence Ter – under the direction of Henry Bava – completes the Master Plan Industrienatur Zollverein and adds a free space component to the strategic master plan. The master plan for the open space honours the value of the wilderness that has emerged in recent years. The industrial nature with its strong patterns and contrasts resulting from the history of the space supports Koolhaas' concept of the 'walled city'. The existing railway tracks will be transformed into a new 'track boulevard'; the 'ring promenade' will be added as a conceptually new element and as such will – visibly detached from the existing structures – mark the core of the monument and strengthen the links to the surrounding urban spaces.

1.3. THE ZOLLVEREIN PARK COMPETITION

At the same time, the work towards re-development, further construction and conversion of the site is progressing. The Choreographical Centre NRW 'Pact Zollverein' opens in the former Waschkaue (Christoph Mäckler), the outdoor facilities and infrastructure are upgraded for the new use (Planergruppe Oberhausen), the time-consuming refurbishment of the largest building on the site,

for Zollverein Park on the basis of the master plans. The draft designs should interweave the design of the open space with the involvement of artistic interventions, the creation of a new guidance and orientation system, and the realization of an appropriate lighting concept. The priority is to strengthen the industrial nature, to integrate the subareas of the extensive area, and to equally meet the diverse interests of the owners, commercial tenants, cultural users, tourists and residents, offices and authorities.

Our team of Planergruppe Oberhausen (Landscape), Observatorium (Art), F1rstdesign (Orientation System) and LichtKunstLicht (Lighting) under the direction of Harald Fritz, takes the assignment for interdisciplinary work very seriously and develops a concept that does not juxtapose the disciplines as complementary, but instead reflects the relevant elements of the design holistically in all disciplines. For example, the landscape architectural element of the Ring Promenade designed in the master plan becomes an important element of the orientation system, which is emphasized by the illumination and lighting. Consequently, the art developed for the park is not exclusively sculptural, but becomes alive



Fig. 5 Contest draft design for the Zollverein Park, overall plan with overview of the financing and maintenance costs of the most important elements (on the left © Planergruppe/ Observatorium/ F1rstdesign/ LichtKunstLicht, 2005)



Fig. 6 Contest draft design for the Zollverein Park, guidance and orientation system, 'gatekeeper' as a core element at the entrance to the park (on the right © Planergruppe/ Observatorium/ F1rstdesign/ LichtKunstLicht, 2005)

the coal washing plant, starts. However, the responsible institutions and individuals also trust in the potential that lies dormant in the development of the outdoor facilities, which support the development and conversion. In 2005 a pan-European planning competition was held in which interdisciplinary teams of landscape architects, artists, designers, and lighting planners were invited to present draft implementation and realization concepts

and rather personal – both, as part of the landscape and the ensemble, as well as in the form of the new 'gatekeepers' welcoming the visitors to the site and offering orientation. Hence, also the lighting is not exclusively functional and effective, but eclipses in favour of a casual, almost imperceptible presentation of special features.

The core of our winning design for the Zollverein Park is the conscious exploitation of the long implementation and realization time. Due to our 20 years of experience with Zollverein, in 2005 we just knew that this park cannot be built in two, three or five years. In fact, the park would rather further be developed and evolve slowly over a period of ten or even 20 years. Therefore, a clear and robust concept is needed that can react flexibly to any changing basic conditions. In addition to the principle of

‘conservation by conversion’, which is related to the buildings and facilities, we follow ‘development by maintenance’ for the open space. The maintenance and care of the park - usually much neglected for being supposedly expensive - becomes the most important tool for this. The prerequisite for this procedure is favourable: starting from the sculpture forest in the middle the industrial nature has recaptured large areas such as the track ladder or the fallow land between the abandoned facilities of the coking plant. The outer boundaries of the UNESCO World Heritage Site are enclosed by a dense seam of ‘industrial forest’ with the monument forming the related

2. CONSTRUCTION AND MAINTENANCE – THE GROWTH OF THE PARK

2.1. THE CONCEPT

Our approach to Zollverein is based on a few principles: emphasis on the architectural ensemble, restraint in landscape architecture, reduction of elements and materials, respect for the existing, conservation of the industrial origin, use of the space by visitors, visualization and experience of the transformation from the hermetically closed off industrial area to a public touristic highlight. The Zollverein Park, which has developed on industrial terrain and does not deny its industrial origin, is given



Fig. 7
Implementation of the site plan Zollverein Park,
Status: Dezember 2017.
(© Planergruppe)

glades.

In close cooperation with the owners and users, the authorities and the historic monuments protection authority, the other planners on the site and the ecologists, our design is sharpened and subdivided into realization areas and levels. In parallel, we are developing a ‘maintenance and care plan’ for the Zollverein Park on the basis of a biotope type/habitat mapping (Hamann and Schulte), and in accordance with our park design. It takes into account both the current status and the imminent phased realization of the park in which it is designed dynamically, and it will be reviewed annually and continuously adapted to current developments. In 2006, finally, the realization of the first building blocks of the park begins.

its uniqueness by the high-contrast playing between the clear, simple shapes and structures of the industrial architecture and the variety of spontaneous vegetation. The shape and the appearance of the park are developed through a systematic and continuous maintenance programme. Therefore - over a quite long period of time - a park has been created from a forbidden zone, ready to be used by visitors.

2.2. THE TRACK BOULEVARD – THE BACKBONE OF THE PARK

The structure of the Zollverein Park is characterized by the three areas of Shaft 1/2/8, Shaft XII and the coking plant, which lie island-like in the dense seam of industrial forest. These are connected by a broad, harp-shaped track system, on which coal and rock were loaded and waggons were ranked. It extends over the area from south to north, and in the past it used to run along the entire coke oven battery. Under the industrial buildings of Shaft XII, which are mostly positioned on steel stilts,

Fig. 8
Northern part of the track boulevard.
(on the right © Claudia Dreyße, 2013)

Fig. 9
Track boulevard.
(bottom left © claudia Dreyße, 2013)

Fig. 10
Southern part of the track boulevard.
(bottom right © Thomas Mayer, 2014)



the tracks fan out wide, pass by Shaft 1/2/8, and bundle to a track that crosses the street Arendahls Wiese and leads to the coking plant.

At operating times in the past, this track system - in addition to the conveyor belts in the obliquely up and down running conveyor bridges between the individual buildings - was the infrastructural backbone of the site. Via the tracks most of the materials and goods were transported, loaded, shunted and fed into the regional railway network.

Today, trains are no longer running at Zollverein, but there are many people instead who work or relax here, crossing the park on their way or visiting the museums and the monument path. The rail tracks are obviously part of the monument and should serve as the backbone of the development system in the future. The structures are transferred to a boulevard whose rhythmic pattern allows visitors to use, experience and take possession of the park.

Our design of the track boulevard is simple and robust. The main elements are the tracks transformed to paths

and the emerging industrial nature in between. In the longitudinal direction, the boulevard is divided into four sections, in which these elements are varied according to the environment and the use.

The immediate vicinity of the former coal washing plant, below the new gangway, is far more extensively maintained. Only in a biennial periodic cycle, the green is cut down, so that a dense wilderness unfolds quickly, yet trees cannot grow. Only one of the tracks running here is extended to a bike path.

Underneath the rails for mine cars of Shaft XII, a large square extends: Right next to the highly frequented core of the World Heritage Site – in front of the impressive backdrop of the architecture of Fritz Schupp and Martin Kremmer – it offers a variable surface for a variety of different uses. The paved surface keeps the green in check and hence the view to the monument is permanently free.

The northern part of the track boulevard however has a clear park-like character. The existing succession forest has been carefully lighted, the visitor walks through a

sparse grove of irregularly standing trees, mostly birches. The variety of different stages and forms of population by birch and lilac is clearly perceptible and is continuously maintained and cared for.

As a newly added element, the park avenue crosses the track boulevard and connects Shaft 1/2/8 with the sculpture forest and hence also connects the centre of the park with the surrounding neighbourhood. The sturdy concrete track along both sides lined by gold robin, forms a clearly visible new axis in the park's path network.

as well as its own space as such – a space for all park visitors, for tourists from far away, as well as for the residents of the neighbourhood and for the numerous employees on the site.

In the shadow of the coking oven battery of the coking plant, on the zigzag course of the promenade path, the visitor comes very close to the World Heritage Site. Cool and wet air comes from the inside of the abandoned unloading track hall, a sheet metal plate rattles in the wind, and in the semi-darkness one can imagine the mysterious details of the site. Then, in gentle momentum,

Fig. 11
North of the coke oven battery, the zigzag course of the ring promenade keeps visitors close to the former unloading track hall. Large open spaces in the industrial forest open the view to the plants.
(on the right © Claudia DreyBe, 2013)



Fig. 12
Ring promenade on the north side of the coke oven battery. The path, the forest and the machine.
(bottom left © Claudia DreyBe, 2014)

Fig. 13
Ring promenade in the sculpture forest.
(bottom right © Claudia DreyBe, 2014)



2.3. THE RING PROMENADE – THE PATH, THE FOREST AND THE MACHINE

The ten-meter-wide profile, the eye-catching colour scheme, the red steel band glowing in the darkness, and the small step on the inside of the ring make both the connecting and the separating function of the ring promenade visible and tangible. The ring promenade generally is the easiest – and easiest to find – path between two points at the site and generates a diverse experience of the multifaceted spaces on the Zollverein World Heritage Site. It is both a four-kilometre long path guiding visitors and providing a variety of sensory impressions,

the path takes off again, the view sweeps outwards into the adjacent neighbourhood, and the island character of the industrial area in this former agricultural part of the north of Essen becomes clear. The city rapid-transit train rushes by, a once stately and today run-down residential building emerges, and around the next corner, countless steel bars and pipes in front of serially cascaded stoves determine the area, and further down, six chimneys jut high in the sky along the promenade. An open space widens, bounded by the path, the forest and the machine. A sunny rest area with sparse grass on a light grey track ballast. A few benches, a foundation excavated

during the construction of the promenade, and rusting steel girders invite for a rest, for a playful gymnastics or balancing, and for marvelling at the scenery.

The ring promenade focusses on the big attraction of the World Heritage Site park. Although the coke oven battery seems to extend uniformly over more than 600 meters, the course of the ring promenade stages impressive and varied viewing points: a wooden extinguishing tower, futuristic tangles of today's functionless, surreally dimensioned tubes and pipes arranged like an elaborate theatre stage design. Halfway down, the gigantic mine's screening plant (German: 'Sieberei') dominates the scene with seemingly weightless conveyor bridges jutting up to it.

Further south, on the white side of the coking plant, the width of the orthogonally arranged plants, pipe lines and buildings determine the area. As there is no space between the protected industrial forest and usable land, the promenade follows the historic road as extended sidewalk, and therefore one gets very close to the giant steel structures of the chimney coolers before heading back into the forest.

Here the ring promenade gives way to one of the slender stone stela sculptures by Ulrich Rückriem – who once gave the sculpture forest its name – and the view extends over a wide, black, sometimes dust-dry and sometimes flooded plain against the backdrop of the stretch of woodland and the steel girder masts of the high-voltage power line. The path runs along in a long curve, separating on the left leading up into the forest, and on the right leading up into the valley with its anchor point, the 'Castell'. One is more and more tempted to leave the ring promenade in order to examine the stone, to touch its surface in order to discover the millimetre-thin gaps. Then to follow the narrow paths into the forest in order to search for more granite objects, to discover a pond with thousands of natterjack toad tadpoles, to marvel at the conveyor bridges between tree tops, and finally to find a bright yellow blooming trough on the flat top of the mine heap with buzzards circling above.

Back on the ring promenade, the discoverer now reaches the heart of the Zollverein World Heritage Site. Between the former coal washing plant and its new front garden, the promenade crosses countless tracks, passes the new Forum (Agence Ter) on the left and the buzzing transformer station on the right. Further down the promenade one suddenly is standing in the courtyard of honour, in front of the double-rack winding tower.

All around, the brick cubes are arranged like shoeboxes. Some visitors are venturing alone, others in groups through the narrow paths and wide axes between the buildings and lawns; those in a hurry follow the rusty gutter past the bike station, the Casino and the Design Centre in order to again realise the marginality of the ring promenade. Within the ring the ensemble of buildings of Shaft XII is located, and a bit farther the mine head tower of the Shaft 1. Outside the ring a white concrete cube with irregularly arranged facade window squares is located, visually exceeding the standard of the neighbouring residential development. The SANAA building – named after its Japanese architects – is one of the new 'attractors' from Rem Koolhaas' Master Plan.

On the area of Shaft 1/2/8, the promenade now leads very close along the garden and the 'art shaft' by Thomas Rother, along the conveyor house, along the courtyard of the choreographic centre 'Pact', and along the former mine car circuit which has not yet been converted. After a short ascending slope, the track boulevard is now reached. Behind the trees rise six huge chimneys and lure the visitor to the coking plant. Crossing the bridge, there is the playground located at the mixing plant and the first wooden extinguishing tower announces the well-known fire extinguishing hall.

2.4. THE PAVILIONS – WELCOME TO ZOLLVEREIN PARK

The orientation system in the Zollverein Park starts with welcoming gatekeepers who provide the visitors with information and orientation upon arrival. The five new pavilions and the rebuilt gatekeeper's house at the courtyard of honour serve for orientation, information and support, and for lingering – the arrival at Zollverein is somehow familiar and therefore contrasting to the large-scale machine Zollverein. A pavilion breaks down the industrial dimensions to a place for the individual. The gatekeeper shares the inside and outside pavilion with the visitor. Welcome to Zollverein!

The pavilions are located in six strategic locations on the site where visitors arrive and are provided with information, orientation, and guidance: the historic gatekeeper's house at the courtyard of honour, the A1 car park at the South Entrance, the A2 car park in the centre of Shaft XII, the track boulevard northwest of Shaft XII, the former coking plant's mixing plant at the car park C, and the entrance of the Emscher Park cycle path at Zollverein Park in the northwest of the coking plant.

„The design of the pavilions is based on the modular



Fig. 14

Pavilion 5 at the northwest entrance to the World Heritage Site. The sky ladder allows visitors to have a look to the outside, into the neighbouring urban space and on the Cologne-Minden railway tracks, but also to the other direction to the more than 600 meter long unloading track hall and the coke oven battery. (top left © Claudia Dreyße, 2014)



Fig. 15

The pavilion 4 at the mixing plant. Gatekeepers welcome visitors to the World Heritage Site and provide information and orientation. (top right © Claudia Dreyße, 2014)

Fig. 16

The pavilions break down the industrial dimensions into places for the individual. The gatekeeper shares the pavilion with the visitor. (on the right © Claudia Dreyße, 2014)



structures applied by the architects Fritz Schupp and Martin Kremmer to the steel framework of the façade architecture of the colliery. A pavilion breaks down these industrial measures into a place for the individual. The bookcase architecture, which was specifically developed for the pavilions, offers space for information material, books and found objects, both inside and outside. This is very convenient for reception, but also a form of ‚architecture parlante‘. The gatekeeper shares the pavilion with the visitor, outside and inside seem merged together as one. Around an information desk there are a variety of places to stay.“⁽³⁾

3. 30 YEARS OF ZOLLVEREIN PARK – CONTINUOUS CHANGE

Today, more than 30 years after the decommissioning of the Zollverein colliery and 13 years after the competition for the realization and implementation of the Zollverein Park, the basic elements of the park have been realized. But Zollverein and Zollverein Park are not finalized yet, and will probably never be finalized.

Especially in the last few years a lot has happened: The Folkwang University of Arts has moved into their new

address to the Design City (MGF Architekten). The RAG Foundation and RAG Joint Stock Company (German: RAG Aktiengesellschaft) have finalized their new administrative location in the south of the coking plant (kada-wittfeldarchitektur). The Grand Hall – an event hall in the former suction device and compressor hall – started operation (Architekturbüro KWR). The reconstruction works on other buildings and facilities on the site of the coking plant is continuously progressing. At present, Hall 4 – the former engine house located south in the shadow of the double-rack winding tower opposite the Ruhr Museum – is being prepared for a gastronomy business (architect Heinrich Böll).

According to Koolhaas‘ Master Plan, the new use of old and new buildings bring new life to the World Heritage Site and of course change the demands on the park to which it can react with its sturdy structures. So we continue to build the park where it is needed and develop it by continuous maintenance and care in desired and at times in surprising directions.

The Zollverein Park is not about establishing a museum-like industrial landscape, but the concept composes a

Fig. 17
Swing at the team aisle.
(on the right © Claudia Dreyße, 2014)

Fig. 18
Biotope for the protected natterjack toad at the
portal scraper.
(bottom left © Claudia Dreyße, 2014)

Fig. 19
The Zollverein Park invites the visitor to discover
and to explore. The traces of bygone times are
omnipresent.
(bottom right © Claudia Dreyße, 2014)



landscape space from the existing elements, incorporating the historical and current developments and signs in a conscious and credible manner, and offering a complex surface and a pragmatic future development and usage space – maybe a new kind of landscape.

Sascha Wienecke, Planergruppe, 2018

(1) Stefan Rotzler; Zollverein Park – Staub, Stille und Spektakel; Stiftung Zollverein, ARGE Zollverein Park – Planergruppe, F1rstdesign, Observatorium; Publisher of the Bookstore Walther König; 2017

(2) Harald Fritz; Die Halde Zollverein; Bauhütte Zeche Zollverein Schacht XII GmbH; Year unknown

(3) Andre Dekker; Zollverein Park – Staub, Stille und Spektakel; Stiftung Zollverein, ARGE Zollverein Park – Planergruppe, F1rstdesign, Observatorium; Publisher of the Bookstore Walther König; 2017