Post-war Green Spaces – Recent Restoration and Upgrading Projects in Berlin¹

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City squares, parks and the greenery of residential estates of the post-war period are often not yet recognised, valued and protected as heritage worth preserving and are therefore in danger of being redesigned or developed. This is particularly true in the current discussion of increased housing construction with densification in the so-called interspaces. In addition, unprofessional and lacking care sometimes creates confusing anxiety spaces which create problems of use and then lead to the call for the redesign of the facilities. The recording and protection of the stock of the 1950s to 1980s is differently intensive in the individual federal states and depends on how well staffed the state heritage authorities are with regard to qualified garden conservationists. With the participation of the Conference of the Heads of the Garden Offices (GALK), the non-profit organisation of Homeland and Environment (BHU) and the Technical University of Berlin, a research project on green spaces of the 1950s and 1960s has been finished which was funded by the (German Environmental Foundation) DBU and which published nationwide results by 2017.

In addition, the section on historical gardens of the German Society for Garden Art and Landscape Culture (DGGL) has formed a working group on green post-war heritage, which in the coming years, in cooperation with the sponsors of the research project, intends to present principles for dealing with these sites, taking into account the German-speaking countries. The post-war sites have a specific design, use of materials and plants as well as equipment that must be preserved during repair, restoration and maintenance. This will be illustrated in the following with selected examples from Berlin, where numerous green and open spaces from the 1950s and 1960s are already under protection and in some cases have been intensively looked after as garden monuments since the 1990s. Work is also currently underway to record and protect the heritage of the 1970s and 1980s.

Karl-Marx-Allee

As early as the mid-1990s, a comprehensive set of rules and regulations for all open spaces in Karl-Marx-Allee, construction phase of the 1950s, had been drawn up on behalf of the garden preservation authorities.² Since 2000, the pavements and the lime-lined promenade on the north side of the avenue have been continuously repaired on this basis in constructive cooperation with the district civil engineering and green space office. In the process, the asphalt laid in the 1970s was removed and the promenade was given back its original water-bound surface on the existing substructure.

Drainage gutters, path edges and borders of the tree discs made of Lusatian granite could be repaired using the existing original material, ensuring that the tree discs corresponding in size to the square base plate of the candelabra standing in the rows of trees were not changed to standard sizes. Unfortunately, the hawthorn hedge formerly existing between the promenade and the lawn strip could not be replanted so far due to a lack of maintenance capacity. On the sidewalks, the concrete slabs with reddish-coloured aggregates typical of the time were retained or supplemented by new productions with the same surface structure. The costly measures are being financed without funds from the garden preservation authorities, exclusively from the civil engineering budgets of the senate and district.

A challenge for the senate, district and monument preservation authorities was posed by the more than 200 candelabras, elaborately decorated with ceramic applications, which characterise the avenue. Due to the brittleness of the concrete poles, all of them were no longer stable and therefore in need of renewal. Initially, there was a threat of replacement by inexpensive modern lamps and thus a loss of an essential, characteristic element of the avenue. The compromise that was finally reached after a long struggle because of the enormous costs involved is to produce a replica of the luminaires that is true to form and also largely appropriate to the materials used, using original parts, but simplified in terms of processing, new concrete poles and trusses, in parts also with the elaborate ceramic decorations true to the original. This measure was started between 2008 and 2010 with the intensive support of the garden preservation authorities. For reasons of urban planning and monument preservation, it was also imperative to reinstall the elaborate quadruple candelabra at the Frankfurter Tor as completely as possible in accordance with the historical situation and was finally achieved despite considerable additional costs. In the second construction phase of Karl-Marx-Allee of the 1960s between Strausberger Platz and Alexanderplatz, the restoration or recreation of the original lighting as well as the heritage-compatible restoration of the open and green spaces was also planned in the last years und realised from 2018 to 2020 (Fig. 1).

There will be deficits for some time to come regarding water basins as well as perennial, rose and summer flower plantings in the lawn strips and squares, as professional maintenance is currently not guaranteed. The perennial and rose garden on the northern side of the avenue had been selected as a project to accompany the International Garden Exhibition (IGA) in 2017 and was redesigned heritage-compatibly after 20 years in the sense of an extensification of care.



Fig. 1: Karl-Marx-Allee, with a view of the Frankfurter Tor, postcard from the 1950s (© Zentrum für Berlin-Studien)

Weberwiese

The Weberwiese green area, which has existed since the beginning of the 19th century, was already included in the early reconstruction plans for Karl-Marx-Allee at the end of the 1940s with the pergola house by Ludmilla Herzenstein and corresponding terraced buildings.³ After the reorientation of the urban planning ideas, the Lingner Collective from the Institute for Urban Development of the Bauakademie in 1952/53 had initially developed a – not realised – proposal here which strictly referred to the high-rise building on Weberwiese by Hermann Henselmann in an axisymmetrical manner.

Helmut Kruse, on the other hand, realised a completely contrasting landscape design in 1954 with a water basin and a curved circular path with a circular seating area and loose groups of tree plantations. The high-rise building by Henselmann was staged here in the spirit of the traditional landscape garden as a park building that can be experienced in changing views. Like the building with its neoclassical décor, the park also referred to the tradition of Karl Friedrich Schinkel and Peter Joseph Lenné.

With its kidney-shaped water basin with a fountain, the combination of natural stone and concrete coverings, the artistic decoration with a bronze boy and the perennial and rose beds, the design shows great similarities with comparable layouts of the 1950s in Western Germany as well; the

walkway with a circular square is reminiscent of designs by Gustav Lüttge a few years later in the Hansaviertel.

Helmut Kruse explained the planning in 1953: "While the street fulfils a representative function, the areas behind the building blocks serve the social needs of the working people as useful green spaces. [...] The first construction phase will be the opening up of the Weberwiese and the immediately adjacent area. The design of the Weberwiese will be dominated by the high-rise building, whose lines will be reflected in a landscape-like pond embedded in a meadow. A footpath covered with woody plants leads along resting places and flowering shrub plantations. In the adjoining grounds, two larger children's playgrounds with a total of 200 square metres of usable space will be completed this year (Fig. 2).4

Walter Delenk, the long-serving head of the district garden office in Friedrichshain, had already worked on the history of the open space design of Karl-Marx-Allee in 1992 on behalf of the garden monuments authority and also prepared in-depth studies for the Weberwiese including the development of planting concepts for the perennial plantings which no longer exist.⁵

On this basis, it was not until 2008 that it was possible to restore the paths, stairs, natural stone walls, terraces and the water basin with fountain in a heritage-compatible way and to recreate exemplary perennial plantings, especially at the pond edges.⁶ A complete implementation of the original planting concept was unfortunately not possible due to the



Fig. 2: Summer fun on the Weberwiese, postcard (Bezirksamt Friedrichshain-Kreuzberg von Berlin, Denkmalarchiv)



Fig. 3: The Weberwiese complex after restoration (photo Büro Hortec 2013)

limited maintenance capacities of the district and the pressure of use (Fig. 3).

An asphalted path was also restored in the original way as a water-bound surface with numerous benches. On the sheltered seating area at the water basin, it was possible to concentrate the remains of the former benches without backrest with stone neoclassical bench feet, which were formerly present along the entire Karl-Marx-Allee. Until 2019, it was not possible to cut down two poplars in front of the high-rise building, thus preventing the desired mirror effect in the pond. However, in 2020 one of the trees will be cut down.

Garden courtyard of the Humboldt-University Unter den Linden

The war-damaged garden courtyard was redesigned in 1960-61 according to the designs of the garden architect and university lecturer Prof. Georg Bela Pniower under the direction of K.-F. Gandert. Following the chestnut grove that has characterised the garden since the Schinkel era, the new, recessed lawn was again framed with chestnut trees and fitted with high-quality artificial stone benches typical of the time, pole lights, a fence designed by Fritz Kühn and ceramic planters from Hedwig Bollhagen's workshop (Fig. 4). This results in the special artistic overall quality of this garden courtyard. The garden courtyard, which is largely original in its structural substance and furnishings, is one of the most important examples of post-war green modernism in the eastern part of Berlin. The Humboldt University has accepted this open space of GDR post-war modernism as its legacy and is endeavouring to carry out the restoration in sections. A garden monument conservation report, which includes planning documents, photos and statements by Prof. Gandert, forms a solid basis for the preservation and restoration.7 In recent years, it has been possible to restore the two bench types designed in strict geometry (artificial stone bench without backrest, artificial stone box bench with wooden supports) as well as the avant-garde lamps of GDR modernism and the fence installation by Fritz Kühn in a heritage-compatible manner while largely preserving the original substance (Fig. 5).

Within the framework of the new canteen building in a side wing of the Ehrenhof, which was completed by 2015, the side rooms of the garden courtyard were accessed through light shafts and seat terraces while maintaining the garden layout, but the artificial stone shelves of the courtyard were preserved or damaged ones were replaced in accordance with the original concept. The complete renovation of the courtyard in a heritage-compatible way, including the partial renewal of the heavily damaged gridded in-situ concrete surfaces, will only be carried out after the completion of the necessary pipe and façade renovations in the next few years.

Kleiner Tiergarten (eastern part)

Designed by Willy Alverdes (1896–1980), head of the gardening department of the district of Tiergarten and director of the Großer Tiergarten, this important garden monument of the 1950s and 1960s with remaining structures and old trees of the original 19th century design by Gustav Meyer was only included in the Berlin monument list as a garden monument a few years ago, after decades of neglect.

Alverdes developed the garden design ideas for the insertion of the fixtures, special gardens and paths while preserving the traditional old tree population of Gustav Meyer's estate. He used silver maple as the new tree species in the Kleiner Tiergarten. With its picturesque, multi-trunk structure and the filigree foliage in several preserved specimens, it still forms a contrast to the dense crowns of beech and lime trees. The Japanese cord tree (Sophora japonica) can be



Fig. 4: Humboldt University garden courtyard, view 1962 (Archive of the Humboldt University Berlin/Dokumentation Büro Topos)

found as individual specimens in the sunken garden and the bridle tree (Celtis australis) in the eastern part of the park. A transparent hedge of Fontanesia (Fontanesia phylliraeoides), a very typical and rare tree species in Berlin, surrounds the sunken garden. The horticultural engineer Hans Nimmann (1928–2015) assisted him with the technical implementation, especially as designer of the extensive water features in the special gardens.

For the use of materials, the model of the Interbau 1957 is to be mentioned. Concrete Coloment slabs were also used there, which were a new development in the concrete industry. Slabs in three formats and with reddish, yellowish and blue-grey colouring were laid with basalt paving surfaces in a wild pattern to create almost ornamental patterns in the sunken garden. The pebble-washed concrete wall of the sunken garden was handmade on site and is one of the earliest examples in a public garden in Berlin. As a special playful element typical of the time, a roller coaster in the shape of an eight was embedded in an artificial hilly landscape with wooded planting – a miniature low mountain-range landscape for children (Figs. 6 and 7).8

Parallel to the protection of the landscape, a landscape architecture competition for the redesign had already been announced, for which the essential garden conservation principles could be provided at the last minute. The winning design of the Latz und Partner office pursued the concept of making the park more transparent, especially at the edges,



Fig. 5: Garden courtyard of the Humboldt University; restored artificial stone benches and upgraded original lamps (photo Klaus Lingenauber, 2011)



Fig. 6: Roller coaster in Kleiner Tiergarten, July 13, 1960 (Bezirksbildstelle Tiergarten/Dokumentation Bernd Krüger, 2013)



Fig. 7: Roller coaster in Kleiner Tiergarten after repair (photo Klaus Lingenauber, 2016)

by means of clearings and introducing new elements such as concrete seating walls and pebbles, but also playgrounds; a substantial or even comprehensive heritage-compatible restoration of the largely preserved post-war furnishings and planting was not initially planned. The coordination process for further planning, however, already took place with the legally binding effect of the garden monument, which has since been listed.

Thus, the result of the new construction and restoration planning of the landscape architecture firm Latz und Partner, which was realised in the years 2012 to 2016 with funding from the Federal Programme "Active Centres", can be characterised as a restored "old picture in a new framework". All

elements of the design of Alverdes could be preserved and at least one characteristic water basin with bubbling fountains of the formerly differentiated water garden could be restored and reactivated and the water bowls could be turned into play bowls. All other basins have been preserved in "standby" position in the ground (Figs. 8 and 9).

Also, all concrete slab coverings and clinker edges of seating niches still existing at the time of construction were preserved as traces in the reworked edge areas. Characteristic structural elements such as the old tree population, flowering shrubs and a Fontanesia hedge at the sunken garden, the long fountain basin, a garden courtyard wall with protective roof, the roller coaster, path surfaces and bench seats were



Fig. 8: Water garden in the Kleiner Tiergarten, 13 July 1960 (Bezirksbildstelle Tiergarten/Dokumentation Bernd Krüger, 2013)



Fig. 9: Fountain basin in Kleiner Tiergarten after renovation (photo Bernd Krüger, 2016)

carefully preserved and repaired. The convincing result is not least due to the intensive construction supervision by a contact landscape architect paid by the garden monument preservation department.

The heritage-compatible restoration and supplementary redesign was completed and presented to citizens and the specialist public on May 21, 2016, the nationwide Day of Urban Development.

Southern Hansaplatz in the Hansaviertel

In the atrium courtyard of the Hansa Library, a small basin was planned in addition to the realised angular basin on the south-east corner of the square-shaped library that was opened here. However, this was probably realised in a dialogue between Düttmann, Walter Rossow (leading committee Interbau), the landscape architect of the southern Hansaplatz and possibly also of the atrium courtyard of the library, the Dane Edvard Jacobson, on the west side of the library (Fig. 10). Here it accentuates both the designed square and the entrance area of the library. By deliberately placing it in the north-south pedestrian axis along the subway station, it forms a garden-artistic caesura that forces one to pause and decide between lingering, visiting

the library, making a detour to the church, or taking the subway.

The southern Hansaplatz is, in contrast to the area north of the library designed by Herta Hammerbacher, strictly structured in a 5 x 5 m grid and designed in detail through the differentiated use of different materials, plant beds and groups of trees. This square thus forms the small prototype for the Ernst-Reuter-Platz, which was designed a few years later on a larger scale but in the same language by Werner Düttmann, who was already in office as Senate Building Director at that time.¹¹ On the initiative of the garden monument conservation department of the Berlin Heritage Authority, a precise survey and repair planning of the differentiated floor coverings of Hansaplatz was carried out on the occasion of the 50th anniversary in 2007 (Fig. 11).12 In 2008/09, the southern Hansaplatz was then repaired in a heritage-compatible way, and with the help of tourism subsidies the overgrown bed of water basins, so essential in terms of design but almost forgotten, was uncovered again and put into operation after the water technology had been renewed and the original fine glass mosaic covering partially repaired. Unfortunately, this repair, which preserved the original mosaic, proved to be unsustainable, as leaks occurred again after a short time. The analysis of the damages forced the abandonment of the fine mosaic and complete sealing and laying of



Fig. 10: Restoration design for the southern Hansaplatz, Büro Margret Benninghoff, 2006

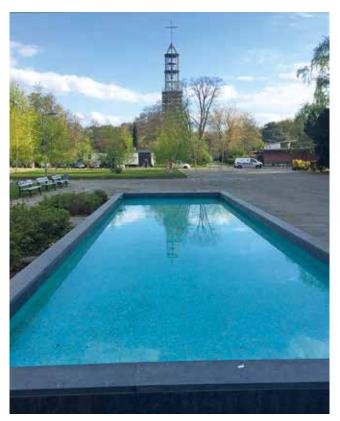


Fig. 11: Southern Hansaplatz: Water basin and adjoining square areas after heritage-compatible restoration (photo Ramona Simone Dornbusch, 2016)

a new mosaic floor, very similar to the original, with a small covering area remaining. This repair and recommissioning in 2015, which is now hopefully permanent, was financed by the Berlin Heritage Authority.

Akademie der Künste

The open spaces of the Akademie der Künste go back to designs by Werner Düttmann and the landscape architect Walter Rossow. Here, two water basins, on the same level as the surrounding slab areas, were conceived as an essential design element in the open space. Based on the experiences with the Hansa Library, interior and exterior spaces were again designed in a very differentiated way with flowing spatial sequences and levels. Furthermore, Theuma slate was also used here inside the building and in the open space.

In contrast, the elongated water basin on the ground floor, which accompanies the covered glass corridor between the public and office areas of the Academy, separates the building, courtyard and garden as well as public and private areas from each other, as was already the case with the library's interior and exterior. The basin itself is also divided by a transparent curtain of concrete steles into a public and an administrative part (Fig. 12). From the inner courtyard one looks through the glass passageway across the water basin, through the academy garden towards the Tiergarten and vice versa. The Academy opens up to its green surroundings

in a differentiated manner and at the same time forms closed and protected spaces – reflecting its various functions.

After decades of neglect, the theatre garden of the Akademie der Künste was in a state around 2014 that no longer met the requirements for listed buildings. Although the garden conservation department of the Berlin Heritage Authority had already commissioned a garden conservation report on the gardens in 1999, for many years there were no prospects of implementation.¹³

Numerous non-original trees and shrubs that had been wildly sown or over-developed original trees had turned a light garden with perennials and flowering shrubs and strong visual references to the directly adjoining Großer Tiergarten into a realm of shade. Extensive felling and the removal of an almost closed, dark wall of tall yew trees on the adjacent edge of the Tiergarten, initiated by the author, were necessary to bring out the original idea of a sunny lounge with barely noticeable transitions to the Tiergarten again. A planting concept based on Rossow's planting plans could now be implemented in a modified form, and today the restored garden once again shows the original intentions of its creators to a large extent (Fig. 13).14 In this context, the restoration of the water basin, deliberately placed between the glass corridor and the garden space, including the concrete stele wall, was also carried out. Here only about 40 per cent of the original concrete substance could be preserved, but the semi-transparent concrete stele wall dividing the basin into two segments was completely preserved by careful restoration.

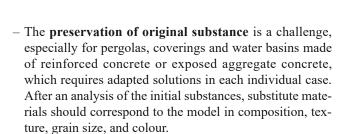
In addition, the forecourt of the Akademie der Künste was restored in 2016/17 as part of the federal funding programme National Urban Development Policy.

Theses/Conclusions: Challenges for the preservation and restoration of the green post-war heritage (1950s and 1960s)

- Park maintenance concepts, including a description of the development and detailed documentation of the current status of the site are essential foundations for the preservation, restoration and development of garden monuments from the 1950s to 1970s. For numerous important facilities in Berlin and partly also in the Federal Republic of Germany, these have been developed since the 1990s.
- Inappropriate and inadequate maintenance creates problems for the plantations of the facilities, which in some cases leads to over-shaping and the development of nature conservation claims with corresponding conflicts. Care-intensive parts of the plantings, such as hedges, alternating plantings, roses, tub plants, etc. are sometimes reduced, abandoned or replaced by plants that are easier to maintain.
- The use of the proper form and material must be demanded and enforced during the restoration, partly with a view to a sustainable and economic restoration. Substitute materials must be used deliberately while ensuring the correct form. An example is the replacement of sensitive wood by metal in pergolas and trellises.



Fig. 12: Akademie der Künste, restored theatre garden with repaired water basin and stele wall (photo Klaus Lingenauber, 2016)



- Fountains, water basins and water features are very difficult to maintain or restore. Their operation is often only possible with funding from sponsors. Problems arise due to excessive safety requirements, some of which lead to problematic design compromises with disturbing fall protection devices.
- Barrier-free accessibility is often rightly demanded, even for all parts of differentiated systems. It requires, for example, ramp solutions that have to be developed from the genius loci and integrated with restraint.
- Citizens' wishes and citizens' initiatives play an increasingly important role in maintaining the facilities, both as a support and as an obstacle (protests against the felling of trees necessary for the preservation of garden monuments).
- Competitions for post-war modernist facilities lead to redesign demands with difficult planning, coordination and approval processes and, as a result, to the loss of original substance.

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Fig. 13: Akademie der Künste, theatre garden (photo Klaus Lingenauber, 2016)

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