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Article

## Wilhelm Riphahn in Cologne (1913–1963): Urban Policies and Social Housing between Innovation and Conservation

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### Abstract

An urbanist actively involved in social housing, a prolific designer and a rigorous developer, Wilhelm Riphahn (1889–1963) fulfilled the controversial role of ‘modern architect’. An intellectual and professional who can be included among the most interesting—yet least studied—members of the German *Neues Bauen*, he was one of the protagonists of the exemplary neighbourhoods of Dammerstock (1929) in Karlsruhe. He designed several neighbourhoods on behalf of *Gemeinnützige Wohnungsbau AG* Köln. In the 1920s, his pragmatic and operative attitude enabled him to initiate a functional and aesthetic revolution in the conservative world of affordable construction, the outcomes of which went well beyond the period after World War II. From 1918 to 1938, Riphahn brought to completion social neighbourhoods that had a remarkable urban impact in the troubled political context of the Rhineland between the two wars. His tireless energy led to a profusion of work in the infrastructural reconstruction of the battered city of Cologne up to the years of the German economic boom. Riphahn left significant and vibrant construction projects, such as the *Britisches Kulturinstitut* (1950), the fine urban complex of the *Kölner Oper* (1954–1957) and the *Schauspielhaus* (1962). The article focuses on the *Siedlungen* of Cologne and compares their original compositional features and exemplary character, which continue to have an impact within the context of social housing.

### Keywords

*Blauer Hof*; Cologne; Dammerstock; *Grüner Hof*; social housing; urban policies; *Weisse Stadt*; Wilhelm Riphahn; Zollstock

### Issue

This article is part of the issue “Housing Builds Cities”, edited by Luca Ortelli (École Polytechnique Fédérale de Lausanne, Switzerland), Chiara Monterumisi (École Polytechnique Fédérale de Lausanne, Switzerland) and Alessandro Porotto (École Polytechnique Fédérale de Lausanne, Switzerland).

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### 1. Introduction

In recent years, along with Rudolf Schwarz (1897–1961), Wilhelm Riphahn (1889–1963) has rightly been recognised as one of the most prominent figures on the Rhenish architectural scene of the first half of the 20th century. However, his work remained in the shade for a long time, often ignored by local criticism and German historiography. On the occasion of the Bauhaus’s centenary, a re-reading and appreciation of his works—ranging from the 1910s to the 1960s—have secured his recognition and location on a European level in the Modernist panorama. Despite the immense losses of building heritage caused by the wars, the suburbs of Cologne have mostly retained the public and pri-

vate housing complexes—commercial, residential and entertainment-related—built by Riphahn between 1913 and 1963. For reasons of synthesis, this article will exclusively deal with his planning activity in Cologne between the two wars, in the context of his principal achievements in subsidised housing.

### 2. Methodology

The elaboration of this article follows, almost a decade later, the completion of a multi-year study on German urban reconstruction—carried out in the 2002–2003 semester at the Institut für Baugeschichte and Denkmalpflege of the FH Köln and subsequently continued at the Department of Architecture of the

University of Bologna. The study resulted in multiple publications, including the monograph *Tradition and Modernism of Urban Places: The Reconstruction of German Cities, 1945–1960* (Maahsen-Milan, 2010). This work focused on the study of spaces of representation and involved an analysis of the pre-existing building fabric and post-war reconstructive work in the cities of Cologne, Düsseldorf and Bonn. The investigation identified artistic personalities of primary importance and interest, among them figures of the Lower Rhine milieu, of whom Riphahn represented an exemplary case of methodological coherence, through his urban practice and, in particular, *Großstadt* building. His role in the history of ideas, as well as in the spread of the Werkbund and the Modern Movement, is entirely comparable to that of the most famous protagonists of the *Neues Bauen*.

It should be pointed out, although it is only briefly dealt with below, that the works and residential complexes by Riphahn presented here were the result of important artistic collaborations. The research included studies and documentary collections in libraries and municipal and private archives in the cities examined, as well as visits to Riphahn's buildings.

The appreciation of this author was possible thanks to Wolfram Hagspiel's (1981) PhD thesis. The architect's production was ignored after his death in 1963 and it was partially bridged by the first exhibition in Cologne (MAK | Museum für Angewandte Kunst, Köln, September 2004–February 2005, B. Funck ed.). An important review of the exhibition (Hebler, 2004) highlighted how the declared neutrality towards the work of the architect—presented there as a simple *Bestandaufnahme* (catalogue)—did not lead to a full evaluation of the figure of Riphahn. The review, in effect, only initiated a discussion and critical analysis of works that developed over a period of five decades. That reconnaissance, however, allowed us to confirm the works' consistency: the residential buildings, mostly private or public properties, were in part destroyed due to war or were at risk of demolition or alteration.

It is remarkable that, after the exhibition, Riphahn's work was re-evaluated positively by public sector operators. Thanks to the new awareness, *Gemeinnützige Wohnungsbau AG Köln* (GAG)—the owner of the Cologne housing complexes—has revived Riphahn's housing complexes with great effectiveness and sensitivity.

### 3. Wilhelm Riphahn: Civil Architecture and Social Commitment

Born in 1889 in Cologne, the son of a building contractor, Wilhelm Riphahn interpreted and followed an educational path common to many architects of his time. In the years between 1898 and 1912, he began his formal education at the local *Oberrealschule*, confirming his cultural and professional choice with architecture studies at the universities of Munich, Berlin and Dresden. The

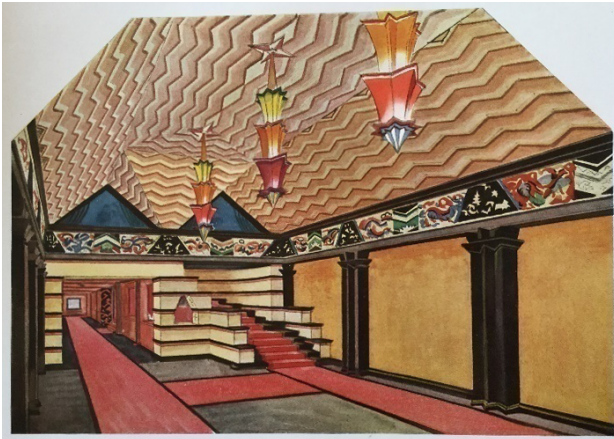
young Riphahn was as open to sociological topics as urban planning and transport engineering, passing through the seminars of Cornelius Gurlitt (1850–1938), Theodor Fischer (1862–1938) and Karl Hocheder (1854–1917).

His first apprenticeship in Berlin, at the technical office of Siemens & Halske, was followed by years of professional practice in the workshops of Bruno Taut (1880–1938), Otho Orlando Kurz (1881–1933) and Hans Herlwin. He began his independent professional activity in Cologne in 1913, working in his father's business, which was committed until 1920 to the construction of large government-subsidised building complexes (Hagspiel, 1978). In view of the 1914 Cologne exhibition, Riphahn enrolled in the local section of the Deutsche Werkbund, establishing contact or consolidating close relations with Gropius, Taut and Van de Velde, the most prestigious figures on the German architectural scene. In his long and successful career, some traits emerged that remained throughout the entire design process, such as a holistic design concept, aimed at enhancing the comfort features of housing, obtained through an abundance of natural light and effective thermal and acoustic insulation. Riphahn revealed a precocious—and not obvious—attention to the performance and quality of accommodation. He was one of the first designers to install a private bathroom, separate from the toilet, in all housing units. The sensitivity of his design can be seen in the pursuit of urban quality, with generous standards of public and private greenery, made easily accessible by wide driveways and pedestrian paths. He showed a pragmatic attitude, devoid of intellectualism and attentive to the economic aspects of a property, including consideration from the point of view of the marketability of housing (Maahsen-Milan, 2010, p. 107).

Thanks to his constant collaboration with progressive artists, Riphahn pursued, from a sociological point of view, a completely innovative conception of the living space, favouring a sense of community and contributing to the psychological well-being of the inhabitants through the search for a harmonious composition of volumes and chromatically pleasing surfaces. Riphahn was a brilliant and versatile designer, able to approach both private and public clients in an original and effective way, satisfying prestigious high-bourgeois and entrepreneurial clients with the production of elegant villas and commercial and tertiary complexes of disruptive modernity (see Figure 1)—an example of this is his pavilion for the *Kölnische Zeitung* at the *Pressa-International Press Exhibition* (Cologne, 1928; see Figure 2)—while his cultural contribution can be seen above all in the production of social housing of major urban impact (Riphahn, 1929).

#### 3.1. Cultural Models and Architectural References: Between Experimentation and Concreteness

Despite the tense political-economic situation and the prolongation of the Allied military occupation of the Rhineland and the Ruhr, in Cologne as elsewhere in



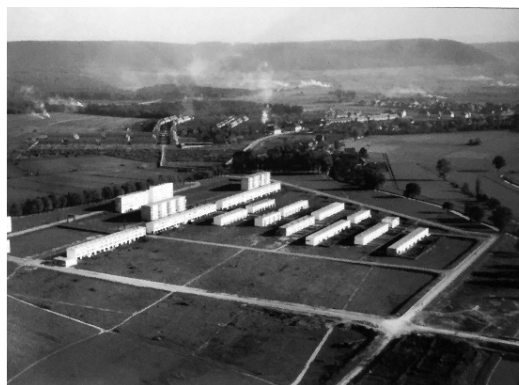
**Figure 1.** From left to right: W. Riphahn and H. Hansen, Entrance hall and corridor of the *Variété Cavalu* theatre, Cologne, 1922 (Hoffmann, 1927); W. Riphahn, Bastion on the banks of the Cologne Rhine, Panorama restaurant on former *Kaponniere/Rheinbastion* (Superbass, 2008).

post-World War I Germany, the cultural climate of the Weimar Republic was impetuous and original. In 1923, both Bruno Taut and Walter Gropius were in Cologne, the former for the conference ‘*Frühlicht* (morning light): Architectural demands of contemporaneity’ (Taut, 1923), the latter to print *Idee und Aufbau des staatliches bauhaus Weimar* (*Ideas of the Bauhaus*), the fundamental writing that theorised the synthesis between art and industry with the re-founding of the school in Weimar (Gropius, 1923)

In 1925, in the midst of a design commitment to social housing cooperatives, Riphahn and twelve colleagues made a study trip to Holland to exchange experiences with De Klerk and Kramer in Amsterdam and Dudok in Hilversum (Behrendts, 1911, pp. 63–103; Engelberg-Dočkal, 2011, p. 4; Kruschwitz & Allmers, 1925, pp. 63–64). In particular, Riphahn was focused on the *Siedlung Tusschendijken* of J. J. P. Oud in Rotterdam (1920): under the motto *Klar und wahr* (clear and authentic), the Dutch model would subsequently provide Riphahn with the main architectural-typological ref-

erence in the competition for housing interventions in Zollstock, Cologne, which he would win (Hagspiel, 1981, p. 156).

Riphahn’s architectural work was prominently featured in a collective volume edited by the architect and critic Heinrich de Fries, published in Berlin in 1926 and considered the manifesto of the German Modern Movement (Jaeger, 2001, pp. 45–91). In the volume, twenty-five architects were called on to represent the new course of the *Junge Baukunst* in Germany, among them architects emerging at the moment of transition between Expressionism and Purism. The names of Otto Bartning, Emil Fahrenkamp, Otto Haesler, Hugo Häring, Ernst May, Adolf Rading and Hans Scharoun stand out. According to the editor, the review proposed itself as a ‘transversal reading through the development of the new design of the contemporary era’. A year later, the same individual signed the introduction to the monographic volume on Riphahn (Fries, 1927) in the series *Neue Werkkunst*, describing his most recent achievements: the *Siedlung Bickendorf*, the *Filotramviarie* work-



**Figure 2.** From left to right: W. Riphahn and C. M. Grod, Pavilion for the *Kölnische Zeitung* at the *Pressa-International Press Exhibition* Cologne, 1928 (Mantz, 1928); W. Riphahn and C. M. Grod, *Dammerstock-Siedlung*, aerial view from northwest, Karlsruhe, 1931 (Sträle, 1931); W. Riphahn and C. M. Grod, *Dammerstock-Karlsruhe*, eight family houses, oblique view, Karlsruhe, 1928 (Sander’s private).



**Figure 3.** W. Riphahn, Haus Riphahn, Köln-Braunsfeld, 1923–1924, garden and front street view. Source: Fries (1927).

shops of Köln-Merheim, the restaurant Bastei and various examples of housing construction in Köln-Braunsfeld (Läuferts, 2004, pp. 24–29; see Figure 3).

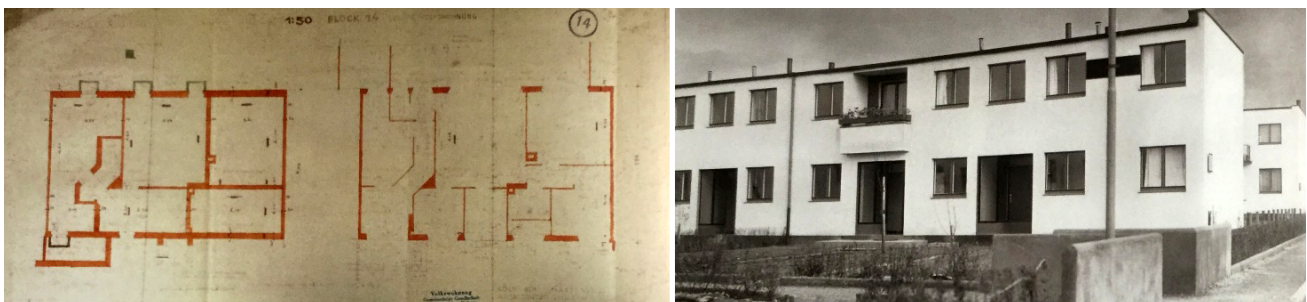
In 1928, Riphahn came third in the competition to design the model district of Dammerstock-Karlsruhe (Figure 2, middle). The direction of works of the low-cost terraced houses was entrusted to Otto Haesler and Walter Gropius (Franzen, 1993, pp. 256–260). This was nonetheless a worthy achievement for Riphahn that gained him great fame, helping to consolidate his status as an important exponent of the Modern Movement. On this occasion, he had proposed a terraced housing model with no compromises, fully adhering to the principles of the Neues Bauen, which attracted the harsh criticism of Fritz Schumacher and Paul Schmitthenner, supporters of traditional architecture. The typological model proposed by Riphahn in Dammerstock-Siedlung can nevertheless be considered one of the most important contributions to the topic of social housing in the 1920s in Germany (Klemmer, 1989, p. 74; Schmitt, 1997, p. 20–210).

The project was developed according to the requests of the public commissioner: five small, low-cost, terraced houses and multi-family buildings with flat roofs, placed in axial continuity with the unit designed by Gropius. The general orientation, according to the east-west heliothermal axis, presented some critical issues, which were resolved ably by Riphahn and Grod through an accurate

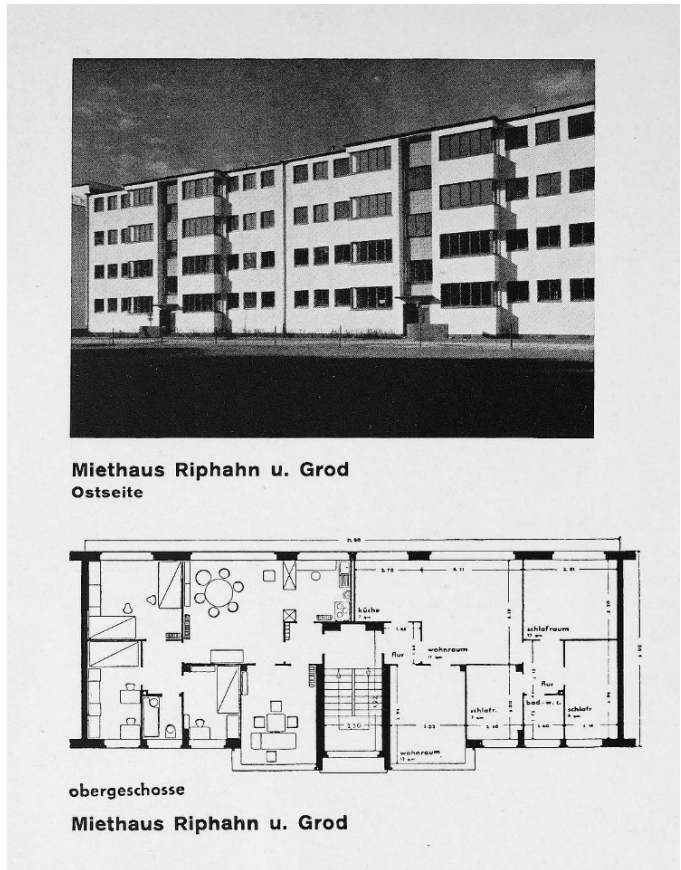
arrangement of living spaces. The multi-storey buildings located on the Ettlinger Allée in front of the entrance to the neighbourhood were arranged on four levels and presented the characteristic distributive solution at the stairwell, with a slightly set back entrance and strip windows, with respect to the symmetrical order of bay windows running the entire height of the building (Bier, 1929; Funck, 2004, p. 70; see Figure 2, on the right).

The terraced buildings are particularly sober and constrained within the volumetric arrangement, resolved, on the west facade, with the expediency of a deep loggia, glazed laterally on the corners in order to intercept the solar radiations on the south side (Figure 4). The interior was carefully designed for the most rational use of simple lacquered furniture, designed by Franz Schuster (Kutting, 2010, pp. 23–25; Schuster, 1929, pp. 4–32; see Figure 5). The kitchen was equipped according to the principles of the *Frankfurter Küche* by Margarethe Schütte Lihotzski. The inauguration of the neighbourhood, in the summer of 1929, earned Riphahn and Grod the job in Cologne for the design of the Weisse Stadt (Funck, 2004, p. 71).

However, the typological model proposed in Karlsruhe was derived from a previous design experience, that of a terraced settlement presented in 1921 by the Siedlung for miners in Brühl and Moers (Jahn, 1921, pp. 85–106), won by the team of Tessenow, Schmitthenner and Mewes (Funck, 2004, p. 239; Voight



**Figure 4.** From left to right: W. Riphahn and C. M. Grod, Dammerstock-Siedlung, two-family houses floor plan basement and ground floor, Karlsruhe, 1928; West view photograph. Source: Atelier Bauer (1929a).



**Figure 5.** W. Riphahn and C. M. Grod, Dammerstock-Siedlung, multi-storey buildings, rental house. Source: Atelier Bauer (1929b).

& Frank, 2003, p. 132). It was a low-cost building, but with an interesting and lively volumetric articulation that alternated a one-storey service building with a four-level housing volume (with cellar floor and attic included): the overall effect, with the graceful proportions of Biedermeier taste, was completed by the simple articulation of the south-facing facade, on which the small windows of the *Stube* and the bedrooms opened.

**4. Social Housing: The Cologne Case**

**4.1. The Foundation of Gemeinnützige Wohnungsbau AG Köln**

Throughout the Rhineland, and in the city of Cologne in particular, the phenomenon of industrialisation at the beginning of the 20th century had caused a rapid increase in population, with a consequent lack of low-cost housing. In the wake of a formidable social emergency, in March 1913, Konrad Adenauer (1876–1967)—later German chancellor but then deputy mayor of Cologne—conceived and set up GAG, a building cooperative for the construction and management of social housing (Greven, 1928, p. 23). The project was based on the idea of using private capital and public participation for the construction of rented, affordable housing, responding to the serious *Wohnungselend* (housing poverty) among

the marginalised segments of the urban population. The share capital, amounting to 1.22 million *Reichsmarks*, came from private investors and the city of Cologne, the latter with 52% of the share value.

**4.2. The Cultural Legacy of the Gartenstadt**

The first public competition organised by GAG, in 1914, was aimed at creating a model housing complex, located in the Cologne suburb of Bickendorf. The realisation of the winning project—awarded to the team of Caspar Maria Grod (1878–1931), Riphahn and Leo Kaminski—stood out for its motto, *Licht, Luft und Bäume* (light, air and trees), which from that moment became the programmatic and distinguishing theme of all social housing in Cologne (Heinen & Pfeffer, 1988, pp. 77–97).

Completed just after the end of World War I, the Bickendorf district consisted of a residential complex of 578 dwellings grouped into small building units (Figures 6 and 7) and inspired by the Margarethenhöhe model by Georg Metzendorf (Maahsen-Milan, 2007, pp. 152–163), the fairy *Gartenstadt* built by the Krupp industrialists in Essen. At the same time, from 1914—again in a project by Grod, Kaminski and Riphahn—GAG started the construction of the Nibelungensiedlung am Nordfriedhof (1919–1928) in Mauenheim, consisting of 676 single-family buildings (Riphahn, 1922).



Figure 6. W. Riphahn and C. M. Grod, Bickendorf I. Architectural model for the 1914 competition. Source: Läufer (2002).

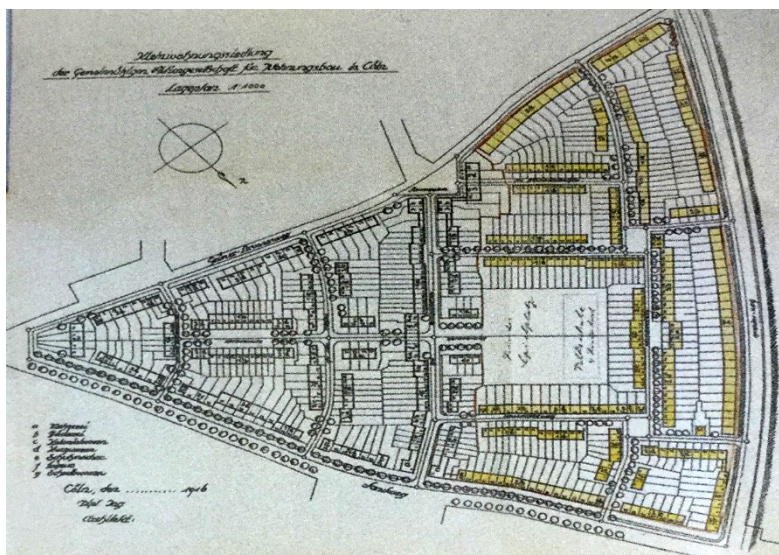


Figure 7. W. Riphahn and C. M. Grod, Bickendorf I. Plan (April 1919). Source: Riphahn’s private archive, Cologne.

### 4.3. The Weimar Years and Riphahn’s Project Activity for GAG

After the First World War, the general lack of housing was the main problem in the city, and the construction activity of GAG reached impressive numbers: once again, Riphahn and Grod’s professional collaboration was at the forefront, imposing on the city, between 1920 and 1936, standards and styles openly referring to the *Neues Bauen* (Heinen & Pfeffer, 1988).

It was above all the innovative visions of Riphahn—who had been steadily engaged since 1916 in the construction of large residential complexes—that became a model throughout the national territory. In particu-

lar, the spatial concept of urban housing, already successfully tested in settlements, was appreciated in the suburbs, led by GAG in Höhenberg’s Germaniasiedlung (1919–1928).

## 5. Siedlungsbau: The GAG Social Neighbourhoods in Cologne (1914–1938)

### 5.1. Nibelungensiedlung (Cologne-Mauenheim)

The Nibelungen district—whose name came only in 1921, after a public competition—comprises the full and coherent application of the urban and residential planning criteria defined by the social policies of GAG. In the

formal language still inspired by the *Heimatstil* (regional style), the new neighbourhood accentuated the rural character and food self-sufficiency typical of the difficult years immediately after the war. The influence of the *Reformbewegung* (Reform Movement) in the urban planning of the early 20th century was unmistakable: the role of forming the basis of the ‘New City’ theorised at this time was entrusted to public housing. It was a mixture of rurality and sociality, with large private green spaces—for the domestic cultivation of vegetables and the breeding of small farm animals—and collective service facilities to promote a spirit of community life in the settlement. The characteristics of the settlement model therefore provided for the possibility of leading a dignified but low-cost way of life, with the acquisition of entirely new levels of family and personal privacy. In this way, the concept of a ‘city of short distances’ was expressed, characterised by a contained physical dimension and a strong sense of identity on the part of the new ‘urban settlers’. These principles were already to be found in the design guidelines indicated by GAG, which recommended the achievement of ‘uniformity in the design of gardens and services, in front of and behind houses’ but in ways that discouraged the isolation and emergence of individualism, in the name of the ‘general laws of beauty’ understood as the achievement of social harmony (Bertram, 1999, p. 46; Kunze, 1992; see Figure 8).

The result obtained was measured in the construction of a complex characterised by simple and functional shapes but, at the same time, varied and of high aesthetic quality. To this end, the elaboration of the urban plan foresaw a careful planning of public spaces, softened by squares, courtyards and curvilinear road routes, as well as by artistic furnishing elements, such as benches and fountains. In the design of the fronts, the criterion of variety was favoured, adopting diversified building types, ranging from one to three floors, with altimetric profiles varying from west to east, in order to obtain the optimal solar exposure for both the settlement and the individual building units. The buildings were characterised by the distinctive profile of the steep double-pitched roofs, accompanied by the lively and picturesque composition of staircases, arches, dormer windows and

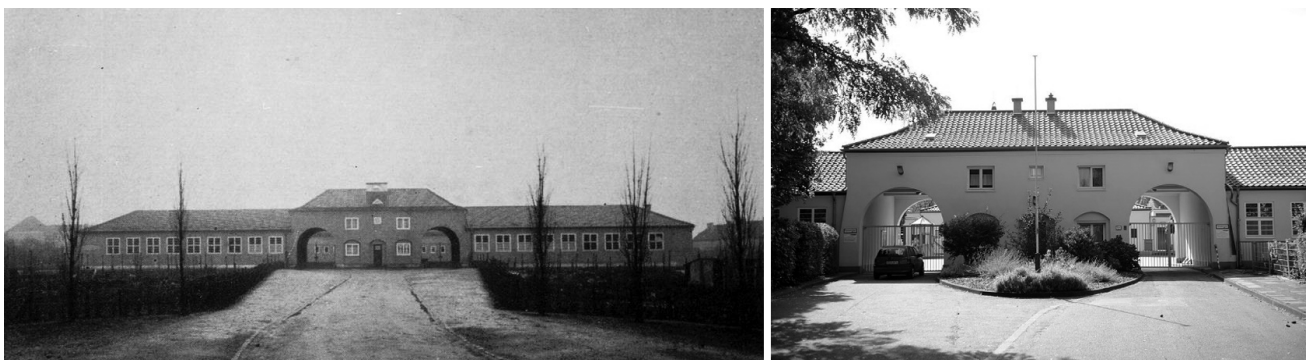
bow windows with curved profiles that recalled the architecture of the castles. Particularly modern for the time, each housing unit had its own water and gas supply.

In 1925, following the prevailing expressionist taste, all the houses were painted in bright colours, thus earning the playful name of the ‘parrot’s quarter’. War damage from Allied aerial bombardments in 1944 caused a level of destruction estimated at 90%; the district had been built in immediate proximity to a railway line of strategic importance. Despite partial privatisations and inevitable modernisations, the uniform character of the historical settlement is still partially recognisable.

Today, the large settlement of Mauenheim corresponds to one of the most popular districts of Cologne, located in the north quadrant of the city, between the railway station and the Nordfriethof and well connected to the city centre. The general layout anticipated the Viennese experience of *Gemeindebau* (K. Ehn, 1923) and the *Berliner Hufeisensiedlung-Großsiedlung Britz* (M. Wagner, 1924), both synonymous with a collective housing form of utopian community inspiration, with integrated services placed in relation to collective green spaces (Kunze, 1992, p. 44). The complex was entirely renovated between 1995 and 2000.

### 5.2. Germaniasiedlung (Cologne-Höhenberg, 1917–1928)

Höhenberg’s Germaniasiedlung is an outstanding example of cooperative housing built during the Weimar Republic. Development phases and changes in the concept of social housing construction that occurred during building can be seen. Germaniasiedlung—established on the grounds of an abandoned industrial complex of the same name—can be considered one of the most important housing experiments in the city, thanks to the participation of 38 local architects. In 1917, GAG acquired the site of the former Germaniahütte foundry in order to establish affordable housing for low-income users; the general urban plan—developed by the technical director of GAG, Fritz-Hans Kreis—was ordered according to the principles of the *Gartenstadt*, creating a new type of Reformhausiedlung. It became a multi-



**Figure 8.** From left to right: W. Riphahn and K. M. Grod, Mauenheim school (Unknown, 1925, p. 128); Nibelungensiedlung School, gatehouse, Nibelungenstrasse, Cologne (Kramer, 2012).



storey building placed along the perimeter of the lots but with internal green courtyards, services and common areas. The settlement was originally designed as a residential complex consisting of single-family units, but these could only be built in the first phase of construction (1920–1921, Germaniastrasse/Meiningerstrasse). In the second phase, multi-family buildings were built in units for five to six families. The revision in the design, caused by the difficult economic situation of those years, was exacerbated by the phenomenon of monetary inflation, which rendered the construction of single-family buildings, financed with public money, unsustainable (Roeseling, 2003, p. 104).

The pentagonal shape of the lot, with diversified road sections, created a particularly pleasant effect, intentionally inspired by the urban landscape and medieval architectural language, recalled, for example, in the use of arches, battlements and bow windows. The district draws fully on the expressionist repertoire in vogue in the early 1920s, with geometric ornamentations, an abundance of sharp spires and edges and the combination of exposed brick surfaces and plaster. In addition, the varied composition in the construction of the roofs and the care in the individuality of the accesses contributed to accentuating the autonomous character of the settlement and of the single housing units, differentiated for the various social and professional roles—workers, employees and officials of the nearby industrial enterprises of tertiary services—for which they were intended. Community infrastructure—a school, department stores, shops—were built as integral parts of the settlement and found their centre in the Weimarer Platz. In 2009, the neighbourhood underwent modernisation and renovation (by Böttger Architekten BDA, Köln), according to philological criteria, respecting the original typologies and finishes (Heinen & Pfeffer, 1988, pp. 77–84).

**6. Elaboration and Transcendence of the Models of the Gartenstadt: Riphahn, Forerunner of the Neues Bauen**

In 1919, while Konrad Adenauer assumed the role of Technischer Bürgermeister of Cologne, the architect and

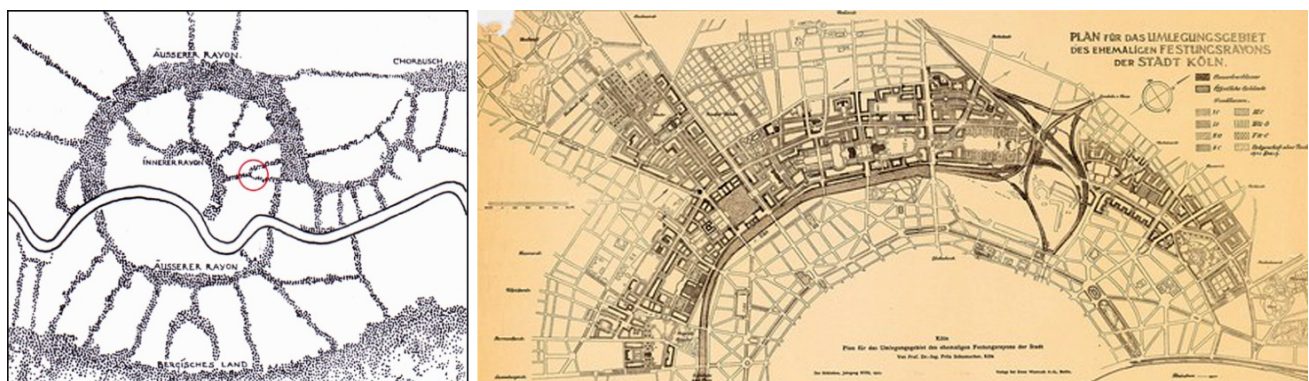
urban planner Fritz Schumacher (1869–1947) won the competition for the design of the immense range of fortifications disused since 1907 (Schuckmann, 1965; see Figure 9), ahead of the proposals of Alfred Stooß and Hermann Jansen. Between 1920 and 1923, Schumacher prepared the general town plan with long-term growth prospects in mind, conceiving the idea of the city as a social *Gesamtkunstwerk* based on the creation of large green belts (*Innere Grüngürtel*) 500 meters wide and developed for more than 7 km (Gebert, 2013, p. 119). It was in that context that all the major social housing projects developed and took shape, comprising the new jurisdictional definition of the *Großstadt* Köln, which included all the small towns and neighbouring villages in the new urban perimeter.

From 1922, with the resumption of the building activities of GAG, Riphahn designed and built the most significant housing complexes in Cologne: the *Grüner Hof* of Mauenheim (1922–1924), Bickendorf II–Rosenhofsiedlung (Cologne, 1922–1938), the *Blauer Hof* of Kalkerfeld-Buchforst (1926–1927) and finally the *Weiße Stadt* in the suburb of Zollstock-Buchforst (1929–1932).

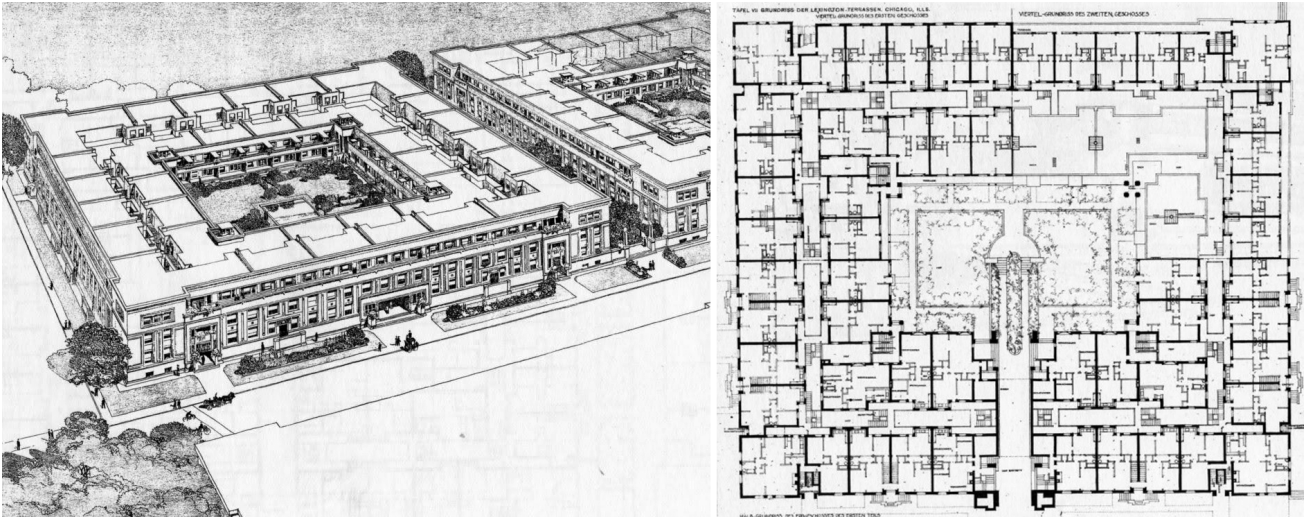
The new and extraordinary abundance of greenery allowed for the construction of a housing project with modern building hygiene criteria conceived according to the motto *‘Licht, Luft, Sonne!’* The urban vegetable gardens included or adjacent to the *Siedlungen* allowed families to overcome the harsh economic situation of the post-war period. The advantages of horticulture and family poultry and rabbit farming became widespread thanks to the experiments conducted in Worpsswede at the *‘Sonnenhof’* social farm during the same period by the landscape architect-Leberecht Migge (1881–1935).

**6.1. Grüner Hof (Cologne–Mauenheim, 1922–1924)**

Riphahn’s *Grüner Hof* was realised in just two years and was fully consistent with the principles of expressionist aesthetics; it received recognition and publicity in the following years (Hoffmann, 1927). The residential courtyard, whose typological system refers explicitly to



**Figure 9.** From left to right: F. Schumacher, *The Green Belt of Cologne: Concept*, Cologne, 1919. Source: (Curdes, 2000); F. Schumacher, Competition for the development of the inner district, Cologne, 1920. Site plan 1:10000 (Schumacher, 1920).



**Figure 10.** F. L. Wright, Lexington terrace apartments, Chicago, 1894–1901, bird's eye view and ground plan. Source: Wright (1909).

the Lexington Terraces apartment houses of F. L. Wright (1894–1901; see Figure 10), consisted of three intermediate courtyards, delimited by four open rows; the massive character of the building, originally painted in dark red and ochre, expanded into a green space of unusual dimension (Hilberseimer, 1927, pp. 26–34).

Meadows, playgrounds, hedges and—long ago—flowerbeds created a peaceful island of peace in the urban fabric (Figure 11). The sequence of the windows, the deep arcades and the stairwells, made up a singular vertical order on the façade, which—arising from a 'shoe-like' plinth—culminated in a blind arcade. On the roof slopes, small triangular-shaped dormers opened in groups. The reference to medieval stylistic elements dear to the expressionist movement was evident, symptomatic of a cultural climate balanced between over-excited sensitivity and sarcastic realism, typical of the Weimar years. The irruption of the anxiety that ran through the insecure world of those years could also be found in the original closing of the arcades by rectangular-grid grilles, which resumed the partitioning of the windows, accentuating

the vertical course of the *Risaliten* (avant-corps). The housing layouts, based on six different dimensional cuts, were combined in eleven typological variants.

#### 6.2. Bickendorf II–Rosenhofsiedlung (Cologne, 1922–1938)

The second extension of the residential village Bickendorf II, also known as Rosenhofsiedlung, was designed by Riphahn and Grod and built in 1923. The settlement, designed to form an island of quietness among urban traffic, was characterised by the asymmetrical layout and the generous endowment of green areas placed on the road fronts, with restful gardens in the inner courtyard. The central tree-lined square, called 'Rosenhof', gave the neighbourhood a serene country setting, delimited by service buildings of higher formal and chromatic quality, whose combination—in shades of yellow ochre, earth of Siena and beige—gave vivacity and pleasantness to the whole complex, despite the simplicity of the façades (Figure 12). The entrances were marked by stair-



**Figure 11.** From left to right: W. Riphahn, historical image of *Grünener Hof*, Köln-Mauenheim (1922–1924 (Schmölz, 1926)); Interior of the courtyard (Heinrich, 2010a).



**Figure 12.** W. Riphahn and C. M. Grod, *Rosenhof-Siedlung*, Akazienweg-Venloer Straße, Cologne. Source: Joauth (2012).

wells protruding slightly from the façade, with giving a pleasantly rhythmic effect to the façade on the road front. The buildings rose three to four floors at most, with cuts of housing based on four basic building types, which combined to develop eleven possible variants: the living rooms and kitchens overlooked the arcades facing east and south to get the maximum sunshine.

The neighbourhood, now protected heritage, was renovated in 2012, with services and functional equipment refitted and the original colour plan restored.

### 6.3. Kalkerfeld-Blauer Hof (Cologne-Buchforst, 1926–1927)

This settlement, built in 1926 and 1927 for GAG and designed by Riphahn and Grod, attests to the achievement of the aesthetic and functional canons avowedly Neues Bauen. The municipal building cooperative had acquired in 1926 a lot of 18 hectares of land in the suburb of Kalkerfeld, wooded and uninhabited but opportunely connected to the city centre and to the periphery via the railway line.

Due to the construction of the Mülheim Bridge on the Rhine and the related demolition of residential buildings, the city of Cologne urgently needed living spaces for low-income tenants. The design of the complex followed the dictates of Dutch Social Housing, with ‘courtyard’-type settlements (Maahsen-Milan, 2010, p. 108; see Figure 13).

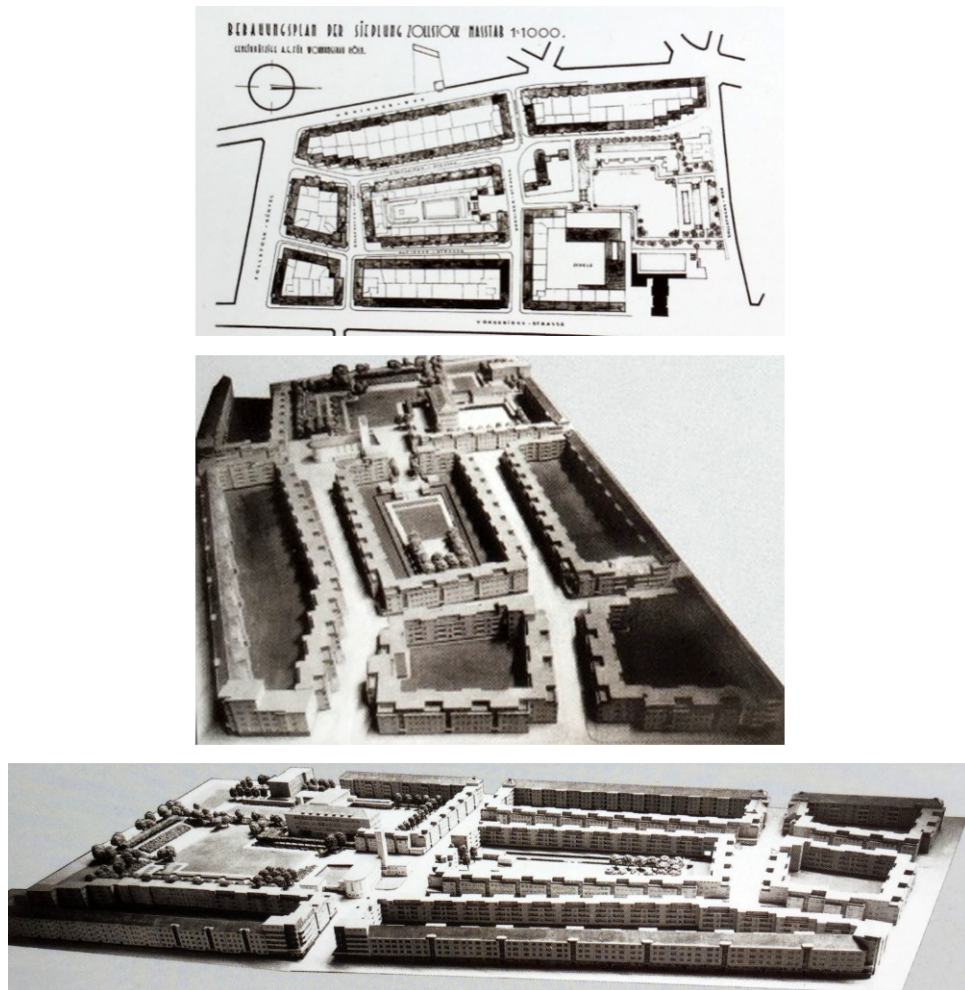
The buildings were laid out on four floors on an almost square plan; at the corners were access blocks to the courtyards that rose, in cubic form, for five floors.

The smooth façade on the street side was marked by the backward volume of the stairs and the alternating height of the upper windows. In the corner buildings, the balconies opened onto the external front. The façade overlooking the courtyard was characterised by galleries built in every three or four alternate floors per house. The Cologne artist Heinrich Hoerle (1895–1936) was entrusted with the design of the chromatic plane: the external front was painted white, with red square windows. The façade facing the inner courtyard was decorated with two different shades of blue and punctuated by white sash windows (Hagspiel, 1981, p. 181; Heinen & Pfeffer, 206–212; see Figure 14). For the more than 200 new apartments, the architects designed custom-made furniture at low cost, optimally adapted to the housing plans. The settlement was completed in 1927 and immediately occupied.

Heritage-listed since 1988, the settlement was completely renovated in the years 2006–2010. The living space was adapted to today’s needs. All the residential buildings were equipped with new flat roofs, wall and roof insulation and central heating systems that replaced the original stoves. The internal courtyard, which was completely redesigned after the construction of an underground car park, is now a lawn and has a public, tree-lined playground.

### 6.4. Zollstock–Weisse Stadt (Cologne-Buchforst, 1929–1930)

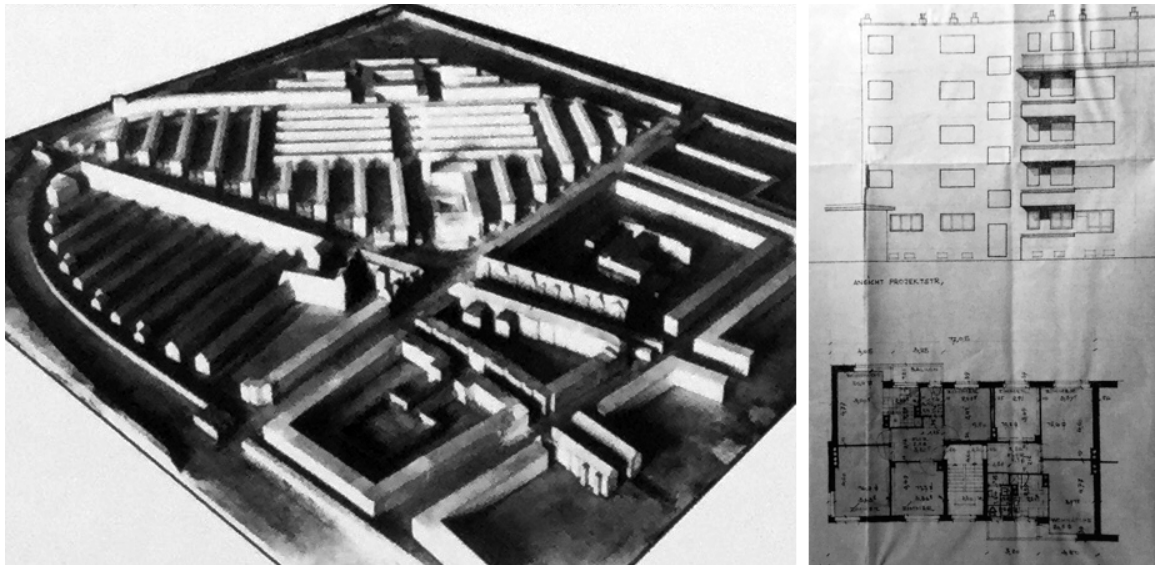
Riphahn and Grod’s most celebrated residential district was the *Weisse Stadt* (white city), built between 1928



**Figure 13.** Top: W. Riphahn and C. M. Grod, *Zollstock Siedlung*, general plan 1929 (Riphahn, 1929). Middle and bottom: *Zollstock Siedlung*, model 1929 (Mantz, 1929).



**Figure 14.** W. Riphahn, *Blauer Hof*, Cologne-Buchforst, 1926–1927. Interior courtyard. Source: Heinrich (2010b).



**Figure 15.** From left to right: W. Riphahn, Cologne-Buchforst, Siedlung Kalkerfeld with *Blauer Hof* and *Weisse Stadt* (1929–1930; Mantz, 1928); Cologne-Buchforst, Siedlung Kalkerfeld with *Blauer Hof* and *Weisse Stadt* (1929–1930; Schmölz, 1929).

and 1932 in the suburb of Kalkerfeld, called Buchforst after 1932. The housing complex—which experimented with a mix of residential blocks of flats and terraced houses, in alignment with the dictates of the *Neues Bauen*—was characterised by an original volumetric articulation, based on the 45-degree rotation of the terraced houses, which, instead of aligning with respect to the axes of Heidelberger Strasse and Waldecker Strasse, appeared in a foreshortened view (Figure 15). The general effect, having a strong visual impact, was further accentuated by the chiaroscuro effect of the slightly staggered heads, narrowing the appearance of the façades on the street; on the ground floor, small volumes are aggregated for neighbourhood shops and ‘collective services’ (Gemeinschaftshaus; see Figure 16).

The large spaces between the houses were designed to allow, in addition to an optimal amount of sunshine, the efficient ventilation of open courtyards, equipped

with generous amounts of greenery to help residents relax. For the first time, Riphahn renounced traditional pitched roofs to adopt modern flat roofs and luminous, two-sided integrated balconies, which enlivened the façades of the blocks with vigorous volumetric contrasts.

In order to promote the social mix, single-family residential types were also built in rows, arranged on one or two levels next to the multi-storey blocks of flats. The multi-storey blocks around the garden courtyard combined with the flat roofs and the rhythmically structured façades, arcades and backward balconies to consolidate a purist plasticism, devoid of decoration and now free of any formal loan to the *Gartenstadt*’s vernacularism (Figure 17). The stylistic path and urban conception gradually moved away from the model of the single-family house in the village: in a few years, Riphahn would be recognised as a genuine and authoritative representative of the *Neues Bauen* (Funck, 2004, pp.76–85).



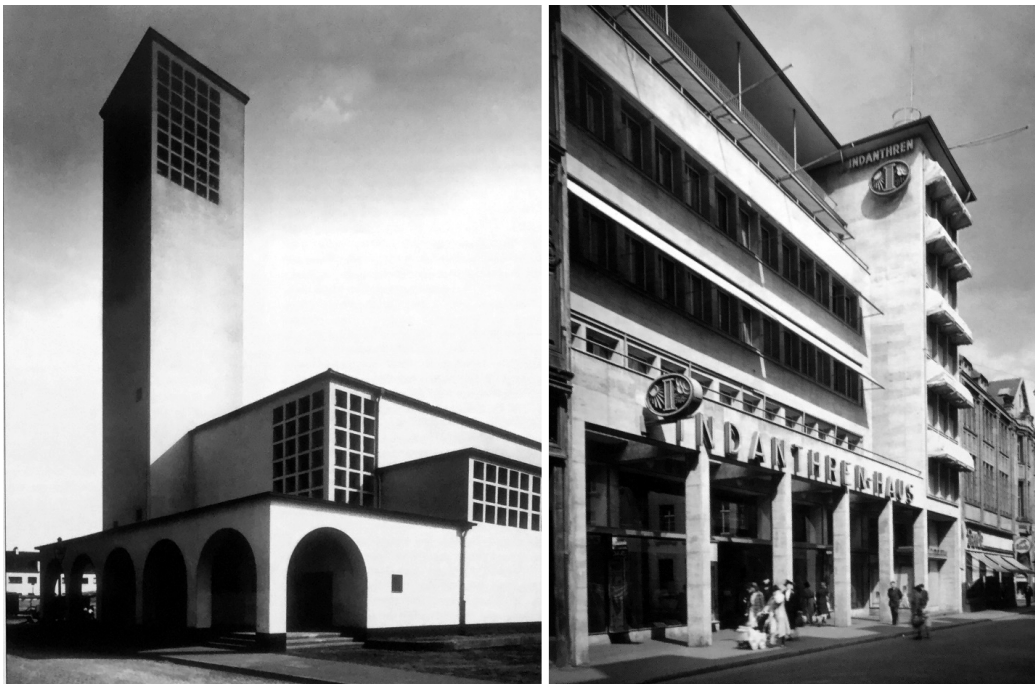
**Figure 16.** From left to right: W. Riphahn, Cologne-Buchforst, Siedlung *Weisse Stadt*, 1929–1930 (Fries, 1930); Heidelberger Straße corner (“Heidelberger Straße corner”, 1929).



**Figure 17.** W. Riphahn, Cologne-Buchforst, *Weisse Stadt* (1929–1930). Source: Hatzfeld (2017).

The neighbourhood planning also included the construction of a new parish church (1928–1931), dedicated to St Peter Canisius and built to a design by Riphahn himself. Although the church was located at the heart of the new community, it was set back from the urban road axes. The church had a simple basilica structure but the

project was repeatedly reworked and eventually stripped of the most original and innovative solutions due to the refusal of the Cologne Catholic authorities to approve them (Körner & Wiener, 2008; see Figure 18, left). After the heavy war damage, the hall was rebuilt in 1947 by Dominikus Böhm (Schlombs, 1991, p. 203).



**Figure 18.** From left to right: W. Riphahn, Cologne-Buchforst, *Weisse Stadt*. Church of St. Peter Canisius (1929–1930). View from southwest (Mantz, 1931); W. Riphahn, Office and commercial building 'Indanthren'. General view from Breite Strasse, Cologne 1939 (Mantz, 1939).

### 6.5. The Return to Conservative Modernism (1938–1940)

In the years of the National Socialist dictatorship, the Weisse Stadt was considered an expression of the International Style and was therefore branded *undeutsch*, i.e., not typically German. As a result, Riphahn was marginalised and excluded from any public contract until 1938. Thanks to the friendly involvement of Clemens Klotz (1886–1969)—an influential architect of Cologne engaged in the major tenders of the regime—Riphahn was included again among the public housing designers of GAG (Kier, Liesenfeld, & Matzerath, 1999, p. 115). In the same year, he realised two elegant buildings in the centre of Cologne: a corner block with a tower for the *Teilschenbeschleuniger* and the *Indanthren-Haus*, a commercial building with a gallery of marked Italian taste in Breiter Strasse (see Figure 18, right). He also designed and produced a multi-storey block for individuals at Volksgarten, a suburb of the Kölner Südstadt. For GAG, he resumed the construction of two building blocks on Venloer Strasse, in the Bickendorf II district, and at the intersection of Birresborner and Bitburger Strasse, in Köln Lindenthal. These were residential complexes in line with the requests of clients: austere, conservative volumes in taste as well as construction, aligned to the street front and marked by squared *Erker* (bow windows) at the entrances to the blocks of flats (Funck, 2004, p. 252).

### 6.6. War Planning: Ideas for the New Cologne

The outbreak of war on September 1, 1939, did not slow down Riphahn's construction activity. From 1940, despite the first aerial bombardments, he was busy with the construction of elegant commercial buildings in the centre of Cologne. The elaboration of the second variant of the building complex of Martinsfeld, which started in 1934, continued too. He then specialised in the construction of air raid shelters, and his activity revolved around conceiving a new urban layout for the city centre after the bombardments. His activity culminated in the con-

ception of the monumental *Dombunker* (1941) in the southern area of the cathedral, with the discovery of the so-called mosaic of Dionysus (third century AD), which would become the future constitutive nucleus of the RGM | *Römisch-Germanisches Museum* (1961–1974). In 1942, the dramatic evolution of the war forced Riphahn to evacuate and abandon his professional activity entirely (Funck, 2004, p. 253).

### 7. The Post-War Experience: Residence and Infrastructure for the New Beginning

Between April and May 1945, Cologne was occupied by Allied troops and Germany's unconditional surrender to the Allies was signed. Riphahn resumed the design of the new city layout with the most brilliant local technicians, such as Karl Band, Eugen Blanck, Michael Fleischer, Hans Lomeyer and Gerd Lohmer (Maahsen-Milan, 2010, p. 112). In 1946, Rudolf Schwarz was appointed head of the renovated reconstruction planning office. From that moment on, Riphahn devoted himself to designing innovative, formally shabby residential buildings, i.e., the Hahnenstrasse complex (1945–1952; see Figure 19)—the first pedestrianised commercial and public street in Europe. The Cologne example was probably the reference for the creation of the blue zone *Lijnbaan* (1949–1953) in Rotterdam, developed by J. H. van den Broek and Jacob Berend Bakema (Funck, 2004, pp. 166–173).

The cultural centres of the Britisches Kultur Institut *Die Brücke* (1948–1950) and *Französische Kultur Institut* (1951–1953), promoted by the Allied military administrations, followed shortly after. Throughout the 1950s Riphahn's professional activity continued, with an ever-increasing commitment to the construction of buildings for tertiary use—from the *Deutscher Herold* and the *Concordia Haus* (1950–1952) to the *Dresdner Bank* (1958–1961), now indispensable in supporting the country's economic recovery—and to reconstruction, with the extension of the Faculty of Economic and Social Sciences at the University of Cologne (1954–1960) (Maahsen-Milan, 2010, p. 140).



**Figure 19.** W. Riphahn, Hahnenstrasse complex (1945–1952). Source: Spekking (2014).

From 1946, Riphahn started the process of designing and reconstructing the theatre complexes in Offenbachplatz, proposing five different variants and managing, between 1952 and 1957, to complete the Opera Theatre (Kölner Oper). The four-year period 1958–1962 also saw the annexed Theatre of Prose (Schauspielhaus) completed, including its restaurant (Funck, 2004, pp. 226–232).

## 8. Conclusion

Five decades of inexhaustible activity allowed Riphahn to experiment, during the first half of the 20th century, with the most important styles of German architectural culture: from the *Jugendstil* of the early years of his career with Grod to the very lively and reckless expressionist season; then, from 1927, with the dry language of the *Neues Bauen*. At this stage, Riphahn did not renounce typological invention, especially in the urban resolution of the great *Siedlungen* of Cologne (Goethe, 1772; Grod, 1928). The creative parabola ended in the heroic years of the Second World War, in a civil commitment that went beyond the professional: perhaps these are the later and happiest works, which expressed the perfect synthesis of elegance and formal cleanliness (see Figure 20).

Over the course of his professional life, Riphahn received honours and recognition. In 1950, the Technische Hochschule Carolo-Wilhelmina zu Braunschweig awarded him an honorary doctorate, and three years later, the Land of North Rhine-Westphalia proclaimed him the ‘first prize winner’ of the Architecture Prize, declaring that:

*Der Architekt Dr. e.h. Wilhelm Riphahn steht unter den Baukünstlern unseres Landes an hervorragender Stelle. Er hat in einem Lebenswerk von un-*

*beirrter Folgerichtigkeit Bauten aller Art geschaffen. Sie zeichnen sich durch einfallsreiche Frische und Kraft der Gestaltung aus. Vorwärtsdrängende Ursprünglichkeit und Sinn für Einordnung verbinden sich glücklich in seinen Werken. So wurden sie vorbildlich für das Bauschaffen der Gegenwart. [The architect Dr. hc Wilhelm Riphahn played a role of excellence among the artists of our land. During his professional life, he created buildings of all kinds, in a life of absolute consistency. His works are characterized by great imaginative freshness and power in design: an originality that blends happily into a sense of order and harmony and represents contemporary creativity.] (Hagspiel, 1981, p. 394; Klemmer, 1989, p. 74)*

The reasons for the late recognition of Riphahn’s work can be found, first, in the shy and frank character of the architect who—engaged full time in the activities of designer and builder—had no public tasks at any time in his professional life. Moreover, the legacy of a continuing critical hostility towards the most significant works of the German Reconstruction, of which Riphahn was certainly one of the most prestigious and original interpreters, weighed against him. The legacy of his thought, investigated by a small number of scholars (Hagspiel, 1981), is linked to only two written works: a chronicle of his travels in the United States in 1939 and a concise but valuable reflection on the guiding principles for the reconstruction of the city of Cologne, dated July 14, 1945, only two months after Germany had surrendered to the Allies (Riphahn, 1945). However, from these few elements arise a first-class intellectual and a civic personality, competent and passionate, attentive to the definition of the basic concepts for the structuring of a modern metropolis that was to be rebuilt while enhancing its surviving architectural remains and without losing the



**Figure 20.** From left to right: W. Riphahn, Crew buildings, GAG Siedlungsbau Raderthal-Volkspark residential skyscraper, north-west view (“Besatzungsbauten, GAG Siedlungsbau Raderthal”, 1951); W. Riphahn, Residential skyscraper, west front view, 1951 (Konservator der Stadt Köln, 1951).



opportunity to renovate and rationalise an urban layout still conditioned and restricted by medieval precursors.

Given the complexity of such a high-level but completely underestimated artistic figure from the period of post-war reconstruction, it is surprising that some of Riphahn's most precious works—i.e., the Nordfriedhofsiedlung—were demolished in recent times (and it was only with difficulty that the *Kölner Oper* (1954–1957; see Figure 21) and the *Schauspielhaus* (1962) could be saved from demolition (Maahsen-Milan, 2010, p. 114). After the exhibition held in Cologne in 2004, an appropriate critical re-reading of his work began at the MAK | Museum für Angewandte Kunst Köln, with the necessary reconsideration of the role that this great artist played in the city of Cologne and in German architecture between the two wars (Funck, 2004). In 2015, after years of restoration work, marked by a long



**Figure 21.** Top: W. Riphahn, Historical image of *Kölner Oper*, 1957 (Vakdad, 2018). Middle and bottom: Modern image of *Kölner Oper* (Spekking, 2010).

debate between the supporters of renewal and of respectful conservation, the theatrical architectural complex was re-opened, becoming, together with the figure of Riphahn himself, a true icon of German post-war architecture.

The recent redevelopment of Riphahn's *Siedlungen* took place in the context of the energy retrofitting, functional adaptation and renovation of the technological systems of GAG's real estate assets. The building restoration was entrusted to teams of architects and scholars, who contributed to enhancing Riphahn's housing complexes with rigorous procedures of preservation and philological restoration of volumes, facades and original colouring. Visits to the restored complexes are possible on the *Tag des offenen Denkmals* (Open Monuments Day), which takes place annually thanks to the Deutschen Stiftung Denkmalschutz of the city of Cologne. The visits, usually attended by architects, are highly appreciated by a diverse public, including citizens and tourists interested in learning about Modern Movement heritage.

Noteworthy, and evidence of the growing interest in Riphahn's work, is the series of conferences and guided tours *Perlen Moderner Architektur & Moderner Bauens* in Köln (1 June–30 October 2019), aimed at enhancing the architectural heritage of Riphahn on the 130th anniversary of his birth.

The bibliographic sources on the work of Riphahn are many, some of them contemporary to the construction of his works. Recent critical evaluations are still based on the reconnaissance generated by the sensitivity and work of Hirtrud Kier, who, with Wolfram Hagspiel, contributed to the rediscovery of the personality and architectural and urban work of Riphahn, providing a precise cultural and historical framework. However, incisive international comparisons that might place Riphahn's work in the context of the urban renewal of the 20th century are lacking.

We hope that further studies will delve into and disseminate the work of this distinguished exponent of modern architecture. This article is a first step in spreading his work and teaching in Europe.

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### Conflict of Interests

The author declares that there are no conflicts of interest.

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