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New color trends of the model Werkbund estates and Neues Bauen residential architecture during the Weimar Republic in Germany

Introduction

During the Weimar Republic in Germany, two color trends of *Neues Bauen* residential architecture were clearly visible: “white architecture” and the “colorful city” (*Die farbige Stadt*).

The pioneer of the “movement for color” (*Farbenbewegung*) in Germany was Bruno Taut. His passion for color was already evident in his early garden estates before World War I: Reform (1913–1930) in Magdeburg and Falkenberg (1913–1914) in Berlin-Grünau [1]. The Falkenberg estate was the first in which Taut presented the concept of colorful houses (Fig. 1). The period from 1918 to 1925 was a time of intense promotion of color in residential architecture.

The trend of “white architecture” appeared in Germany around 1926 and ended in 1933 with the coming to power of the National Socialists and the return of traditional forms in architecture (*Heimatstil*). White color was symbolically linked to the so-called *Lebensreform*, a reform focusing on improving health conditions of the population by promoting a new way of living in new and hygienic houses.

The purpose of the article is to present the color trends of the *Werkbund* model estates (1927–1932) in the background of *Neues Bauen* residential architecture built under the urban construction program during the Weimar Republic in interwar Germany (1918–1932).

The presented knowledge is the result of extensive historical studies based on archival research (State Archive in Wrocław, Wrocław Construction Archive-Department

of the Museum of Architecture in Wrocław, Akademie der Künste in Berlin) and iconographic research. Apart from the above mentioned, literature studies of contemporary publications were conducted.

Succeeding many years of use and remodeling, today, the only way to discover the original concept of the houses (even those that were under conservation protection) is through stratigraphic studies of the paint coatings of the houses. In many housing estates such research has been conducted and described in professional journals. This article is based on the author’s personal experience involving the revalorization of Wrocław’s *Werkbund* model housing estate.

The original *Werkbund* exhibition catalogues [2]–[6] and contemporary monographs on them [7]–[13] were an excellent source of information.

An exceptional publication is a catalogue from an exhibition organized in Wrocław’s Museum of Architecture of six *Werkbund* model housing estates – *A Way to Modernity, Werkbund Housing Estates 1927–1932* [14]. The exhibition was organized as part of the European Capital of Culture.

Priceless information is contained in professional journals of the interwar period.

However, the most relevant to the content of this article are publications on the color of architecture of the interwar period, belonging to the *Neues Bauen* trend. These are usually publications related to the restoration of buildings and stratigraphic studies revealing the original colors of the buildings [15]–[29].

Although the knowledge of the color scheme of the interwar estates, especially of the *Werkbund*, is still incomplete (it is shown in the indicated publications), the color trends promoted at that time can already be clearly noticed.

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Fig. 1. Falkenberg garden estate in Berlin-Treptow, designed by B. Taut, 1913–1916, current state, color reconstruction design by W. Brenne: a) terraced houses, Gartenstadtweg, b) multi-family houses, Gartenstadtweg (photo by R. Czajka, 2016)

Il. 1. Osiedle ogrodowe Falkenberg, Berlin-Treptow, zaprojektowane przez B. Tauta, 1913–1916, stan obecny, projekt rekonstrukcji kolorystyki – W. Brenne: a) zabudowa szeregową, Gartenstadtweg, b) dom wielorodzinny, Gartenstadtweg (fot. R. Czajka, 2016)

Dwelling estates built under the urban construction program (1919–1924)

Under tough economic conditions, the Weimar Republic in the first postwar years from 1919 to 1924, began to take measures to solve the housing problem, which was considered one of the chief social issues. Despite difficult financial conditions, housing companies were established at that time to support the design and construction of houses and estates, particularly for working class families.

In the 1st half of the 1920s, the so-called crisis houses (*Notheim*) were proposed. Due to a lack of building materials after World War I, housing companies used substitute materials. In the search for low-cost solutions, local old building materials were resorted to. Walls could be made of blocks of dried clay, limestone, lime slag or wood. Roofs were covered with shingles or even thatch.

Ernst May, the creator of *Das neue Frankfurt*, started his professional career in Wrocław in 1919 and was appointed to manage the *Schlesische Heimstätte* company. At that time May used color as an important artistic means. Color was intended to reduce the monotony of the ensembles of simple houses. The use of color by the *Schlesische Heimstätte* was part of the all-German trend for colorful construction of the interwar period. The architects strived to maintain originality of their works. Color, used on the façades of the houses and in their interiors, became an excellent means of attaining individual character of the individual estates.

In 1922 Ernst May published an article in *Schlesisches Heim* entitled *Angst vor der Farbe* [Fear of color], in which he called for the use of color.

Schlesisches Heim published articles promoting the use of color, where completed examples and technical problems were presented. It was written that no other means gave such a specific character to a room at such low cost as color.

Two possibilities of obtaining façade colors were indicated: mass colored plaster and painted plaster. The first

method offered fewer possibilities for obtaining a wide spectrum of colors, whereas the second method offered much greater possibilities thanks to the introduction of mineral pigment production technology present at the end of the 19th century. The advantage of paints based on these pigments was their resistance to weather conditions as well as the possibility of their production on an industrial scale.

Between 1919 and 1925 May built many colorful housing estates in Wrocław and its surroundings (Kleci-na, Oltaszyn, Prudnik, Boleslawiec). He designed buildings in the form of barracks in which color (red, blue, green) was the only decoration. May used, as he claimed, the cheapest and most decorative means to enliven simple architecture.

After the war, in Magdeburg 1921–1923 it was Bruno Taut who was able to put his ideas into practice when he became the city architect. His work inspired Ernst May and Otto Haesler [23], [30], among others, to “fight for color”, and the campaign *Farbiges Magdeburg*, which began in 1921, stimulated a “color movement” throughout Germany. In the years to follow, an organization called *Die farbige Stadt* was founded as well as a magazine under the same name.

The effects of the fight for color were soon evident in the architecture of Stuttgart, Halle, Freiburg [24], and Potsdam. In Glauchau in 1922, an exhibition was held on color in architecture. Among those exhibiting their work were Bruno and Max Taut. In the same year, an exhibition was organized to present the concept of a colored Potsdam [23].

The fashion for color had an influence on the development of the German chemical paint industry and its dominance in Europe including: Hoechst (headquartered in Frankfurt am Main), BASF, Bayer, Agfa, Cassella, and Kalle, dubbed the “Big Six”, both in Germany and abroad. Around 1923, IG Farben introduced a durable, efficient, and easy-to-use façade paint. The traditional and labor-intensive mass-colored plaster was no longer necessary [31, p. 420].

Dwelling estates built under the urban construction program (1925–1932)

The introduction of the *Rentenmark* currency in October 1923, as well as the Charles Gates Dawes Plan, led to the stabilization of the German economy. Foreign capital began to flow. April 1924 marked the beginning of a phase of economic recovery hitherto unknown in Germany – the “Golden Twenties” (*Goldene Zwanziger Jahre*).

Invigorated by economic growth, “The movement for color” experienced its peak between 1926 and 1929. Color was used in mass housing construction both by radical, avant-garde architects, advocates of *Neues Bauen* (Bruno Taut, Ernst May, Otto Haesler).

In German architecture of the Weimar Republic, there was what Wolfgang Pehnt called the “scream for color” [32], which was close to expressionism in art in its vivid, bright color palette. Between 1925 and 1930, more than one million buildings were given a new color scheme.

Between 1924 and 1929 the economic situation was relatively stable. The introduction of a tax on rental houses in the spring of 1924 improved it further and enabled the development of mass housing construction of small, two- and three-room apartments.

The most spectacular changes were those aimed at giving German cities a new face. The movement for color, on the one hand, entailed the restoration of old urban buildings (*Die farbige Stadt* – the colorful city), while on the other, the construction of new rational social housing.

In the new housing estates, color had an important task to fulfill. Taut believed that a colorful cityscape had a positive effect on its inhabitants. Color was supposed to create the impression of a safe living space in the so-called *Großsiedlungen*, the new and rational housing estates [23]. Since 1925 many colorful housing estates of this type have been built in Germany, with two cities, Berlin and Frankfurt am Main, playing a leading role in this field. It was there, that the proposals of the social democratic architects Martin Wagner, city architect (*Stadtbaurat*) in Berlin from 1926 and Ernst May, city architect in Frankfurt am Main from 1925 were accepted by the municipal authorities. In the late 1920s, color became a symbol of modernity through its originality, novelty, association with new form, and modern paint technologies. Color was to help avoid the monotony of the bare walls of the new housing developments, give them artistic expression, and emphasize the compactness of the entire complexes. According to Rieger, from 1928 onward, [...] *the question of color loses its relevance, there is an oversaturation, the glamour of the fashionable fades, the movement for color loses its lasting links with progressive artists and architects* [23, p. 166].

In addition to their residential function, the colorful neighborhoods were also meant to satisfy the psychological need for a friendly, nature-compatible environment. Color gave a sense of security due to the possibility of easy identification of the houses, and was supposed to compensate the residents for the reduction of green areas (in comparison with garden estates, which were previously extremely popular in Germany). Individual greenery

was reduced in favor of a singular common one. A variety of colors in the estate was to replace the private backyard garden. Progressive architects argued that the further away from nature residents were, the more color was needed by them. For the residents of tall multi-family houses, so promoted by the functionalists for economic reasons, only green areas for common use were created. Color became a means to complement nature, and combine the organic with the inorganic.

Each architect had his own individual way of designing the color scheme of the housing estates. Otto Haesler in Celle avoided creating a uniform façade, using strong contrasting colors alternately (red and strong blue in the *Italienischer Garten* in Celle), emphasizing the fragmentation of the building mass.

Ernst May, a pioneer of European social housing, initiated the construction of several housing estates with lively colors in Frankfurt am Main (e.g., Römerstadt, Riederwald, Praunheim).

Despite the typification and uniformity, he promoted, May saw the use of color as an opportunity to diversify the landscape of a settlement. He did not differentiate the colors of the façades of houses, thus creating a uniform frontage of streets. He distinguished individual buildings by color, when they occupied a special position (for example, corner houses) or had an important function (schools, kindergartens, laundries, stores, meeting rooms, etc.). He used the following color scheme: white walls on the south side (exposed to sunlight), colored façades on the north or west side (with low light). This method provided color permanence and coziness of street interiors.

The Berlin housing estates of Bruno Taut had a distinctive character. The architect was looking for a special expression for new democratic buildings for the masses. He avoided bare walls and massive blocks and used color to emphasize the divisions and dissection of the building. He favored intense colors, broken – for large surfaces, and basic – for small ones (window and door woodwork). A characteristic feature of Taut’s housing estates was accenting the beginning of a row of houses by changing the color of the corners of the gable walls. Taut used a richer color palette than May. He used eight different colors in Zehlendorf, while May only used four in Frankfurt Römerstadt. The group of colorful Berlin estates includes: Britz (*Hufeisensiedlung*) in the district of Neukölln (Fig. 2), Waldsiedlung Zehlendorf (*Onkel Toms Hütte*) in the district of Zehlendorf and groups of buildings in the city that do not form separate estates (Fig. 3).

Bruno Taut and Ernst May’s publications in the *Schlesische Heimstätte* helped to draw attention to the importance of color in shaping architectural form. An especially significant role was played by the involvement of municipal building authorities, who supported the movement for color. Two methods were used to influence the shaping of color in the city: “color dictatorship” according to Ernst May’s conception, which he applied in Frankfurt am Main where municipal functionaries supervised painting work done in accordance with pre-drawn up plans, and “consultancy” in Wrocław which was voluntary by



Fig. 2. *Hufeisensiedlung* in Berlin-Britz, designed by B. Taut, M. Wagner, 1925–1927, reconstruction design by H. Pitz, W. Brenne, after the second renovation: a) houses at Fritz Reuter Allee, *rote Front*, b) houses at Lowise-Reuter Ring, *Hufeisen* (photo by J. Urbanik, 2015)

Il. 2. Osiedle *Hufeisensiedlung*, Berlin-Britz, zaprojektowane przez B. Tauta, M. Wagnera, 1925–1927, projekt renowacji: H. Pitz, W. Brenne, po drugiej renowacji: a) domy przy Fritz Reuter Allee, *rote Front*, b) domy przy Lowise-Reuter Ring, *Hufeisen* (fot. J. Urbanik, 2015)

nature. An independent organization was established to organize color design according to uniform criteria [33]. The Municipal Council for the Arts and the “Colorful City” Society were established.



Fig. 3. Multi-family houses at Trierer Strasse, designed by B. Taut in Berlin-Weissensee, 1925–1926, reconstruction design by W. Brenne (photo by J. Urbanik, 2015)

Il. 3. Domy wielorodzinne przy Trierer Strasse, zaprojektowane przez B. Tauta, Berlin-Weissensee, 1925–1926, projekt renowacji: W. Brenne (fot. J. Urbanik, 2015)

In addition to the color trend, around 1926 a style of architecture emerged in Germany where white was the dominant color. The creators of “white architecture” were inspired by Suprematism and Neo-Plasticism in art as well as by the achievements of Le Corbusier and the Dutch group *De Stijl* in architecture. Piet Mondrian attributed a specific meaning to primary colors: blue was supposed to be distancing, yellow – extending, red – rising [34]. They merely complemented white (in some cases also gray and black) in the plastic composition of colors on smooth façades. Mondrian’s early paintings (until 1921) used primary colors largely muted by white, while the introduction of pure primary colors in full saturation was caused by Bart van der Leek and his important contributions to *De Stijl*. A model



Fig. 4. House designed by G.T. Rietveld for Mrs. T. Schröder-Schräder in Utrecht, 1924, original colour scheme (photo by J. Urbanik, 2008)

Il. 4. Dom zaprojektowany przez G.T. Rietvelda dla T. Schröder-Schräder, Utrecht, 1924, oryginalna kolorystyka (fot. J. Urbanik, 2008)

project of this trend became the house designed by Gerrit Thomas Rietveld for Mrs. Truus Schröder-Schröder in Utrecht in 1924 (Fig. 4). Its color scheme was a composition of colorful lines and surfaces, white and black were complemented by three colors: yellow, red, and blue.

The *De Stijl* group sought to create a rational, intellectual, and impersonal style in architecture and design. The influence of this style on German avant-garde architects became evident with the arrival of Theo van Doesburg at the Bauhaus headquarters in Weimar in 1921. He was credited with steering the Bauhaus away from expressionism and toward constructivism [35].

Architectural innovators created the dream user for their new rational estates and apartments. This anonymous and abstract role was that of a sober and organized man. Removed from his surroundings was everything that was not contemporary, all that did not match the simple, hygienic, and organized layout (linear layout – *Zeilenbauweise*) of the white estates and small apartments of the *Existenzminimum* type.

One of the propagators of such solutions was the *Reichsforschungsgesellschaft für Wirtschaftlichkeit im Bau- und Wohnungswesen* (RFG – State Research Society for the Economics of Construction and Housing), whose aim was to study the optimization of housing and residential space. The RFG adopted several new model housing estates as its patron (e.g., the Dammerstock estate in Karlsruhe (Fig. 5) and the Haselhorst estate in Berlin, both under the auspices of the *Werkbund*).

For the functionalists, the white color of the buildings was an expression of their modernist way of thinking, symbolizing purity, as well as anonymity of the individual in a society to which these innovative solutions were addressed. White was not only meant to distinguish the new construction from the surrounding grayness of the old houses, but was also symbolically linked to the so-called *Lebensreform*, a reform focusing on improving the health conditions of society (among other things by promoting a new way of living in new, hygienic houses).

The use of color in “white estates” was limited to primary colors only. Otto Haesler’s Georgsgarten estate in Celle is one of the earlier (1924–1926) linear estates. Here white was supplemented with yellow on façades on the east side and window frames, dark blue, and red window frames and sashes in bay windows. The colors were used to emphasize function by indicating entrances, windows, and even water pipes (blue – for cold water, red – for hot water).

The increasing use of white color in German architecture as of 1929 was called the “white wall revolution”. In Berlin, some of the *Großsiedlungen* from 1929 to 1931 (Weisse Stadt in the Reinickendorf district, Friedrich-Ebert-Siedlung in the Wedding district and Siemensstadt in the Charlottenburg district) were referred to as the “white architecture” housing estates.

Adolf Hitler’s rise to power in 1933 marked the end of “white architecture”, and meant the closing of progressive schools (Bauhaus, Academy of Art in Wrocław) and the dispersion of the German avant-garde community around the world.



Fig. 5. Dammerstock estate in Karlsruhe, designed by W. Gropius with the team, 1929, multi family block of flats, post-renovation, renovation design by matzka architekt (photo by J. Urbanik, 2013)

Il. 5. Osiedle Dammerstock, Karlsruhe, zaprojektowane przez W. Gropiusa z zespołem, 1929, dom wielorodzinny, stan po renowacji, projekt renowacji: matzka architekt (fot. J. Urbanik, 2013)

Werkbund’s experimental model housing estates

The exhibition estates of the *Werkbund*, which displayed functional, formal, and technological features of modernist architecture, played a unique role in the history of modern housing. These estates whose construction dated from 1927–1932 (from the economic growth to the economic crisis period of the Weimar Republic) were built to assess the functional principles of the new style of architecture, to present new possibilities in mass construction, and to present new types of small and inexpensive houses and apartments.

The exhibition *Die Wohnung* with a model housing estate in Stuttgart was the first overview of the latest ideas in housing. Over the next five years, further experimental model housing estates were built, most of them in conjunction with housing exhibitions including: the “New House” (“Nový Dům”) housing estate in Brno, in the Žabovřesky district which accompanied the “Contemporary Czechoslovak Culture” exhibition in 1928, the WuWA housing estate in Breslau in 1929, accompanying the “Living and Working Space” (“Wohnung und Werkraum” Ausstellung) exhibition, the “Neubühl” housing estate in Zurich in 1931 in the Wollishofen district, the “Baba” housing estate in Prague in 1932 in the Dejvice district, and the “Lainz” housing estate in Vienna in 1932.

Avant-garde European architects, while presenting their concepts for housing proposed not only new plans for apartments, new forms of houses, but also new colors. Unfortunately, knowledge on this subject was still incomplete because professional restoration works were not conducted everywhere. Only following stratigraphic examination of paint coatings could reliable information about the original colors be obtained.



Fig. 6. Weissenhof Werkbund estate in Stuttgart, 1927:

- a) semi-detached house, designed by Le Corbusier and P. Jeanneret, following its second renovation in 2003–2005, renovation design by Büro Architektur 109 (Arne Fentzloff and Mark Arnold),
- b) detached house designed by H. Scharoun, after renovation in the 1980's
(photo by J. Urbanik, 2015)

Il. 6. Osiedle Werkbundu – Weissenhof, Stuttgart, 1927:

- a) dom bliźniaczy zaprojektowany przez Le Corbusiera i P. Jeannereta, po drugiej renowacji w 2003–2005, projekt renowacji: Büro Architektur 109 (A. Fentzloff i M. Arnold),
- b) dom jednorodzinny zaprojektowany przez H. Scharouna, po renowacji w latach 80. XX w.
(fot. J. Urbanik, 2015)

The first renovation works were carried out in Weissenhof in the 1980's. However, only half of the houses were renovated, as only that many had survived the war. At a similar time, the renovation of Neubühl began. In Vienna, the first phase of renewal was from 1983 to 1985, the second from 2011 to 2016. In Wrocław, in 2011, a municipal program was launched to financially support the revitalization of private houses of the WuWA estate. Despite

incomplete data, it is possible to indicate the color trends that were promoted during the exhibitions.

In 1927, the Werkbund Weissenhof in Stuttgart became known as a “white” housing estate (Fig. 6).

Other housing estates were described in an equivalent way. In Wrocław, Ilse Molzahn wrote about the gleaming white terrain of estates [36]. Gustav Wolf, co-creator of the Wrocław housing estate, pointed to a certain uniform-



Fig. 7. WuWA Werkbund estate in Wrocław (former Breslau), 1929:

- a) eight unit house designed by G. Wolf, after renovation in 2017, renovation design by J. Bułat and K. Bułat, 2016, stratigraphic studies of paint coatings by K. Wantuch-Jarkiewicz and A. Jarkiewicz, 2016,
- b) gallery-access block of flats designed by P. Heim and A. Kemptera, po renowacji w 2014, projekt renowacji: K. Lato, 2013, stratigraphic studies of paint coatings by A. Witkowska and D. Lawenda, 2013,
- c) multi-unit house designed by E. Lange, after renovations in 2017, renovation design by J. Bułat and B. Bułat, 2016, stratigraphic studies of paint coatings by K. Wantuch-Jarkiewicz and A. Jarkiewicz, 2016
(photo by J. Ilkosz, 2019)

Il. 7. Osiedle Werkbundu – WuWA, Wrocław (dawny Breslau), 1929:

- a) dom ośmiorodzinny zaprojektowany przez G. Wolfa, po renowacji w 2017, projekt renowacji: J. Bułat i K. Bułat, 2016, badania stratygraficzne powłok malarskich: K. Wantuch-Jarkiewicz i A. Jarkiewicz, 2016,
- b) dom galeriowy zaprojektowany przez P. Heima i A. Kemptera, po renowacji w 2014, projekt renowacji: K. Lato, 2013, badania stratygraficzne powłok malarskich: A. Witkowska and D. Lawenda, 2013,
- c) dom wielorodzinny, zaprojektowany przez E. Langego, po renowacji w 2017, projekt renowacji: J. Bułat i B. Bułat, 2016, badania stratygraficzne powłok malarskich: K. Wantuch-Jarkiewicz i A. Jarkiewicz, 2016
(fot. J. Ilkosz, 2019)



Fig. 8. Weissenhof Werkbund estate in Stuttgart, 1927, terraced houses designed by M. Stam, after the renovation in the 1980's (photo by J. Urbanik, 2018)

Il. 8. Osiedle Werkbundu – Weissenhof, Stuttgart, 1927, dom szeregowy zaprojektowany przez M. Stama, po renowacji w latach 80. XX w. (fot. J. Urbanik, 2018)



Fig. 9. Weissenhof Werkbund estate in Stuttgart, 1927, detached house designed by H. Scharoun, after renovation in the 1980's, interior (photo by J. Urbanik, 2015)

Il. 9. Osiedle Werkbundu – Weissenhof, Stuttgart, 1927, dom jednorodzinny zaprojektowany przez H. Scharouna, po renowacji w latach 80. XX w., wnętrze (fot. J. Urbanik, 2015)

ity of color proposals. He believed that architects accepted the tendency of the time for light colors both inside and outside, ranging from white to light pastel shades [37] (Fig. 7). In this respect the similarity of WuWA to the original Weissenhof in Stuttgart can be seen.

Strong saturated colors also appeared in the landscape of the model estates. Mart Stam's terraced houses had an ultramarine front façade [23], [17] (Fig. 8).

Bruno Taut in his detached house proposed dark pink and blue façades. Le Corbusier's semi-detached house

used indigo and brick red in addition to the white exterior (Fig. 6). In Hans Scharoun's single-family house, white was complemented by a contrasting brick color used unconventionally on the ceiling or in the form of a strip on the wall (Fig. 9).

In Gerrit Rietveld's house in Vienna, the pastel pink of the façade was contrasted with the sapphire and spring green of the door frames both in and outside the building (Fig. 10). This house is nothing like his 1924 Utrecht project, (the house of interior designer Truus Schröder-

Fig. 10. Lainz Werkbund estate in Vienna, 1932, terraced houses designed by G. Rietveld, after renovation in 2011–2016, renovation design by P. GOOD Praschl-Goodarzi Architekten (photo by J. Urbanik, 2012)

Il. 10. Osiedle Werkbundu – Wiedeń, 1932, dom szeregowy zaprojektowany przez G. Rietvelda, po renowacji w latach 2011–2016, projekt renowacji: P. GOOD Praschl-Goodarzi Architekten (fot. J. Urbanik, 2012)





Fig. 11. WuWA Werkbund estate in Wrocław (former Breslau), 1929, hotel like building for single people and childless couples designed by H. Scharoun, original color of the façade, stratigraphic studies of paint coatings by J.M. Żelbromski, 1993, renovation design by J. Urbanik and A. Gryglewska, 1993 (photo by R. Soldek, 2010)

Il. 11. Osiedle Werkbundu – WuWA, Wrocław (dawny Breslau), 1929, dom hotelowy dla osób samotnych i małżeństw bezdzietnych zaprojektowany przez H. Scharouna, oryginalny kolor elewacji, badania stratygraficzne powłok malarskich: J.M. Żelbromski, 1993, projekt renowacji: J. Urbanik i A. Gryglewska, 1993 (fot. R. Soldek, 2010)



Fig. 12. WuWA Werkbund estate in Wrocław (former Breslau), 1929, hotel like building for single people and childless couples designed by H. Scharoun, renovation design by J. Urbanik, A. Gryglewska and A. Tomaszewicz, 2011, 2013, roof terrace of the building's left wing, after renovations in 2011, 2013 (photo by J. Urbanik, 2014)

Il. 12. Osiedle Werkbundu – WuWA, Wrocław (dawny Breslau), 1929, dom hotelowy dla osób samotnych i małżeństw bezdzietnych zaprojektowany przez H. Scharouna, projekt renowacji: J. Urbanik, A. Gryglewska i A. Tomaszewicz, 2011, 2013, taras na dachu lewego skrzydła budynku, po renowacji w 2011, 2013 (fot. J. Urbanik, 2014)

Schröder), where he used the Mondrianesque color palette so characteristic of the *De Stijl* group and the Netherlands.

The color scheme of the multi-family house designed by Adolf Rading in the WuWA estate is also well known. The architect used three contrasting colors: white, black



Fig. 13. WuWA Werkbund estate in Wrocław (former Breslau), 1929, hotel like building for single people and childless couples designed by H. Scharoun, renovation design by J. Urbanik and A. Gryglewska, 2008, restaurant (photo by J. Urbanik, 2009)

Il. 13. Osiedle Werkbundu – WuWA, Wrocław (dawny Breslau), 1929, dom hotelowy dla osób samotnych i małżeństw bezdzietnych zaprojektowany przez H. Scharouna, projekt renowacji: J. Urbanik i A. Gryglewska, 2008, restauracja (fot. J. Urbanik, 2009)

and red. He used color to separate the functions of individual rooms. For this purpose, he used not only the surface of the walls, but also the ceiling, which he painted black [37]. Moritz Hadda used similar colors in the single-family house designed in the WuWA housing estate. The furniture was more traditional in form, wooden, upholstered, and strongly colored [38], while the intense red of the walls contrasted with the black slats of the bookshelves [39]. All these projects, despite the use of intense colors can be classified as “white architecture”, because white was the dominant color.

A completely different, and extremely interesting color concept was proposed by Hans Scharoun in his house for singles and childless couples (*Ledigenheim*). Working in an unconventional way, not subject to any rigors, he left the CIAM (Congrès Internationaux d'Architecture Moderne) soon after its founding, protesting against the doctrinaire rationalism of Le Corbusier and the ideology of international architecture. Therefore, his architectural works, not replicating the geometric patterns of the international style are so unique.

The color concept of Hans Scharoun's Wrocław project is close to the colors he used in his paintings. After his stay in Breslau, the architect moved to Berlin. There he created numerous watercolors depicting his architectural visions. A similar color palette was present in all his works. Only in his first few Berlin buildings dating back to 1928–1931, did the architect give in, to the style of the time and designed white façades.

Scharoun's architectural works were unique, not replicating the geometric patterns of the international style. Stratigraphic studies have shown that he changed the color

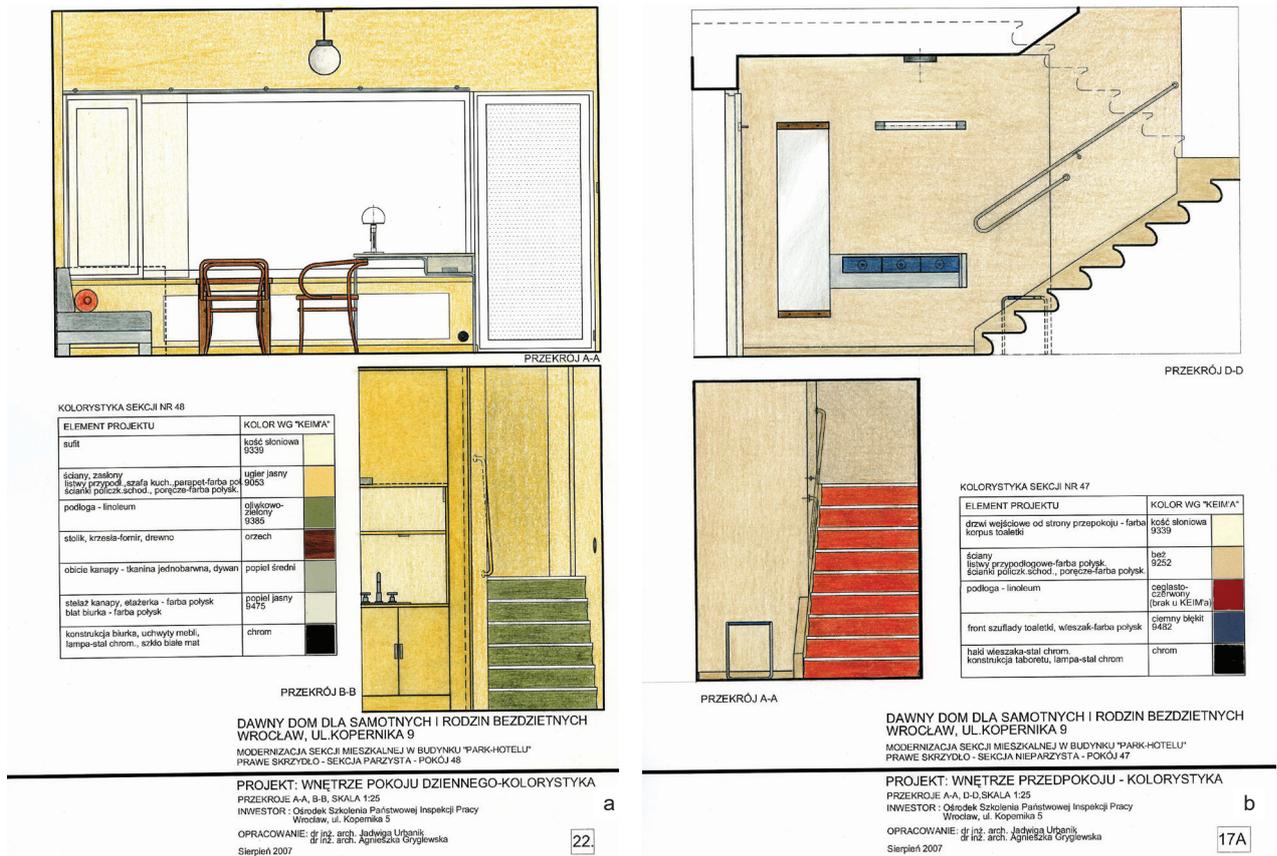


Fig. 14. WuWA Werkbund estate in Wrocław (former Breslau), 1929, hotel like building for single people and childless couples designed by H. Scharoun, renovation design of the apartments by J. Urbanik and A. Gryglewska, 2007:

- a) color scheme of the split-level apartments of the building's right wing, even numbers,
- b) color scheme of the split level apartments of the building's right wing, odd numbers (source: archives of the National Labour Training Centre)

II. 14. Osiedle Werkbundu – WuWA, Wrocław (dawny Breslau), 1929, dom hotelowy dla osób samotnych i małżeństw bezdzietnych zaprojektowany przez H. Scharouna, projekt renowacji mieszkań J. Urbanik i A. Gryglewska, 2008:

- a) kolorystyka dwupoziomowych mieszkań prawego skrzydła budynku, numery parzyste, b) kolorystyka dwupoziomowych mieszkań prawego skrzydła budynku, numery nieparzyste (źródło: archiwum Ośrodka Szkolenia Państwowej Inspekcji Pracy)

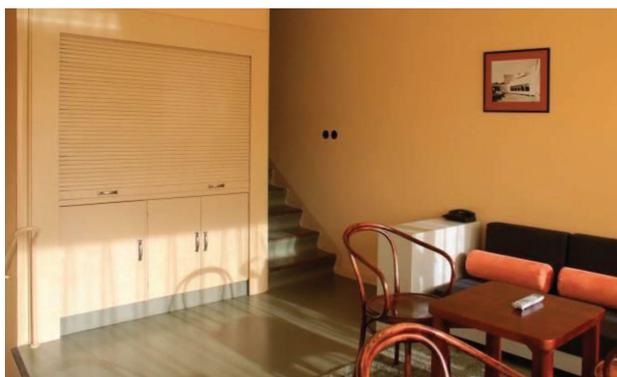


Fig. 15. WuWA Werkbund estate in Wrocław (former Breslau), 1929, hotel like building for single people and childless couples designed by H. Scharoun, renovation design of the split-level apartment of the building's right wing by J. Urbanik and A. Gryglewska, 2008; living room with kitchen niche, 2009–2010 (photo by J. Urbanik, 2010)

II. 15. Osiedle Werkbundu – WuWA, Wrocław (dawny Breslau), 1929, dom hotelowy dla osób samotnych i małżeństw bezdzietnych zaprojektowany przez H. Scharouna, projekt renowacji mieszkań dwupoziomowych prawego skrzydła budynku: J. Urbanik i A. Gryglewska, 2008; pokój dzienny z niszą kuchenną, 2009–2010 (fot. J. Urbanik, 2010)

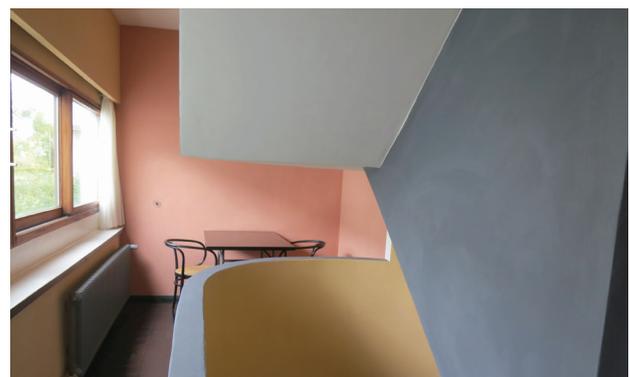


Fig. 16. Weissenhof Werkbund estate in Stuttgart, 1927, semi-detached house designed by Le Corbusier and P. Jeanneret, following its second renovation in 2003–2005, renovation design by Büro Architektur 109 (A. Fentzloff and M. Arnold), staircase (photo by J. Urbanik, 2018)

II. 16. Osiedle Werkbundu – Weissenhof, Stuttgart, 1927, dom bliźniaczy zaprojektowany przez Le Corbusiera i P. Jeannereta, po drugiej renowacji w latach 2003–2005, projekt renowacji: Büro Architektur 109 (A. Fentzloff i M. Arnold), klatka schodowa (fot. J. Urbanik, 2018)

concept even during the execution phase. The façades of the Ledigenheim building were painted in ochre light (“luminous”) color (Fig. 11). All elements of railings, external balustrades, window, and door frames were painted in grey (“mouse grey”). Only the balcony doors of the right wing of the building were in the color of the elevation – light grey. The reinforced concrete structure of the trellis on the roof of the left wing was orange-red concrete (Fig. 12), while the elements of the building foundation and the retaining walls were left in their natural color (concrete color).

The general use interiors (lobby and restaurant) featured strong and vibrant colors. The lobby was a deep blue color, against which shiny armchairs made of steel pipes cast silver reflections, while the restaurant was dominated by many shades of red [39, p. 410]. In the saturated colors of the lobby and restaurant of Hans Scharoun’s house and in the way they were combined, the spirit of expressionism can be sensed. The use of intense colors and simple geometric patterns (blue and pink stripes on the gable wall of the restaurant, a blue stripe repeating the shape of the room on the ceiling of the lobby) is close both to the expressive shaping of space and to the color tendencies of the late twenties associated with the German campaign for color in the city (Fig. 13).

In the residential sections, Scharoun proposed two color versions in pastel tones (ivory, light ochre, olive green, ash or ivory, beige, brick red, ash in the right wing sections), enhanced by wooden or chrome-plated furnishings [27] (Figs. 14, 15).

Hans Scharoun’s house for singles was one of the projects included in the 1925–1930 nationwide campaign of the “colorful city” (*Die farbige Stadt*). In Breslau Hans Scharoun, Theo Effenberger, Moritz Hadda (architects of the WuWA exhibition housing estate), and Hermann

Wahlich functioned as heads of departments of the Building Police responsible for the city’s color scheme [33]. 2nd half of 1920s was a period of a real “cry for color”, still originating in expressionism, for which color was also a means of architectural expression. More than one million buildings in Germany at that time received a new coat of color.

It is interesting that the color scheme of the interior of Le Corbusier’s semi-detached house from the Weissenhof estate is almost identical to Scharoun’s proposal from Wrocław. Although these architects shared a completely different approach to shaping architectural form, their taste for color was similar. Le Corbusier’s house, white on the outside, presents a real “cosmos of colors” on the inside. The colors were saturated, yet fractured, so characteristic of the mineral pigments that were used at the time (Fig. 16).

Summary

The examples described above show that regardless of whether they are model houses in the Werkbund housing estates or houses built as part of the city construction program, their colors fall within the trends of “white architecture” or of the “colorful city”. The color scheme clearly reflected the very individual tastes of its architects.

Today, knowledge of the color scheme is essential to the proper revalorization of interwar architecture, thus portraying original character is the duty of both historians and conservators.

Translated by
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Abstract

New color trends of the model Werkbund estates and Neues Bauen residential architecture during the Weimar Republic in Germany

The purpose of the article is to present the color trends of the *Werkbund* model housing estates (1927–1932) in the background of *Neues Bauen* residential architecture built under the urban construction program during the Weimar Republic in interwar Germany (1918–1932). After the World War I, despite the exhaustion of the country due to war, effort was made to build new housing estates, which later became a model for modern housing solutions. The task of the architects of that time was to show that industrialization was not synonymous with the loss of individuality. An excellent weapon in the fight for individuality of housing estates was color, which was used to distinguish new buildings from the surrounding grays of the old ones. The Weimar Republic period in Germany, displayed two distinct color trends “white architecture” and the “colorful city” (“Die farbige Stadt”). The most spectacular changes, aimed at giving German cities a new face, were initiated by Bruno Taut in Magdeburg and Berlin, Ernst May in Wrocław (former Breslau) and Frankfurt am Main, and Otto Haesler in Celle. The exhibition housing estates of the *Werkbund*, constructed from 1927 to 1932, were a review of the tendencies entering the housing construction of the interwar period. Today, the only way to discover the architect’s original concept following years of use and reconstruction of the houses (even those under conservation protection) is through stratigraphic studies of the paint coatings. These types of studies have been conducted in many model housing estates. This article is based on personal experience of the author who participated in the revalorization of Wrocław’s model housing estate *Werkbund*, where both color trends are clearly visible.

Key words: Weimar Republic, *Neues Bauen*, *Werkbund*, color trends, residential architecture

Streszczenie

Nowe trendy kolorystyczne wzorcowych osiedli Werkbundu i architektury mieszkaniowej nurtu Neues Bauen w okresie Republiki Weimarskiej w Niemczech

Celem artykułu jest przedstawienie trendów kolorystycznych propagowanych we wzorcowych osiedlach mieszkaniowych *Werkbundu* (1927–1932) na tle kolorystyki architektury mieszkaniowej nurtu *Neues Bauen* powstającej w ramach programów budownictwa miejskiego w okresie Republiki Weimarskiej w międzywojennych Niemczech (1918–1932). Po I wojnie światowej, mimo wyniszczenia kraju, podjęto trud budowy nowych osiedli, które później stały się wzorem dla nowoczesnych rozwiązań mieszkaniowych. Zadaniem ówczesnych architektów było pokazanie, że industrializacja nie jest równoznaczna z utratą indywidualności. Doskonałą bronią w walce o zróżnicowany charakter osiedli był kolor, którym

odróżniano nowe budynki od otaczającej je szarości starych. Okres Republiki Weimarskiej w Niemczech charakteryzował się dwoma wyraźnymi trendami kolorystycznymi nazwanymi: „białą architekturą” i „kolorowym miastem” („Die farbige Stadt”). Najbardziej spektakularne zmiany, mające nadać niemieckim miastom nowe oblicze, zapoczątkowali Bruno Taut w Magdeburgu i Berlinie, Ernst May we Wrocławiu i Frankfurcie nad Menem oraz Otto Haesler w Celle. Wystawowe osiedla Werkbundu, budowane w latach 1927–1932, były przeglądem tendencji dotyczących budownictwa mieszkaniowego okresu międzywojennego. Dziś jedynym sposobem poznania oryginalnej koncepcji architekta po latach użytkowania i przebudowy domów (nawet tych objętych ochroną konserwatorską) są badania stratygraficzne powłok malarskich. Tego typu prace zostały przeprowadzone w wielu wzorcowych osiedlach mieszkaniowych. Artykuł opiera się na osobistych doświadczeniach autorki, która uczestniczyła w rewaloryzacji wrocławskiego wzorcowego osiedla Werkbundu, gdzie oba trendy kolorystyczne są wyraźnie widoczne.

Słowa kluczowe: Republika Weimarska, Neues Bauen, Werkbund, trendy kolorystyczne, architektura mieszkaniowa