

Searching for a city model in the 20th century – the aspect of housing

Abstract

The article aims to present the most important twentieth-century urban planning theories relating to the field of architecture closest to its users – housing. The text contains a concise presentation of selected events, theories and projects, the results of avant-garde architects' activities and the changes that brought about a turning away from the modernist paradigm and a return to historical forms in the period of socialist realism and postmodernism. The chronological ordering of ideas that have a significant impact on the environment of architects allows us to trace changes in the approach of theoreticians and designers to the subject of living. The experiences of modernist and postmodern architects and town planners have prepared the ground for further searches for the relationship between function and form in relation to urban development and may be helpful in finding answers to the current question about the future shape of the city.

Keywords housing | contemporary city

At the beginning of the third decade of the 21st century, we often ask ourselves: „what will the future of the city be like?” But also, above all, we wonder „in what environment do we want to live in and how to achieve that.” These issues are not new, they have been considered since the time we became aware that human fate is directly influenced by the living environment. The answer to such questions was often of a practical dimension; it manifested itself in projects and realizations, but sometimes attempts were made to

formulate general, theoretical principles and strives to mark out the ways to implement them. This article aims to present twentieth-century urban theories relating to the field of architecture closest to its users – housing.

Those of urban planners and architects of the interwar modernism period were probably the most convincing and unambiguous attempts to find an answer to the question about the future of living in the city. In their flagship manifesto - the CIAM Athens Charter (1933), they presented postulates that were supposed to solve all problems of the modern city. They were convinced that the directions they set would always be up-to-date.

The principles of the Athens Charter often come down to the two points:

“77. The keys to urbanism are to be found in the four functions: dwelling, working, recreation (in leisure time), and circulation.

78. Plans will determine the structure of each of the sectors allocated to the four key functions and they will also determine their respective locations within the whole.”¹

The principles of a functional city, as formulated in the Athens Charter, were preceded by earlier proposals. Pioneering solutions to the Charter were presented by Tony Garnier, who in the *Industrial City* (1904) contained almost everything that thirty years later was to become its main theme². The incredible development of the practical search for the ways of the city's development took place in the 1920s, during the economic revival after the First World War. It is worth recalling the meetings of avant-garde architects and

¹ *Karta Ateńska. Urbanistyka C.I.A.M.*, Warszawa ok. 1956; Jiří Hruza, Josef Zajíč, *Vývoj urbanismu, II. Díl*, Praha 1999, p. 303.

² K.K. Pawłowski, *Tony Garnier – pionier urbanistyki nowoczesnej*, Warszawa 1972.

urban planners preceding the formulation of the Athens Charter, held as part of opinion-forming exhibitions organized by the German Creative Association – Werkbund. It was during the organization of the Werkbund exhibition in Stuttgart in 1927 (Fig. 1) that the designers participating in the exhibition agreed that an international organization would be established so that it was possible to meet to exchange views and experiences³. The fruit of the Werkbund exhibition in Stuttgart were innovative solutions for residential houses along with an exhibition of their furnishings, developed by 17 representatives of the European avant-garde⁴. In the context of deliberations on the relationship between urban planning and architecture of housing, it is worth recalling that the curator of the exhibition, Ludwig Mies van der Rohe, erected a multi-family residential house as part of the exhibition, in which, thanks to an innovative steel structure, he was able to use a free plan, allowing the invited architects to arrange individually the apartment layouts for families of different composition (Fig. 2). The Stuttgart estate of Weissenhof was originally intended to be a prototype of a workers' estate, but eventually houses were built that were intended for a much richer part of society. The solutions used met the requirements of good interior lighting, the houses were equipped with all comforts, terraces for sunbathing on flat roofs and dazzled with new interior solutions, such as sliding walls borrowed from Japan, or currently considered a design classic – furniture made of bent nickel tubes. Successive Werkbund exhibitions were closely watched by the international community of architects and city planners. They were to lead to the identification of new solutions that would allow for the industrialization of erecting residential buildings, and thus reduce their construction costs. However, the result of the Werkbund exhibitions was the creation of building complexes consisting mainly of houses

with minimal usable areas – detached, semi-detached or short terraced houses; multi-family houses were the exception. This is how the trends in housing were presented at the exhibitions organized by Werkbund in Wrocław (WuWA, 1929), where the function of a hotel-guesthouse for young couples, designed by Hans Scharoun caught a lot of attention (Fig. 3, 4), exhibitions in Vienna (1932) and Prague (1930–1935), where an exclusive villa estate known as Baba was built. Only two previous exhibitions: in Zurich (1928) and Brno (1929), were aimed at showing multi-family housing, erected from typified building elements⁵.

The image of the trend in multi-family housing was much more influenced by the activities of Ernst May, who in 1929, as the chief housing director, hosted the 2nd CIAM Congress in Frankfurt am Main. May proposed a slogan to Congress: “Dwelling for a subsistence.” The plans and projects brought by the participants of the congress corresponded with this postulate, as well as, most of all, the estates built under the direction of Maya in the valley of the Nidda River, which are still impressive today. The architects used here, in the most famous estates, Römerstadt (1927–1928, Fig. 5, 6) and Praunheim (1926–1930), different floor plans, depending on their location in relation to the parts of the world. In the Nidda Valley, a program of assigning a garden – a worker's allotment – for each family was also implemented. The flats were equipped with standardized, mass-produced kitchens with a minimal floor space, without the function of a dining room – known today as the “Frankfurt Kitchen” (designed by Grete Schütte-Lihotzky, 1926). Taking advantage of the slopes of the Nidda valley made the urban layouts of the housing estates even more attractive, where efforts were made to provide residents with a view of the river and the available recreational areas. The development of the housing estates was not intensive – it was made of 2–3-story terraced houses⁶.

³ This idea was picked up by Le Corbusier, and in 1928 European architects met for the first time as part of the „International Congresses of Contemporary Architecture”, known as CIAM from the French abbreviation. More about the history of CIAM: E. Mumford, *The CIAM Discourse on Urbanism, 1928–1960*, London 2000.

⁴ *Droga ku nowoczesności. Osiedla Werkbundu 1927–1932*, ed. J. Urbanik, Wrocław 2016.

⁵ Ibidem.

⁶ G. Fehl, *The Niddatal Project: The Unfinished Satellite Town on the Outskirts of Frankfurt*, “Built Environment”, 1983, Vol. 9, no. 3/4, p. 185–197; W. Kononowicz, *Wybrane zagadnienia urbanistyczne wielkich miast i osiedli mieszkaniowych w Zachodniej Europie od połowy XIX wieku do drugiej wojny światowej*, „Kwartalnik Architektury i Urbanistyki”, 2008, Vol. 1, p. 21–23.

In 1930, the 3rd CIAM Congress was held in Brussels, where Victor Bourgeois, a member of CIAM, chaired the discussions on the city's development. In reference to the previous congress, the slogan was "Rational shaping of urban complexes". And here, too, not only plans were discussed, but also specific implementations – such as the Dammerstock estate in Karlsruhe (1928) designed by Walter Gropius, with the use of linear buildings for the first time in relation to terraced houses and multi-family housing blocks⁷. During the Third Congress, the traditional peripheral buildings of the city block with minimal yards and narrow corridor streets were completely rejected. It was emphasized that only linear buildings with houses in the form of free-standing "pegs" can provide good lighting and ventilation of all apartments, optimal positioning in relation to the directions of the world and a sufficient area of greenery, directly accessible to residents. Sigfried Giedion, discussing the Third Congress, emphasized the relationship between architecture and urban planning. He concluded that before starting to design the urban layout, the apartment should be properly designed. At the same time, he emphasized that until it is determined how the city is to be designed, one cannot talk about the correct design of apartments⁸.

At the next, the 4th CIAM Congress (1933), which was originally to be held in Moscow, the Athens Charter was formulated. The 5th Congress in (1937) was held in a completely different international situation, and its slogan "Home and recreation" in the turbulent political situation did not seem to be as important as the topics of the previous four congresses. During World War II, Josep Lluís Sert made efforts to renew CIAM's activities in the United States, where part of the architectural avant-garde emigrated. Without success. Even after the war, the activities of CIAM ceased to influence the new generation of architects and urbanists. In 1956, the organization was dissolved at the 10th Congress in Dubrovnik.

What did make a lasting contribution to the history of contemporary urban planning and housing were the achievements of the first four congresses and the Athens Charter, whose postulates to create a good living environment for all city dwellers still remain valid today. The principles of creating a functional city began to be implemented in Europe only at the beginning of the second half of the 20th century. At that time, confrontation with modernism took place only in the Soviet Union and the countries subordinated to its political doctrine. This confrontation was not only for ideological reasons. Some of the avant-garde projects, e.g. the ideas of constructivists, consisting in the construction of collective houses only with minimal residential dwellings, or the technical disaster which was erected as the 150,000-strong Magnitogorsk (1930, Fig. 7), designed as a "linear city" by E. May, featuring identical multi-family blocks of flats that were rejected by their inhabitants⁹. Le Corbusier's concept of demolishing Moscow and building a "Radiant City" in its place, and even the idea of surrounding Moscow with satellite cities similar to "garden cities" were utopian or not in line with the economic and technical possibilities of Soviet Russia. Thus, tried and tested historical patterns were used, which – accidentally – corresponded to the intentions of those representing the regime. The period of the doctrine of socialist realism resulted in a return to the traditional street, sometimes in a monumental form (Kiev, Minsk), and to the construction of peripheral buildings with extensive courtyards designated for greenery, schools, etc.¹⁰ The urban planning of the residential districts of the socialist realism era resembles to some extent the mass housing for workers, admired since the 1920s, and erected by the socialist government of Vienna, the so-called Viennese Courtyards (*Viener Hof*). The courtyards were surrounded by multi-family, controlled-rent apartment houses with a rich offer of

⁷ W. Ostrowski, *Urbanistyka współczesna*, Warszawa 1975, p. 55, W. Kononowicz, op.cit., p. 20–23.

⁸ Za: J. Hrůza, J. Zajíc, *Vývoj urbanismu, II. Díl*, Praha 1999, p. 300.

⁹ K. Nęcza-Sikoniowska, *Dzień wtóry. Ernst May w ZSRR*, „Autoportret”, 2017, no. 4 (59): <https://autoportret.pl/artykuly/dzien-wtory-ernst-may-w-zsrr/>

¹⁰ *Miasta nowych ludzi: architektoniczna i urbanistyczna spuścizna komunizmu*, Vol. 1, ed. Z. Grębecka, J. Sadowski, Warszawa 2007.

amenities located in the courtyards of the complexes and serving the local community. There are examples of Polish sociorealistic residential districts of Nowa Huta (built from 1949), Muranów in Warsaw (1951) or WSM (1952)¹¹ referring to the historical urban planning of the Baroque era, once (rightly) criticized for excessive subordination of the apartment layouts to the design of the facades. Currently, mainly due to prevailing greenery and relatively low-rise buildings, they became accepted by the inhabitants. Along with the political changes at the beginning of the 1960s, in the face of the housing crisis, the construction of housing complexes with maximally simplified architecture and linear buildings was resumed. The industrial production of building elements was also started (in the 1970s), which resulted in (generalizing) unifying the aesthetic expression of residential complexes.

The separation of individual functional zones, as postulated in the Athens Charter, undoubtedly contributed to the improvement of living conditions in cities where the legacy of industrialization was the mixing of the functions of industry and housing. However, segregation of functions resulted in the deterioration of the mutual accessibility of places to live and work and an increased emphasis on the development of communication. The functional city quickly began to be criticized for its excessive sterility and schematicity, especially in relation to solutions focusing mainly on the technical ease of erecting new residential districts, and thus on the use of overly geometric systems. The consequence of complying with the postulate of good ventilation and sunlight of apartments was a break with the traditional street. Criticism of the principles of a functional city began in Western Europe in the 1960s, when the first monumental housing complexes began to be built. It was then realized that although living in the new large complexes had undoubted advantages, their inhabitants were not satisfied with their living environment. This sparked the interest of sociologists, journalists and, of course, architects and city planners, surprised that

apparently obvious rules do not work in practice. Books have appeared that criticize contemporary architecture and urban planning, mainly in terms of social phenomena: alienation of residents, lack of social ties and the increase in crime. Jane Jacobs, in her famous book *The Death and Life of the Great American Cities*, published in the USA in 1961 (Polish translation in 2014), completely rejected all the basic principles of contemporary urban planning, confronting them with the attraction of a traditional city, where streets and squares teeming with life are the places for residents to interact, where people communicate with each other¹².

The turn to traditional urban structures renewed interest in the principles of their spatial formation. The study of the most appropriate proportions and dimensions of streets and squares was resumed, the relations between the building and the space in which the object is to be built, the role of dominants and their distribution in space, the relationship between the city and nature were examined. The methods of describing the city space, which Kevin Lynch included in his classic work from 1960, *The Image of the City*¹³, and the components of the urban composition consistent with its “stratification”, defined by Kazimierz Wejchert, from the moment they were formulated for the study of space, drew attention to the existence of some timeless values¹⁴. The historic city has once again become an inspiration for architects and planners. The postmodern trend in urban planning, as Sławomir Gzell put it, was aimed at reducing the chaos of the urban fabric, reusing the urban peripheral block, reviving old complexes, using symbolism, differentiating the multiplicity and density of buildings¹⁵.

In the urban planning of postmodern housing estates, one representative of extreme historicizing tendencies is Ricardo Bofill, who works mainly in France,

¹¹ J. Zieliński, *Realizm socjalistyczny w Warszawie. Urbanistyka i architektura (1949–1956)*, Warszawa 2009.

¹² J. Jacobs, *The Death and Life of Great American Cities*, New York 1961, *Śmierć i życie wielkich miast Ameryki*, Warszawa 2014.

¹³ K. Lynch, *Obraz miasta*, Kraków 2011.

¹⁴ K. Wejchert, *Elementy kompozycji urbanistycznej*, Warszawa 1974.

¹⁵ S. Gzell, *Urbanistyka XXI wieku*, Warszawa 2020, p. 97.

the author of the ensemble “Les Arcades du Lac” in St. Quentin-en-Yvelines near Paris (1974–1981, Fig. 8) called “Versailles for the poor”. Behind the monumental facades, decorated with scaled colonnades, small apartments were crammed for the economically weaker social strata¹⁶. Classicizing detail, oversized beyond the classical measure, was also used by Bofill in the “Antigone” complex in Montpellier (from 1979), in which town planning is a monumental reminiscence of the strictly axially symmetrical systems of the Baroque era. Against the background of Bofill’s search, the housing complexes designed by brothers Rob and Leon Krier are particularly intimate. In his 1975 book entitled *Urban space*, written for students of architecture and dedicated to Camillo Sitte, Rob Krier collected, like Sitte over a century ago, examples of traditional spatial solutions, in the study of which he focused primarily on formal analysis¹⁷.

The attitude of the Krier brothers to the traditional and modern city is well illustrated by the quotation from the introduction to the first chapter of the book: „The basic premise underlying this chapter is my conviction that in our modern cities we have lost sight of the traditional understanding of urban space. The cause of this loss is familiar to all city dwellers who are aware of their environment and sensitive enough to compare the town planning achievements of the present and the past to the way things have gone.”¹⁸. The examples of Rob Krier’s projects in Berlin, carried out as part of IBA (International Building Exhibition) in 1987, are characterized by a small, “human” scale and fitment into the fabric of the city. An example that we personally appreciate is the complex of “urban villas”, designed according to the urban plan and directions of Rob Krier by a group of architects, located on Ritterstrasse (Krier is also the author of the gate-building to the complex, Fig. 9)¹⁹. The work of Leon

Krier is currently most associated with the design in England, on the initiative of Prince Charles, the town of Poundberry (implemented since 1988), in which „the nostalgic style of town planning and architecture refers to the neighboring villages of Dorset, or is an imitation of small factory towns of Lancashire”²⁰.

In the trend of postmodernism, we can find various tendencies in architecture and urbanism - on one hand, extreme historicism or New Urbanism, and on the other, neo-constructivism and deconstructivism, which aims to depart from all postulates of modernism and its logic. In line with the new trends, the changeability of the environment should be important for city dwellers, thanks to, among others, new methods of transmitting information and images, advertising, happenings, etc. Intentionally, the city would have an undefined structure that could adapt to the changing needs of its inhabitants. The representative of French postmodernism and poststructuralism, philosopher Jacques Derrida claims that we should move away from thinking about the city and its structure in a stationary way, because the direction of the city’s future development cannot be predicted, which should be accepted. One must also realize that solving the city’s problems is not possible in one generation, because the city is a process.

However, the city can also become a kind of shelter from the changing world and the relativization of its values. Its environment can be familiar and understandable, and its citizen will identify with his place of residence. Contextualism can be helpful, which means both inscribing the city into the landscape and incorporating new elements into the existing structure. To emphasize the existence of the city and its structures, it seems necessary to preserve the archetypes, allowing for the recognition of the agora-forum, the “holy road”, the center of power and science, etc., and also – the creation of a residential structure that will become a framework for families to live safely.

¹⁶ P. Stevens, *Discover the residential complex that ricardo bofill laid out like a french formal garden*, <https://www.designboom.com/architecture/ricardo-bofill-les-arcades-du-lac-le-viaduc-paris-france-03-24-2017/>

¹⁷ R. Krier, *Urban Space*, London 1979.

¹⁸ Ibidem, p. 15.

¹⁹ M. Bereri, *Wohnanlage Ritterstraße-Nord*, <http://f-iba.de/wohnanlage-ritterstrasse-nord/>

²⁰ A. Szmelter, *Swojskość w polskim modelu miasta-ogrodu. Polskie wczesne rozwiązania na tle zagranicznych przykładów*, in: *Przyszłość rzeczy minionych. Studia do dziejów architektury i urbanistyki w Polsce*, tome II, ed. M. Rozbicka, Warszawa 2019, p. 169.

Currently, the criticism of functionalism has definitely lost its bite, and the social premises underlying the principles developed by the creators of the former architectural and urban avant-garde are appreciated again. The experiences of the functionalism era, and then the urbanist experiments with postmodernism and the “return to the traditional city”, it seems, prepared the ground for further searching for the relationship between functions and forms in relation to the city’s development, including its extremely important components, such as districts and housing complexes.