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Heritage of Early Modernism in Residential Architecture in Sarajevo

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Abstract. Appearance of modern architecture in the early 20th century brought revolutionary changes in the meaning and sense of architectural design. New design implies a new way of life of modern man and entirely new approach to residential architecture. The new ideal of residential architecture becoming sunlit living units oriented toward the green, free of bulky furniture, with flexible, open plan, equipped and materialized in accordance to the time. Pure and simple design without decorations started to replace eclectic artistic expressions of the past times. In many European countries, a modernism was reaching its peak during the 1920s and 1930s by promoting and strengthening the ideas of the Bauhaus School and Athens charter and by increasing a number of young architects that have finished schools of architecture in Central European universities and continue to work with significant names of modernism. Such the case was in Sarajevo with a numerous of architects that worked from the second half of the 1920s and later. They have developed remarkable pieces of modernist architecture that are not appropriately treated by institutions and understood by wider public. The purpose of paper is to contribute indicating of value of such architecture that should result with raising of awareness about its importance and future proper interventions based on experience of similar projects related to protection and promotion of modern architectural heritage, that were realized in Europe and wider. Early modernism in residential architecture has brought tectonic changes in development of architecture and cities, quality and way of human living. It was just beginning in creation of extraordinary avant-garde modernism that existed during period of Socialist Yugoslavia in second half of 20th century. A comprehensive understanding of modernism from mentioned period in study case of Sarajevo and promotion its values will help to build positive and honest relation to heritage which was part of common international European identity.

1. Introduction

The modern architecture is, very often, not perceived as a cultural heritage and terms of modern and heritage have almost opposite and opposing meanings in the public and professional perception. The reasons for such attitudes are different. On one side are critics of modernism and their interpretation about modern architecture as new and that has no traditional values. On the other side proponents of the modernism often were exclusive to the previous architectural styles and acted from the arrogant and destructive positions with counter-productive acting for the affirmation of modernist ideas. From the beginning of their revolutionary attitudes modernism caused contradictions, praise from supporters and non-selective criticism of opponents. After more than a hundred years of modern ideas, it is necessary to approach to the evaluation of such architecture in the professional and scientifically based manner. The architecture of the 20th century is marked by modernism and during period of almost one
hundred years has become a tradition by creating a common European, but not just European identity. Architecture and urban planning of the modernism were indelible marked the structure of the world's cities and have brought new impact on understanding, not only about housing and working spaces, but on the behaviour of people and their way of life through radically editing of their understanding of design and materialization of the architecture. Objects that are created based on this formula representing some of the most valuable architectural works in recent human history. Despite the period of fierce onslaught during the second half of the twentieth century the relevance of basic modernist principles will not fade even in contemporary developments of architectural practice. The attitude to the cultural heritage of the immediate past in the case of modernism is directly connected with the present and future time, given the vitality and presence of modern architecture in the recent architectural developments. This must be related to the modern masterpieces, but also to many impressive achievements that we constantly rediscovering in the immediate living environment of our European cities.

2. Modernist influences
Modernists have brought new revolutionary spirit and energy after the promotion of Le Corbusier ideas of house as a machine for living and the form that follows function. They were oriented to the ideas that will improve every aspect of human life and provide them to large number of people. Not just as making some roof over human heads, but also wish to reach high quality of their residential units.

“Since the dawn of human symbolic thinking, architecture not only has provided utilitarian shelter but also has silently expressed how humans view themselves in relation to the cosmos, to their gods, and to each other.” [1]
One of implementation of modernists ideas was implemented in Weissenhofsiedlung, settlement that was planned with intention to built a 33 buildings with one or more dwelling units in every. Final result was 33 building, with 63 apartments designed by 17 selected architects, mostly members of DWB\(^1\), but also from France, Switzerland, Holland, Austria. It was group of mostly younger architects, progressive and open to experimentation, pioneers and latter giants of modernism:

Ludwig Mies van der Rohe, Jacobus Johannes, Pieter Oud, Victor Bourgeois, Adolf Gustav Schneck, Le Corbusier, Pierre Jeanneret, Walter Gropius, Ludwig Hilberseimer, Bruno and Max Taut, Hans Poelzig, Richard Docker, Adolf Rading, Josef Frank, Mart Stam Peter Behrens and Hans Scharoun.

In the article from 1926, titled as "Die Wohnung der Neuzeit" ("Flats modern times") the authors of project say:

"The rationalisation of all areas of our lives does not exclude the issue of housing. The current economic conditions do not permit any wastefulness and demand greatest achievement with the smallest means. As far as housing construction and running costs are concerned, this means using materials and technical methods that lead to lower building and operating costs, simplification of household management and improved living environments."

The tendency of these, then anonymous but later until now, extremely important architectural names was not just to change the concept of housing, but to establish a new way of living. In accordance to the idea that minimum form gives maximum freedom to create spaces that will represent a homogeneous exterior and synthesis of interior design. Aesthetics following functionalist determinants and it is free of ornamentation. Flexible interior spaces that are full of sun and light and surrounded by greenery represent a revolutionary step forward in comparison to the existing dark and crowded housing blocks. In accordance to the rationalistic interpretations furniture ceases to be a decorative element which overloading residential space, but start to be primarily functional and designed in such a way that it leaves more free space. For the first time there were presented built-in kitchens, closets, bathrooms and many modern appliances. Comprehensiveness of this rationalist project is reflected in the facts that were presenting a new construction techniques and materials, with special emphasis on prefabrication. A many of similar resorts around the world have designed by following the example of Weissenhof until the end of World War II. Engineered and designed by one or several of architects, but just few of settlements offered something radically new. After considerable damage during the Allied bombing at 1944, the facilities are left to ravages of the time until 1977 when has begun the activities for rebuilding and finally completed in 1987 on the 60-th anniversary of the exhibition "Die Wohnung" - in Stuttgart.

Very similar concept in development of new settlement was used for Baba housing estate in Prague. For international exhibition 1932 were designed 32 of one or two-storey houses, designed by several cubist, functionalist and purist architects organized in kind of Czechoslovak Werkbund – (Svaz československeho dila)\(^2\). With support of government they decide to build model of modern residential estate. Resort is settled on the southwest oriented slope with beautiful panoramas over Prague, which became centre of Cubist architecture in twenties of 20th century.

"Perched on a hillside overlooking the city, residents would live in a clean, natural environment with lots of fresh air and stunning views across the city. Although Prague is today much more built up than

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1 Deutcher werk bund, German association of architects, designers, artists, craftmen..., had a great importance during development of ideas of modern architecture.

2 Members of the movement who designed most of houses in Baba are: Pavel Janak, Josef Gočár, Jan Linhart, Oldrich Stary, Ladislav Žak and dutch architect Mart Stam.
in the 1930’s, Baba retains something of a "countryside" feel with berries, apple trees and even grapes growing in some of the gardens.” [3]

Early idea about creating of standardized houses was refused and each house was designed independently in accordance to clients’ wishes that produced a lot of variety, but with same functionalist themes, simplicity, geometric formalism and pure lines. Internal space organization in villas are open plans and in accordance to functionalism. During the World War II resort wasn’t damaged, but during period of rigid communism it was treated as bourgeois and without proper maintenance. Because many changes on some of houses and insensitive approach that destroyed original features during that time it was necessary to protect this area what was realized 1993 when Baba became a conservation area.

3. Sarajevo Case
Between the two world wars and until a few years after World War II Sarajevo was marked by stagnation in development, and lack of bigger urban projects. The architects were active, mainly in construction and interpolations in the areas within the existing urban structure. The exceptions from these practices are two smaller urban parts of Sarajevo in Crni vrh constructed from 1933 until 1941 and Džidžikovac from 1948.

Both of these settlements have been created under the recognizable impact of modernist conceived Weisenhoff village near Stuttgart, and Baba in Prague. It is recognizable same tendency, to create comfortable housing units completely in accordance to the principles of the new modernistic movement in architecture. Similar to the aforementioned projects in Prague and Stuttgart and practically in the same time in for realization of project Crni vrh in Sarajevo were engaged different architects from Sarajevo and former Yugoslavia, such as: Dusan Smiljanic, Franjo Lavrenčić, Bruno Tartalja, Danilo Kocijan, Franc Novak, Mate Baylon. They manage to develop urban ensemble that basic structures are recognizable until present days and to create high-quality residential buildings of collective housing in the spirit of that times. At the same time in some of realizations they seek to recognize the spirit of tradition and interpret it appropriately.

"Architecture that evolved in Sarajevo during the twenties and thirties of the twentieth century was varied in between domestic traditions and central European influence. Its roots had grounded in Sarajevo's developed domestic culture of living. Sarajevo's houses were intentionally set in its environment, often in nature with gardens and summer kitchens. They had dispersed internal and external disposition, and the furniture was practical and comfortable. Town had developed infrastructure, inherited from the Austro-Hungarian period (streets, regulating lines, water and sewer).” [4]
Figures 5, 6. buildings in Crni vrh, Sarajevo after construction and nowadays, [11]

Figures 7, 8. buildings in Crni vrh, Sarajevo after construction and nowadays, [11]

Figures 9, 10. buildings in Crni vrh, Sarajevo after construction and nowadays, [12]

Mentioned group of architects were strongly influenced by international trends in modern architecture and stepping towards current Central European model of urban planning. This primarily refers to the modified relationship between public and private in the concept of the house that is substantially different compared with Sarajevo housing tradition. The design and organization of space are fully in line with modern trends in the European architecture of that era. Housing estate in Crni vrh was created on the hill over the urbanized central city zone, oriented to the south and surrounded with
a lot of greenery. First idea was to arrange resort with five types of houses, but latter every unit was designed separately as unique. Settlement was partly realized in accordance to plans but quality of urban and architectural design direct further development after World War II, during period of socialist Yugoslavia. The most serious changes of original condition were made in last twenty years after last war in Sarajevo. The main difference from Weissenhof and Baba is in contemporary treatment and lack of understanding of importance of such a valuable ensembles and authentic modern architecture. There are institutionally recognized only by the Decision of promulgation of a national monument by the Commission for Protection of National Monuments from 2012, in order to prevent further destruction and irresponsible attitude of the old and new owners and users of buildings. Stopping of subsequent interventions that are markedly detrimental or completely destroying the precious heritage of modernist Sarajevo was first step toward future renovations and returning to original state.

**Figures 11 and 12.** House Kopčić, Sarajevo 1939, arch R. Kadić, [13]

**Figures 13 and 14.** residential and commercial buildings Sarajevo 1940, arch. Reuf and Muhamed Kadić, [14]

During the 1930s and shortly after World War II was the most active period of two important Bosnian modernists. After returning from their studies in Prague, the brothers Muhamed and Reuf Kadic worked in accordance to spirit of the finest achievements of modern avant-garde, often by
seeking for roots and base in domestic tradition. House Kopčić from 1939 represents one of the most successful achievements of Reuf Kadic. The facility is very modern for the time when it was built, harmoniously proportioned, situated in the heart of one of Sarajevo’s traditional residential areas – so called Mahalas. Using of traditional elements: courtyard, facade erkers, eaves, hipped roof, traditional materialization, but interpreted in accordance to new ideas of modernity.

Some of their projects, such as residential building Mekteb at the corner of Ferhadija and Ćemaluša streets and buildings of the Pension Office 1940 have been recognized as one of the most successful examples of modern architecture in Sarajevo, related to the Bauhaus movement and accordingly modern ideas from the first half of 20th century.

“A number of buildings dating from this period, especially in Sarajevo, therefore bear the unmistakable stamp of pre-war modernism or of formal details reminiscent of Le Corbusier’s vocabulary.” [5]

Thanks to a little earlier authorities' responses regarding protection of heritage, their building projects are in a slightly better condition than the resorts on the Crni vrh and kept more original look and design of the buildings as we can see in the example of Dzidzikovac settlement designed by Muhamed and Reuf Kadić 1947. Although poorly executed and materialized because of big financial restrictions during period of construction, immediately after the Second World War, Dzidzikovac objects are great examples of modern architecture in Sarajevo. Eight three-storey buildings, placed cascading up on the slope near the central city streets have constructed by introducing new technological solutions, particularly reinforced concrete. Entirely consistent in implementation of principles of the Athens Charter, the housing units are lighted by large glass surfaces oriented towards the south and surrounded with greenery, while entrances seated on the north together with staircases and other service spaces. Objects are joined with covered terraces from the east and west are, and flat roofs are provided for common use. Organization of housing space was completely new and innovative with modernist open-plan concept.

"The sudden appearance of this ensemble was evaluated as an indication of major socio-economic changes and advanced understanding of spatial – formal relationships in architecture and urbanism opposed to initially supported the Soviet model. Freely placed three-story blocks down the green slope, hinged connecting and dividing them with terraces, with a lot of glass on the sunny side, with transparency and mobility on the ground, they were remarkably materialized postulates of current new trends of European urbanism and shaping in construction." [6]

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4 "Iznenadna pojava ovog ansambla ocijenjena je kao nagovještaj krupnih društveno-ekonomskih promjena i naprednih shvatanja prostorno-oblikovnih odnosa u arhitekturi i urbanizmu suprotstavljenih prvobitno zagovaranim sovjetskim uzorima. Slobodno plasirani troetažni blokovi niz zelenu padinu, sa terasama koje ih zglobo i povezuju i dijele, sa dosta stakla na osuncanoj strani, uz transparentnost i prohodnost u parteru, bili su izvanredno materijalizirani postulati aktualnih novih tendencija evropskog urbanizma i oblikovanja u građenju."
Later rapid development of Sarajevo in the second half of the 20th century brought big number of settlements built and urbanized in accordance to principles and postulates of socialist modernism, but rarely achieved the conceptual and shaping value of settlements Crni vrh and Dzidzikovac.

**Figures 15,16,17,18.** residential complex Dzidzikovac, Sarajevo 1947, arch. Reuf and Muhamed Kadic

**Figures 19 and 20.** modern settlements in Sarajevo emerged during 1950s, 1960s and 1970s
On examples of two housing complexes: Crni vrh and Dzidzikovac in Sarajevo we can observe how indifferent, often problematic attitudes exist in general public opinion, but in work of professional institutions too, regard to modernist heritage in architecture that marked the whole twentieth century.

"Cultural Heritage of 20th century is part of the habitat of today, which is somewhat innovative and different approach compared to the previous categorization of history and heritage. Any valuation of the cultural heritage in any social or cultural context implies public recognition, appreciation of a wider audience, being part of a collective identity that eventually requires institutional recognition." [7]. The correct approach to the modern heritage applied in Weissenhof and Baba can serve as an example of affirmative evaluation of architecture regardless to the period of its formation. Modern architecture heritage that is treated in such manner and what is the most important, presented to the public as a highly valuable legacy of elapsed time provides an opportunity for understanding of modernism on equal level of architecture as other stylistic directions from the past. Particularity of modernism is that still is very actual at present times and for sure will be in the future through existence of various neo-modern trends in architecture. Presence of modernism in contemporary movements in architecture cannot be obstacle for proper recognising of early modernism in Sarajevo and wider, as valuable heritage that has to be preserved and restored based on positive experiences from different parts of Europe.

"Much work remains to be done. The Museum of the Revolution in Sarajevo, and the masterpieces of the local modernism that began with the Kadić brothers and was taken forward by Smiljanić, Baylon, Neidhardt and others, must be restored before they acquire any parasitic accretions altering their appearance..." [8]

4. Conclusion
The study indicated that buildings and settlements from modern period in Sarajevo and Bosnia and Herzegovina represents a sad picture of the current attitude to the heritage of that architecture, where even some of the most significant buildings from that period are in a desperate condition. Despite the great importance for the culture of the region, modern architecture of Bosnia and Herzegovina and its appearance through remarkably buildings hardly come to the list of protected heritage that will be subject of future activities on reconstruction and revitalization. After the last war in Bosnia and Herzegovina there is no expert and valid reconstruction and restoration of such objects. Proper evaluation and understanding is necessary to realize that modern architecture is not always arrogant and out of the cultural, historical and natural context, but has huge importance for revolutionary development of architecture. A numerous examples of modernist architecture has the value of cultural heritage, in its artistic qualities, and through the process of establishment of the regional and common European identity, opposite to individual, national approach, that is due to current political needs more often in the focus of the experts and the general public. Timely professional and institutional activity should promote the values of the modern architectural heritage, to prevent its destruction and disappearance, and provide a way to restore it as in original state. It is required a comprehensive education about values and the qualitative improvement that modern architecture was brought about, despite the fact that people by nature usually need more time to accept simplicity and clarity which are basic characteristic of sophisticated modernist aesthetics. Through the process of reconstruction, the modern cultural heritage will be present on the way to promote its qualities and accordingly it will be

5 Kulturna baština 20. stoljeća je dio habitata današnjice, što je donekle inovativni i drukčiji pristup u odnosu na prijašnje kategorizacije prošlosti i baštine. Svako valoriziranje kulturne baštine u bilo kojem društvenom ili kulturnom kontekstu implicira javno priznanje tj. uvažavanje šire publike, bivanje dijelom kolektivnog identiteta koji na kraju zahtijeva institucionalno priznanje."
accepted and understand from wider public as it was case after reconstruction of Weissenhof, Baba and many other particular examples of modernity, which are visited by million tourists every year.

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