

Influences of modernism in urban development of Sarajevo in the period 1945-1980

Adnan Zoranić

Architecture Department, International University of Sarajevo, Sarajevo, Bosnia

ABSTRACT

In accordance with the state strategy oriented to the industrialization and urbanization many of Yugoslav cities had strong and rapid development that was visible in appearance of new parts of the city or even totally new cities in surrounding of new established industrial areas. On the example of Sarajevo, we can observe implementation of ideas related to modernist architecture and urbanism promoted in many European countries during bigger part of 20th century. From wandering in treatment, beginning ignorance and latter acceptance of authentic heritage from Ottoman and Austro-Hungarian period to the Modernist era of massive construction of new parts of the city. Direction of work and thinking of domestic architects leaded by Juraj Neidhardt created specific way of considering Bosnian traditional architecture as inspiration and base for development of authentic modernism related to the wide range of contextual premises that in theory of architecture was recognized as "Sarajevo school of architecture". At the same time massive construction of new urban areas was searching for efficient solutions of industrial and prefabricated systems that were developed and widely used in all Yugoslavia. Design of all new settlements strived to planed and built into consideration to principles of Athens charter with accent to sun oriented and functional residential units, with enough greenery and open public zones, with regulated and distribution of educational, service and commercial facilities in every new established neighborhood. Despite to social, urban and construction quality issues that appeared in new developed urban areas from the period of socialist Yugoslavia, we can talk about relevant and innovative concepts promoted by modernist architecture and urbanism that was under constant and comprehensive improvement process which reach high range of quality very relevant from the perspective of European modernism.

Keywords: Modern architecture, modern urbanism, Yugoslavia, Sarajevo

Corresponding Author:

Adnan Zoranić
Architecture Department, International University of Sarajevo
71000 Sarajevo, Bosnia
E-mail: azoranic@ius.edu.ba

1. Introduction

To understand the intensity and importance of Sarajevo's development after the World War II until the 1990s, it is enough to look at a map of the city and compare the scope and size of the city development, in socialist Yugoslavia, from Marijin Dvor to Dobrinja and Ilidža with parts of the city developed previously, during five centuries of the city's existence. Additionally, it is important to take into consideration a whole series of satellite settlements-cities¹ that are emerging in the immediate vicinity of the city, as a result of industrial development. Sarajevo is one of the few cities in the world where the stratification of historical development can be traced chronologically by moving in one direction, going from the east to the west. Traveling by tram from the City Hall as one of the last points of the city in its eastern part, visitor will travel to the west, but also through the time. Historical changes will have their visualization in architectural appearance and different urban structure from the Ottoman period and oriental Bosnian architecture; through the Central European, Austro-Hungarian matrix till the Marijin Dvor - part of the city where in 1945 Sarajevo was ending with its

¹ Hadžići, Vogošća, Pale, Ilijaš, Breza, Trnovo, Hrasnica.



40,000 inhabitants and further to modernist urban areas from the second half of 20th century. This number of citizens has increased by more than ten times together with strong economical, social, and urban development during the existence of socialist Yugoslavia.

2. Modernist transformation of urban environment in Sarajevo

Sarajevo is a city which is related to associations of multiculturalism, visible through clearly nuanced layers of development from the period of Ottoman rule 1463-1878, Austro-Hungarian monarchy 1878-1918, Socialist Yugoslavia 1945-1991 and the newly formed, undefined, and confusing transitional society from the 2000s to the present day. The previously unmentioned period of the Kingdom of Serbs, Croats, and Slovenes and the so-called the first Yugoslavia from 1918-1941 did not leave recognizable urban features in Sarajevo, but it is significant because during that part of the 20th century there was the emergence and development of modernism in Europe, with clear influences on local architecture and architects. In the period between the two world wars group of local architects began working in Sarajevo. They were returning to their homeland after studies at European universities, work, and collaboration with the greats of modernity.² “Mentioned group of architects were strongly influenced by international trends in modern architecture and stepping towards the current Central European model of urban planning. This primarily refers to the modified relationship between public and private areas in the concept of the house that is substantially different compared to Sarajevo housing tradition. The design and organization of space are fully in line with modern trends in the European architecture of that era [1].” With the exception of the settlement of Crni vrh, from the period before World War II and the settlement of Džidžikovac from 1948, more serious urban development has occurred since the 1950s and continues during the four decades of socialist Yugoslavia. The mentioned settlement Džidžikovac was the project realization of the most important Sarajevo architects from the period of early modernity, the brothers Muhamed and Reuf Kadić. With extremely modest financial sources, with basic materialization and post-war construction technologies, they managed to realize one of the most beautiful examples of modern architecture in those years in Yugoslavia. The complex of horizontally placed three-storey buildings cascading follows the slope of the terrain, orienting living areas to the south and greenery. Complex of buildings has established natural relation to Sarajevo's "Veliki Park" that is located in immediate vicinity of the Maršal Tito main city center street.

"The sudden appearance of this ensemble was assessed as a hint of major socio-economic changes and advanced understandings of spatial and architectural relations in architecture and urbanism opposed to the Soviet role models originally promoted in first years after World War II. Freely placed three-storey blocks a lot of glass on the sunny side, with transparency and passability in the ground floor, were extraordinarily materialized postulates of current new trends of European urbanism and design in construction [2]."



Figures 1 and 2. Džidžikovac settlement, Sarajevo 1948, arch. R. and M. Kadić. Source: Adapted from [3]

The modernization of the city became a topic that was updated by the projects of Juraj Neidhardt, an architect who, by coming to Sarajevo, discovered the values of existing traditional architecture. Similar to Le Corbusier obsession with Mediterranean in his famous “Journey to the East”, Neidhardt was delighted by Sarajevo and

² Juraj Neidhardt was collaborator of Le Corbusier and Peter Bahrens and Selman Selmanagić was collaborating with Walter Gropius.

he found inspiration in indigenous existing local architecture, that he used to develop an authentic approach to modernism, based on traditional vernacular urban architecture, in a way of later defined critical regionalism. This approach will become one of the basic features of Bosnian modernism in architecture to this day. However, at the beginning his radical projects, probably inspired by Le Corbusier's idea of demolishing the central parts of Paris and building the "Illuminated City", include demolishing the oldest parts of Sarajevo, even city bazaar - Baščaršija, the oldest and probably the most famous part of Sarajevo with rectangular streets, oriental shops and some of the most significant examples of Islamic architecture in this part of the world. Some of individual buildings of high architectural and historical value were planned to be preserved by the project, while the rest of the area was provided for modernist buildings whose functions largely met the ideological matrix of the then current phase of Yugoslav socialism.

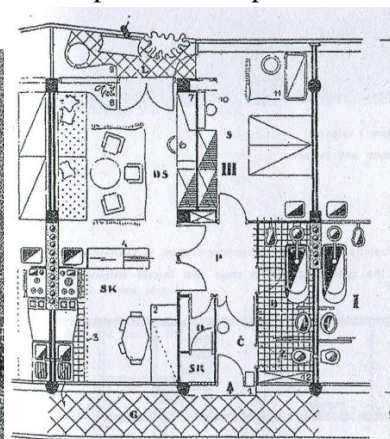
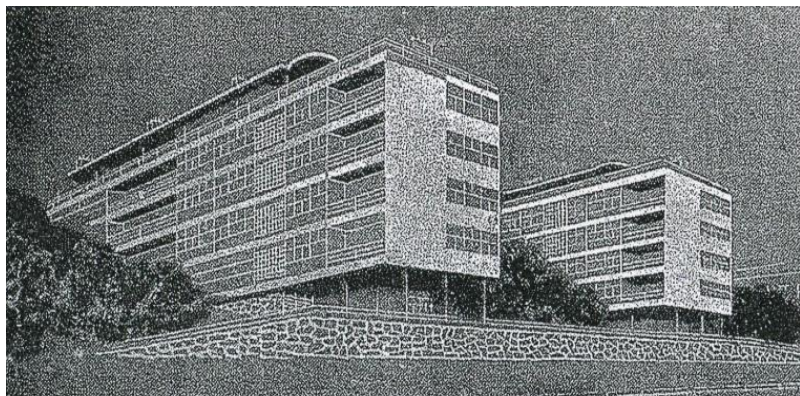
“According to the avant-garde view, the revolution was a new beginning; everything existing was supposed to be “burned down” and the architects had the task of imagining a brand-new world from scratch [4].”

Prompted by the then dilapidated state of the bazaar, which, as he says, from the city center becomes a periphery, Neidhardt proposes the demolition of everything that is dilapidated and unhealthy, replacing it with new and harmonized with modern needs [5]. His project, which did not recognize the ambient value and qualities of the old bazaar in Sarajevo, except architectural and cultural-historical value of some singular buildings, was not realized and Neidhardt himself actively participated in the reconstruction of Baščaršija in 30 years later. Neidhardt's attitude towards the ambient values of Baščaršija should be seen in the context of the then practice based on CIAM principles that promote the protection of architectural heritage, but above all individual high-value buildings, while entire historical parts of the city without high-value buildings are proposed for demolition or preserved and treated as museum units. Changes in such attitudes occurred in the early 1970s and coincided with the period of reconstruction of the bazaar. "Then the instruments of cultural heritage protection were supplemented with the concepts of integral and integrated protection, active protection, revitalization of cultural heritage [6]." According to Bruno Milić, the results of reconstruction of the bazaar in Sarajevo are a carefully restored ambient ensemble with all the features of high Islamic culture and one of the few preserved urban units from the period of the Turkish era in Europe [7].

Instead of the Sarajevo Bazaar, modernization began on the opposite, western edge of the then city. The beginning of the construction of New Sarajevo started with announcing Yugoslav competitions for new residential settlements in Grbavica and the Marijin Dvor area with public facilities, primarily the Assembly and Government of Bosnia and Herzegovina, next to the existing neo-Renaissance building of the National Museum. In the architectural competition from 1955, the project of Juraj Neidhardt was declared as the most successful project of reuse of Marijin Dvor area and for the buildings of Assembly and Government of the Socialist Republic of Bosnia and Herzegovina.

In all his projects he applies modernism under the influence of Le Corbusier, but always striving to affirm and apply elements of local traditional architecture. In his numerous analyzes, Neidhardt constantly asks which old values to preserve and how to transform them. He claims that Sarajevo was created on the eternal ethical principles of humanity, the right to views and the cult of neighborhood, and he believes that these values should be promoted as a domestic, authentic contribution to contemporary architecture and urbanism and to take them into account during construction of Novo Sarajevo [5]. The influence of such an approach created the "Sarajevo School of Architecture", a specific form of critical regionalism, so characteristic for Bosnian modern architecture. It is not always visible in the creation of new parts of the city in Novo Sarajevo, but it is more than recognizable in the work of many Bosnians, but also architects who worked in Bosnia and Herzegovina in the second half of the 20th century, such as Zlatko Ugljen, Andrija Čičin Šain, and later in the work of contemporary Amir Vuk Zec. A strong regional orientation in architecture, beside Bosnia and Herzegovina, also existed in Slovenia under the influence of Edvard Ravnikar, and in both cases it was politically acceptable and possible thanks to the loose federal organization of Yugoslavia [8]. Neidhardt's

architecture seeks connections with tradition on an essential level, and not only on a formal level, which is evident in the project of buildings in Đure Đakovića Street, today Alipašina, which, unlike the design of the settlement on Džidžikovac, are placed perpendicular to the terrain slope with greenery between buildings. The traditional elements of doksat and divanhana³ has found modern application in the design of small but functional, sunny and green-facing apartments, above the recessed ground floor porches with pillars.



Figures 3 and 4. Buildings in Alipašina street in Sarajevo, arch. J. Neidhardt. Source: Adapted from [5]

At the same time, in the rest of the country, by the end of the 1950s, the modernist planning had redefined the most of the Yugoslav republics' capitals and fundamentally changed their urban structure with white box urbanism, towers of new administration, business and public buildings [8].

"In the 1960s, Z. Kovačević and a group of architects realized the urban plan for Grbavica I - the first large, planned housing construction in Sarajevo in the contact zones. Z. Kovačević also led the team that prepared the General Urban Plan of the City of Sarajevo until 1963. [9]"



Figure 5. Urbanism of Grbavica settlement in Sarajevo, arch. Z. Kovačević. Source: Adapted from [10]

³ doksat- a protruding part of the room over the main wall of the house, divanhana – room in bosnian houses for social activities.

The concept and standard of housing in the first buildings of Novo Sarajevo does not differ from the original realizations of similar buildings at that time in Zagreb and Belgrade. These are often simple apartments with a bathroom and two rooms of similar size, one of which has a kitchen. At first, they are built in the traditional way with the use of basic materials. The walls of the bathroom, kitchen and staircase are often painted with oil paint, and the floors are made in the cast floor, so called terrazzo.

Urbanism is characterized by noticeable tendencies of modernist planning with settlements that have a sufficient number of green areas, schools and preschools, supply centers, but for a long time these settlements remain only dormitories of the rest of the city.



Figures 6 and 7. Settlements Čengić vila and Hrasno in Sarajevo, mostly built in 1960s. Source: Adapted from [11]



Figure 8. Settlement Alipašino polje in Sarajevo, mostly built in 1970s. Source: Adapted from [12]

Figure 9. View from the southeast to the settlements in Sarajevo municipalities Novo Sarajevo i Novi Grad, mostly built in 1960s and 1970s. Source: Adapted from [13]

Zoning and a clear separation of industry on the right side of Miljacka and housing, which mostly occupies the left side, are noticeable. The city continues to develop according to the 1965 General Urban Plan, influenced by Le Corbusier and the Athens Charter, defining the division into functional zones, abolishing traditional streets in settlements, and building residential solitaires [14]. At the end of the 1960s and during the 1970s, the first residential skyscrapers were built in Sarajevo, using prefabricated construction systems, which would culminate in the mass construction of settlements for almost 30,000 inhabitants with many so-called solidarity apartments in Alipašino polje, in a prefabricated skeletal structure based on the “IMS system”, and manufactured in domestic company Tehnograd from Tuzla. Beside excellent and innovative capabilities and flexibility of functional solutions and interesting spatial concepts, this system had the problem of poorer thermal and sound insulation.



Figure 10. Settlement Alipašino polje in Sarajevo, mostly built in 1970s. Source: Adapted from [3]

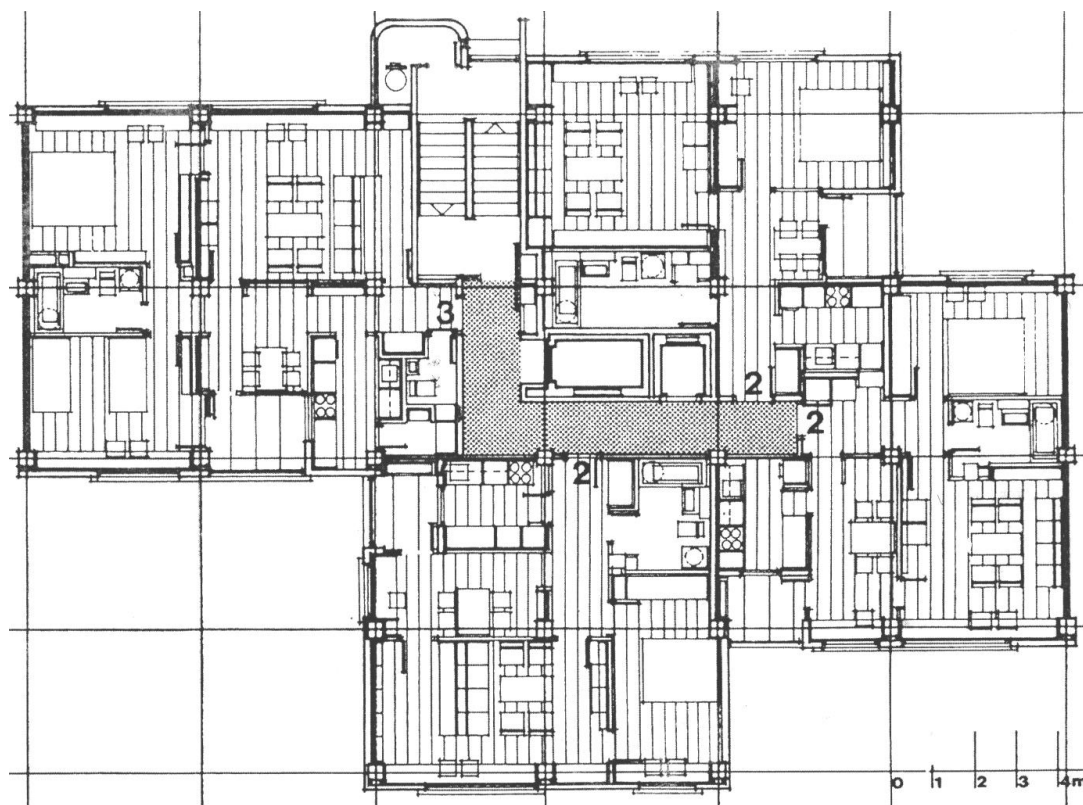


Figure 11. Typical floor plan in Alipašino polje, arch. B. Janković. Source: Adapted from [15]

Latter in the 1980s, prefabricated panel systems became widely used in construction, especially after the gradual abandonment of the construction of residential skyscrapers. The use of panel systems dominated during the 1980s, when some of Sarajevo's best housing estates were built, in line with design norms, but also with improved materialization that followed the quite high standards defined by Yugoslav regulations in construction that largely followed and harmonized with German DIN standards.

The new, modernist parts of Sarajevo, as it was case in other larger Yugoslav cities, were mostly inhabited by newcomers from other parts of Bosnia and Herzegovina and Yugoslavia. Here they became accustomed to urban living conditions and to the new concept of housing, often not so familiar for many of them. However, the new settlements, with all the shortcomings, provided decent comfort and organization of life, even in examples of high population density with preconditions for dehumanization due to lack of intimacy. There are visible attempts of urban planning that respect public space as opposed to narrow private interests of today investors. Urban solutions always leave enough space between buildings for proper insolation and with a lot of greenery; strive to separate pedestrians from road traffic and to provide the necessary public and service facilities in line with the needs of the community from the immediate neighborhood. Sarajevo architect Ivan Straus, direct witness and active participant in the development of Yugoslav and Bosnian architecture has named the period from 1945-1990 as the Pericles era of architecture in Bosnia and Herzegovina, and he was convinced that we must confirm that in the mentioned period was established exceptional sensibility for architecture based on the premises of European tendencies, without looking back or imitating the specifics of layers of architectural heritage from the history [16]. Significant importance for the development of the city and its modernization was the organization of the Winter Olympic Games in 1984, when the city reached the peak of social, economic and cultural development, which was reflected in the construction of settlements and housing units of high urban and architectural quality and great spatial solutions in the last decade of existence of socialist Yugoslavia [17].



Figure 12. Buildings in Alipašino polje after renovation works on façade. Source: Adapted from [18]

The obvious problem of the entire modern architecture and urbanism of Sarajevo is the poor maintenance and still quite visible consequences of the last war damage and destruction, as well as subsequent interventions in space and buildings that completely disrupted the original ideas of designers and former brilliant examples of

modernism turned into examples of disgrace in the perception of broad public. Modernist architecture is completely neglected and unrecognized by the heritage institutions that should be responsible for proper valorization and active protection of the international architecture of modernism. In the period of the last 30 years attention is turned to some other periods of architectural and cultural heritage, accordingly predominant nationalist ideologies, and their intentions to use and to revise the history and tradition in accordance with political goals of creating, previously desired, national identities. Consequently, modernism and internationalism are neglected. By mentioning the numerous challenges that architectural heritage is facing in Bosnia and Herzegovina, which are applicable to the entire territory of the former Yugoslavia, Amra Hadžimuhamedović warns about danger of using heritage for nationalist purposes and producing new truths, wrong reinterpretations and neglect of everything that is not in accordance to ethno-nationalist concepts of newly formed societies [6]. The current state of the architectural heritage of modernity from the period of socialist Yugoslavia should be observed in the context of the above mentioned, but with intention to change it in direction of renovation as it was recently implemented on the examples of several buildings in Alipašino polje.

3. Conclusion

Sarajevo was one of many Yugoslav cities, especially capitals of republics and regional centers, which were radically changed during the period of existence of former state in second half of 20th century. Philosophy of modernist architecture and urbanism had very strong influence in reshaping of the city and development of its new parts. Even Sarajevo is city which exists during centuries; the biggest urban part was developed during strong industrial, economical, urban, social and cultural development in mentioned period. Modernism in architecture of Bosnia and Herzegovina appeared more or less in same time as in the rest of Middle and West Europe. Accepted by local architects was significantly oriented to the tradition of Bosnian vernacular architecture which was used as source and inspiration for specific regional modernism defined by theorist of architecture as "Sarajevo school of architecture". Simultaneously, and particularly during 1960s and 1970s urban design and massive construction were realized under influences of principles of international modernism specified in the Athens charter and in accordance to possibilities of prefabricated systems in construction that were seriously evolved based on scientific researches by architects in Universities and scientific institutes in Yugoslavia.

Despite to social, urban and construction quality issues that appeared in new developed urban areas from the period of socialist Yugoslavia, we can talk about relevant and innovative concepts promoted by modernist architecture and urbanism that was under constant and comprehensive improvement process which reach high range of quality very relevant from the perspective of European modernism. Unfortunately, missing of adequate maintaining of buildings from that period and their very often bad condition, radical changes made by private investors and inhabitants, blurred importance of so massive presence of very progressive and innovative modernism suffering from the lack of recognition, valorization and accordingly, the proper care and protection from relevant state institutions.

Declaration of competing interest

The authors declare that they have no known financial or non-financial competing interests in any material discussed in this paper.

References

- [1] A. Zoranić, "Heritage of Early Modernism in Residential Architecture in Sarajevo" in Book of Conference papers, World Multidisciplinary Civil Engineering - Architecture - Urban Planning Symposium, WMCAUS, Prague, Czech Republic, 2018.
- [2] I. Štraus, "Potpuni nemar i ravnodušnost," *Oslobođenje*, 20/04/2006, Sarajevo, BiH, 2006.
- [3] Author's private collection of photos and self-prepared drawings.
- [4] V. Kulic, M. Mrduljas, W. Thaler, *Modernism In-Between*, Jovis, Berlin, Germany, pp. 217, 2012.
- [5] J. Neidhardt, D. Grabrijan, *Arhitektura Bosne i put u savremeno*, Državna Založba Slovenije, Ljubljana, Slovenia, pp.110, 1957.

- [6] A. Hadžimuhamedović, *Naslijeđe, rat i mir*, Univerzitet u Sarajevu, Sarajevo, BiH, pp. 36, 2015.
- [7] B. Milić, *Razvoj grada kroz stoljeća 2*, Školska knjiga, Zagreb, Croatia, pp. 317, 1995.
- [8] V. Kulić, „The Scope of Socialist Modernism, Architecture and State Representation in Postwar Yugoslavia“ in *Sanctioning Modernism: Architecture and the Making of Postwar Identities*, edited by: V. Kulić, T. Parker, M. Penick, , University of Texas Press, Austin, USA, pp. 41, 2014.
- [9] A. Pašić, *Arhitektura BiH 1918-1992*, Arhitektonski Fakultet u Sarajevu, Sarajevo, BiH, pp.6, 2010.
- [10] maps.google.com. accessed (08/07/2013)
- [11] “Slike starog Sarajeva.” klix.ba. <http://www.klix.ba/forum/slike-starog-sarajeva> (accessed 10/07/2013).
- [12] no.pinterest.com. <https://no.pinterest.com/pin/429812358186647233/?lp=true> (accessed 11/07/2013).
- [13] “View on Novi Grad.” it.wikipedia.org.
https://it.wikipedia.org/wiki/File:View_on_Novi_Grad,_Sarajevo.JPG (accessed 11/07/2013).
- [14] M. Bublin, *Sarajevo u istoriji, od neolitskog naselja do metropolisa*, Buybook, Sarajevo, BiH, pp. 159, 2006.
- [15] *Projekti i terenska istraživanja*, Centar za stanovanje IMS, Beograd, Serbia, 1982.
- [16] I. Štraus, „Arhitektura Bosne i Hercegovine 1945-1990” in *Restart 1995-2010 Arhitektura Bosne i Hercegovine*, edited by H. Ibelings, Buybook, Sarajevo, BiH, pp. 17, 2010.
- [17] A. Zoranić, *Arhitektura prethodne civilizacije, Kulura građenja i duh modernizma u Jugoslaviji u periodu 1945-1990*, International University of Sarajevo, Sarajevo, BiH, pp. 217, 2020.
- [18] “Utopljanje ul. Semira Frašte.” percon.ba. <https://www.percon.ba/reference/utopljanje-ul-semira-fraste/> (accessed 20/12/2021).