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URBAN HOUSING EXPERIMENTS IN YUGOSLAVIA 1948-1970

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In the period from 1948 to 1970 urban housing architecture in Yugoslavia had a distinctly experimental character as it strived intensively towards research and establishment of new architectural patterns and values that would mark the period of economic growth of the country. In conditions of mass housing construction, initiated by the devastated urban housing fund after the Second World War, significant influx of population to towns and the state directed its socialist aspirations at alloting every family acceptable living space. The period of the so-called "directed housing construction", whose imperative was to establish the limits of existential minimum in collective housing, maximal space "packing" and optimal functionality of flats, at the same time represents the most significant period in the development of housing architecture in Yugoslavia. The architects focused their interests in housing in mainly three directions: a) the creation and application of new prefabrication systems, b) innovative application of modernistic patterns in aestheticization of architecture and c) experimenting with space units which will enable a higher level of privacy in high-density housing conditions. The first direction of research emerged in the context of post-war housing construction of a wide scope, which encouraged the advance of technological research in areas of prefabrication and practical application of achieved results on the whole territory of Yugoslavia. The second direction dealt with architectural planning which was strictly subordinated to social and ideological sphere with domineering socialist monumentalism and artistic and sculptural approach to architecture. The third was related to experimental tendency with new urban housing patterns which aimed to search and find more pragmatic, humane solutions within mass high-density housing constructions which were the first to utilize and show examples of "double-tract" buildings. These were primarily realized in Serbia, as continuation of tendencies first expressed in activities of "Belgrade School of Housing".

Key words: Urban Housing, Socialism, Modernism, Prefabricated system, Experimental housing.

INTRODUCTION

After the Second World War, like many other socialist countries in the world (the Soviet Union, Poland, Czechoslovakia, Bulgaria, Romania, China, Hungary, Albania, etc.), Yugoslavia also underwent radical social and economic reforms, which to a great extent had an impact on collective housing construction. During the 1950s, housing culture and policy in Yugoslavia were united in a distinctive sociopolitical system (Ćirović, 2012). Until the 1970s, the state played a strategic role and had decisive responsibility in designing the housing policy. This policy stressed a clearly present social message and was characterized by introduction of "directed housing construction", which was meant to enable every family to have satisfactory living space (Tsenkova, 2008). Directed housing construction is a form of construction organized in such a way that workers in basic labor organizations put aside joint funds for new housing construction, starting from their own economic and social interests (Nikolić, 1981).

After ideological split with Stalin's Russia in 1948 (Perović, 2007; Rusinow, 1978), Yugoslavia turned its back to centralized socialist planning, a model characteristic for economic system in the Soviet Union, and turned towards economic reforms, decentralization and liberalization (Mesa-Lago, 1973). There were two main reasons for emergence of a specific social system in Yugoslavia, different from all other models of communist ideology in the world. The first lies in the fact that it was a federal union of six Yugoslav republics, all with different history, tradition and economic development. On the other hand, the split with the Soviet Union had as a direct consequence, the aspiration towards establishment of an authentic national communist philosophy along with political and ideological

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independence. (Friedmann, 1966; Dunn, 1975; Giofrè and Miletić, 2012; Dyker, 1990; Schrenk *et al.*, 1979; Maksimović, 1965; Riddell, 1968).

One of the specificities of socialist socio-political systems was the aspiration to establish and construct the so-called "housing communes" (Stites, 1989), a structure or group of structures designed for collective housing, aimed at showing the society the importance of collectiveness. Depending on the circumstances in which they emerged, the housing communes were interpreted in different ways. The most significant examples were built in the Soviet Union, the socalled "Kommunalka" or "Communal apartment" during the rule of Josef Stalin and "Khrushchyovka Buildings" built while Nikita Khrushchev was in power (Chmelnizki, 2012; Varga-Harris, 2008). Unlike other numerous housing communes built in the Soviet Union, the situation in Yugoslavia was less drastic, since immediately after 1948, all attention turned to mass housing construction, which was meant to bridge, in a more humane way, the gap between the existing housing conditions and mass migration of the population to cities. A significant social change, initiated by the self-management system, had its impact on the architecture, too. Consultation of Yugoslav Architects in Dubrovnik, held in 1950, initiated the first ideas on architecture outside the Soviet influence (Milenković, 1950). From 1953, a large number of public competitions were organized and this represented fertile ground for experiments with new professional reality. Although the programs were rigid, with strict rules limiting architectural style, new ideas still managed to get expressed and achieved (Mecanov, 2008). This is the background to the first "habitology" experiments,² which explored the limits of existential minimum in collective housing, maximal space "packing" and optimal functionality, the requirement insisted upon by the state, as the biggest investor (Group of authors, 1979; Ilić, 1950; Group of authors, 1978).

The inclination to look for more humane housing conditions was not characteristic only in the Yugoslav context, other socialist countries of that time also experienced similar tendencies, some of which include prefabricated housing construction in the Soviet Union (*Khrushchyovka Buildings*) (Boym, 2008; McCauley, 1995), Czechoslovakia (*Panelák*) (Schot and de la Bruhèze, 2003; Dufkova and Kozeluha, 1999; Zarecor, 2010), Hungary (*Panelház*) (Molnár, 2005; Finta and Magyar, 1960) and East Germany (*Plattenbau*) (Palutzki, 2000; Rubin, 2006).

THE CONCEPTION AND APPLICATION OF NEW PREFABRICATION SYSTEMS

The development of prefabrication technologies in Yugoslav construction industry, in a wider context of post-war reconstruction and industrialization, was particularly dominant in the filed of housing, infrastructure and public buildings. The need for mass housing construction encouraged the advances in technological research in the area of prefabrication. Large companies, such as Serbian Institute for Testing of Materials ("IMS" system), construction companies "Rad", "Ratko Mitrović", "Neimar", "Trudbenik" and "Komgrap" ("KSB" system) in Serbia, as well as "Primorje", "Novogradnja" (type "Dubrava"), "Industrogradnja" and "Jugomont-Jugobeton" in Croatia (systems YU-59, YU-60, YU-61 and YU-71), "Gradis" in Slovenia ("PBM" system), designed and manufactured new prefabricated and semi-prefabricated systems and components (Vukov, 1962; Nikolić, 2013; Lelak and Feldman, 1972; Marković, 1972; Radas, 1972; Šelken *et al.*, 1972).

The conventional, "closed" method of construction was of no use in post-war circumstances, since the need for mass construction of larger housing complexes was the society's priority.³ The main characteristics of "open" system of construction were first of all, flexibility and adaptability of prefabricated elements, which were easy to implement and adapt to every architectural solution, and secondly, the simultaneous construction of different building parts directly on the construction site or in factory plants (Jovanović *et al.*, 2012).

The development of collective housing in Yugoslavia and the experiments in this area were significantly influenced by an invention by Branko Žeželj, who in 1957 promoted, for that time innovative "IMS" skeleton system, based on the use of prefabricated and prestressed modular constructive elements (with 3.6m to 4.8m span), which, as opposed to typified spans of Khrushchovka buildings in Russia (mostly with 3.2m span) offered far better options of functional organization and facade shaping. The main advantage of IMS system was its "openness" and flexibility in design. This innovation proved to have been a significant contribution of Yugoslav engineering to world architecture and industry in the second half of XX century, as the system was implemented in building more than 150.000 flats world wide, from Hungary, Italy, Cuba and Angola to the Philippines (Thaler et al., 2012). Later on, this system was improved by introduction of "System 50" with main functional unit on axis distance of 7.2m, which enabled better modularity and compatibility with other sub-systems (Muravljov, 2010).

The first building built in "IMS" system in 1959, was the housing building in residential Block 2 in New Belgrade, and it was the training ground for all kinds of experiments related to architectural design and construction technology. In subsequent years, "IMS" system was used in other housing units, such as residential blocks 21, 22, 23, 28 and 29, also in New Belgrade (Jovanović *et al.*, 2012).

Along with most frequently used "IMS" skeleton system, post-war construction in Yugoslavia was also characterized by implementation of large panel systems, as the simplicity of their production was in accordance with the development level of construction industry.

One of the first examples of large panel systems "Yugomont YU-61", constructed by Bogdan Budimirov, Željko Solar and Dragutin Stilinović, used for construction of housing

² The term "habitology" stands for scientific area dealing with research in housing. The term was derived from Latin "habitare", which translates as "to dwell".

³ "Closed" system is massive structure where materials and components rely on each other in order to provide desired functionality. A closed system configuration has a complete set of assembly elements needed for construction and architectural solutions that can be fully accomplished with these elements alone (Mrduljaš and Kulić, 2012; Nikolić, 2013).

complex Borongaj (architect Bogdan Budimirov) and in a Folnegović settlement in Zagreb, Croatia. The authors patented the system of flat concrete plates that made up the constructive structure of multi-storey residential buildings, suitable for industrial production of elements in large series. This resulted in cheap production of a large number of housing units in a short period of time, which was very significant in housing shortage characteristic for the postwar period (Vukov, 1962).

INNOVATIVE APPLICATION OF MODERNISTIC PATTERNS IN HOUSING ARCHITECTURE AESTHETICS

Attachment to the East block in the first post-war years and the attempt to politically impose socialist realism, initiated comprehensive debate on architectural expression suitable for the socialist society. After the split with Stalin's regime in 1948, socialism in Yugoslavia tactfully oscillates between the East and the West, cultural freedom expands and modernistic aestheticism and functionalism become imperatives in realization of larger architectural and urban complexes (Kulić, 2012). The relationship between architecture and ideology was evident in many aspects of the architectural discourse in socialist Yugoslavia: from the debate on "official" architectural style, fit for the developing new socialist society, to the attempt of connecting traditional national heritage and modern architecture (Mrduljaš and Kulić, 2012). Modernism became the prevailing form of construction practice with its implicit meanings: on the one hand, this was one of the styles of the first mass wave of socialist modernization, on the other hand, it was an indicator of difference between Yugoslavia and the Soviet block (Kulić, 2012). Tendencies towards decentralization evident in political and cultural patterns of constitutive republics of Yugoslavia are distinct in their different approach to architectural issues, where every republic had its own particularities and preferences. In Serbia, modernization was primarily interpreted as striving towards functionalism which led to experimental patterns, out of which the doubletract residential units were the most characteristic and which have been explored in this paper in more detail. In Croatia, on the basis of pre-war Zagreb modern architecture, a new tradition emerged, enriched by local color tones and individual signatures of powerful authors (Maroević, 2004). Similarly, in Slovenia and Bosnia and Herzegovina the interest was directed primarily towards aestheticization of modernist expression.

In the 20s and 30s of the XX century, eminent Croatian architects worked as a part of several groups, the most significant of which was "The Zagreb School", gathered around Drago Ibler, marking the beginning of new, modernist tendencies in Croatian architecture (Maroević, 2004). In the first post-war years, architecture was mainly directed at reconstruction of torn down cities. With the imperative of mass construction and country reconstruction, architecture had for the first time turned into public service. The period of poverty characterized by collectivism as the basic model of social action, reflected on the housing construction as well, as it showed domineering multi-storey buildings with simple, elongated, horizontal or vertical shape, with large concentration of housing units. In the post-war period, the construction focused on two directions, on the one hand there was a massive anonymous construction of housing buildings and industrial plants, while on the other hand, design of representative symbolic constructions of the new regime emerged, marked by socialist monumentalism. The period from 1953, which continued into the 60s of the XX century, was the period of emphasized individualism and great advance in style as part of the late modernism (Ignjatović, 2012). Drago Galić in 1953 designs a residential building in Vukovar Street in Zagreb implementing the gallery unit of the building with duplex flats, as the expression of his experimenting with new residential types in socialist construction. One of the early examples of postwar aestheticism in Croatia is also "the Wooden Skyscraper", by architect Drago Ibler in Martićeva Street in Zagreb, constructed in 1955. Innovation of the Ibler's approach to shaping and materializing the building is shown in the earliest application of wooden material in articulation of the facade front, and it was directly confronted with the current tendencies which implemented cold and rough concrete in urban housing architecture (Karač and Žunić, 2004). The works of Ivan Vitić represent a parallel stream of thought in comparison to Galić's work. His residential buildings in Laginjina Street in Zagreb, built in 1958, are an example of architecture with simple cubic volumes and lively colors, with polychrome facades articulated as changing and dynamic abstract pictures, with sliding wooden facade elements-window blinds, which was extremely innovative both for Yugoslavia of the 1960s and the world (Karač and Žunić, 2004). (Fig. 1).



Figure 1. Ivan Vitić, Residential building in Laginjina Street, Zagreb, Croatia, 1958 (author's private collection)

The most significant architect from Split Ivo Radić in his projects like residential towers in "Špinut" settlement, built in 1966 and residential-commercial building "Split III", built in 1966, experimented with combinations of loggia and brise-soleil, thus achieving an attractive effect of "depth of surface" (Bilić and Eremut, 2013). (Fig. 2).

During the first post-war years Bosnia and Herzegovina had fewer construction projects characteristic for prewar Modernism or Soviet socio-realism architecture. Owing to the presence and influence of architects from Belgrade, Zagreb and Ljubljana, who belonged to different architectural groups with prevailing different influences, such as dominant academism in Belgrade or Modernism in Zagreb, gradually the dominant tendencies in Sarajevo architectural circle changed. One of the most prominent residential buildings was built by a Croatian architect Juraj Neidhardt in Alipašina Street in Sarajevo in 1958 (Korov, 2012).



Figure 2. Ivo Radić, Špinut residential towers, Split III, Split, Croatia, 1966 (author's private collection)

Architecture in Slovenia also developed in accordance with post-war ideology that favourited collective awareness. The surrounding area of Ljubljana was expanding as new residential areas were built; a large number of key urban projects were carried out outside the capital. In comparison to other much more modest examples of urban architecture in Slovenia, the residential block "Kozolec" in Ljubljana, made by architect Edo Mihevc in 1957 was constructed after the model of Le Corbusier's building *Unite d'habitation* in Marseille (Mihelič, 2003). The second, significant example of Slovenian architecture is a residential building by Stanko Kirstl in Prešernova Street in Velenje from 1960. In this example, modernist implementation of concrete was disrupted by use of bright red brick on the facades (Ravnikar *et al.* 1999/2000).

In Serbian architecture, a residential building by architect Mihajlo Mitrović stands out. It was built in Braće Jugovića Street in Belgrade in 1964 (Fig. 3) and represents a rare example of residential architecture with just a hint of expressionistic tendency.



Figure 3. Mihailo Mitrović, Residential building in Braće Jugovića Street, Belgrade, Serbia, 1964 (Đokić, 1970)

The building has a distinctive early implementation of spontaneous, almost chaotic order of facade elements, as a consequence of author's inclination towards expressive artistic approach and intentional negation of conventional solutions (Mitrović, 1975; Đokić, 1970).

Another similar example is a residential tower for professors of Belgrade University, built in 1966 by architect Rista Šekerinski, in Mitropolita Petra Street, in Belgrade. The tower with its unconventional expressionist appearance contrasts all examples of post-war architecture in Yugoslavia (Anonim, 1966). (Fig. 4)

EXPERIMENTS WITH HIGH-DENSITY HOUSING UNITS

Housing policy in Yugoslavia after the Second World War was determined by the five-year plan (1947-1951), which defined program basis for establishing a standardized existential minimum per capita. However, in practice this led to numerous problems (Milašinović-Marić, 2012). As housing policy represented at the same time an important political issue, the only "solution" to housing crisis proposed by the ruling political party was to construct "communal flats", due to hard economic situation. More than 20 percent of families in Yugoslav towns lived in communal flats, with two or more families residing in one flat (Prosen, 2007). Although it was planned that priority in flat allocation will be given to families with small children and sick family members, the emerging ruling elite quickly ignored their own convictions on social justice and chose the best and most luxurious flats for their own families (Maroević, 2004). The new socialist society at its beginning stripped its citizens of their right to privacy and by adopting the Property Law, dealing with flat disposition (1945). It also encouraged secret control of other tenants, as well as reporting on those



Figure 4. Rista Šekerinski, Residential tower for professors of University of Belgrade in Mitropolita Petra Street, Belgrade, Serbia, 1966. (author's private collection)

who were thought to have excessive living space. All this resulted in the fact that one housing unit was used by 2-3 persons on average (Dobrivojević, 2012). This period lasted for a fairly short time and was under the strong influence of the communist ideology. After ideological split with the Soviet Union in 1948, the first residential buildings which represented a step towards more humane living conditions were built.

The constant gap between the real needs of families and the economic abilities of the state, forced the architects to identify the minimal standards required to secure the same housing conditions for all members of the society. In accordance with egalitarian ideology, new standards reflected the principle of classification of housing with regard to the number of rooms (related to certain number of family members, where the living room was used as bedroom), while the needs, habits and desires of potential group users were not given too much consideration (Bajlon, 1976).

The first regulations meant to define more closely the dimensional and constructive aspects of residential buildings were brought in 1947. However, even though they defined the size of small ($50m^2$ for 3 people), medium ($60m^2$ for 4 people) and large flats ($70m^2$ for 5-6 people), they failed to provide an answer whether a living room was meant to be used as a bedroom for some family members,

and this remained an unsolved issue for many years afterwards, even though it met with harsh criticism and a change in regulations (Ćirović, 2012).

A significant point that should be made is the fact that in socialist Yugoslavia, regardless of the previously mentioned circumstances, there was a strong willingness and inclination towards experimenting with new and different residential patterns, even if that meant aberration from the official ideology. These experiments strove to come up with more pragmatic and humane solutions (Friedmann, 1970). The concepts of these housing complexes reflect the main postulates of socialist ideology, as they redefine the idea of a "neighborhood" and are, in fact, the embodiment of the utopist idea of "the happy community" - the core of the communist society, in which it lives and creates in harmony, equality and order (Milašinović-Marić, 2012).

This is the background to the emergence of the first examples of "double-tract" buildings, as an innovative form of collective housing in Yugoslavia, which was to be characteristic for the period of mass residential construction from 1950 to 1970. This was particularly evident in architectural and urban planning competitions, where new, valuable solutions emerged, related to exploitation of minimal spaces and achievement of higher standards (Giofrè and Miletić, 2012). "Double-tract" or "H-Building" is a type of residential unit characteristic of multi-family residences or collective dwellings. Its features are two closely and parallelly placed residential tracts, sharing a common staircase and lift communication, most often set perpendicularly in relation to the direction of tracts. Primary residential areas are, by rule, almost always oriented towards outer facades of the building, while secondary areas face an open, atrium interspace between the tracts (Alfirević and Simonović Alfirević, 2014). Double-tract units were primarily implemented in Serbia, as a consequence of greater interest by Serbian architects in innovative typological units within "Belgrade School of Housing", but also due to the fact that in typological sense, double-tract was interpreted differently in other Yugoslav republics (Bajlon, 1975; Aleksić, 1975). In Serbia, double-tract was interpreted as a set of two separate units, differing in shape and function, partly connected through common vertical communication into a single structure, while in other republics it was seen as a set of two functional zones, separated by a corridor (Alfirević and Simonović Alfirević, 2014). (Fig. 5)

The double-tract concept can be recorded in several places around the world during various periods. The first examples of double-tract system in multi-family dwellings were constructed by the end of XIX century in New York, at the competition for architectural solution of the tenement building popularly called the Dumbbell (Lubove, 1961; Marshall, 1893; Pommer, 1978; Reynolds, 1893; Schwartz, 2002). Unlike other examples in the world, double-tract in Yugoslavia did not appear in its extreme versions, such as the Dumbbell in the USA. Housing architecture in Yugoslavia was oriented towards experimenting with more humane functional solutions (Alfirević and Simonović Alfirević, 2013). The first indication of the double-tract system appears in Croatian architect Neven Šegvić's solution at 1947 Competition for a typified house in Belgrade. In his solution,



Figure 5. Differences in double-tract interpretation: a) two functional zones as tracts; b) spatial shape units as tracts (Alfirević, Simonović Alfirević, 2014)

the tracts were not visually or functionally clearly divided into separate shapes, although the interior structure of the building was almost completely carried out by following the double-tract principle (Mecanov, 2009). (Fig. 6)



Figure 6. Neven Šegvić, Competition project for typified house in Belgrade, 1947 (Mecanov, 2009)

The first implemented type of the double-tract in Yugoslavia was the urban dwelling "Metuljček" in Maribor, built by Slovenian architect Rudi Zupan in 1955 (Pirkovič-Kocbek 1982; Pirkovič-Kocbek, 1983; Ravnikar *et al.*, 1999/2000). Shortly after this, the first double-tract was constructed in Serbia in 1957, in Belgrade, after a project designed by Serbian architect Milorad Macura (Fig. 7), followed by a series of variations of this system, mostly as a consequence of functional research and experimenting in architectural competitions (Mecanov, 2009).

The solution for experimental residential Blocks 1 and 2 in New Belgrade built by architect Branko Petričić in 1959, was the result of the striving to achieve attractive ambience and optimal distance between linear buildings within the block. For 1967 competition for architectural solution of buildings in Block 29 in New Belgrade, architects Mihailo Čanak and Milosav Mitić designed the construction of four housing units per each staircase vertical, thus avoiding the issues



Figure 7. Milorad Macura, Residential building, Belgrade, Serbia, 1954 (author's private collection)

of the lack of privacy with optimal solution of double-tract (Čanak, 2014; Fig. 8) In residential Block 33 in New Belgrade, built by architect Radovan Mitrović in 1968, the distance between the tracts is about 7.5m, which enabled not only



Figure 8. Mihailo Čanak and Milosav Mitić, Competition solution for city Block 29, Belgrade, Serbia, 1967 (M. Čanak's donation 2010)

the utility rooms, but also the bedrooms to be positioned along the interior facade. At the architectural competition for residential buildings in Block 23 in New Belgrade, architects Milan Lojanica, Borivoje Jovanović and Predrag Cagić (Aleksić, 1975) selected to use the double-tract which enabled multiple units within the same width, shortened communication to a minimum and provided better options of natural light, illumination and ventilation of residential units. At the competition for architectural solution of Block 3 and the Liman 3 settlement in Novi Sad in 1970, architects Milan Lojanica, Borivoje Jovanović and Predrag Cagić designed an atypical shape of double-tract, with the space between the tracts reduced to a minimal dimension (3x5m), giving it the character of a lightwell more than an atrium (Cagić and Lojanica, 1972). Further tendencies in developing double-tract functional concept continued during the 1970s in a large number of authentic projects, among which we should mention residential settlement in Banjica in Belgrade, proposed in 1971 by architects Slobodan Drinjaković, Branislav Karadžić and Aleksandar Stepanović (Đukić, 1972) and unexecuted projects for residential buildings in the northern part of city Blocks 61 and 62 in New Belgrade, by architects Darko Marušić and Milenija Marušić in 1971 (Aleksić, 1975), residential buildings in Block 19a in New Belgrade by architects Milan Lojanica, Borivoje Jovanović, Predrag Cagić and Radisav Marić in 1975 (Aleksić, 1983).

Although the double-tract system in Yugoslavia was used as an experimental pattern for multi-family housing, the results of its implementation were not satisfactory in all cases. In this sense, some examples show that double-tract buildings were constructed even in cases when the location did not require space limitation or when double-tract orientation was inadequate, which resulted in inadequate illumination of the flats and in invasion of privacy.

CONCLUSION

This paper presented three key tendencies utilized by Yugoslav architects in conditions of socialist post-war reality, aiming to provide answers to program conditions set by the state as the biggest investor. The first direction of research emerged in the context of post-war housing construction of a wide scope, which encouraged the advance of technological research in areas of prefabrication and practical application of achieved results on the whole territory of Yugoslavia. The second direction dealt with architectural planning which was strictly subordinated to social and ideological sphere with domineering socialist monumentalism and artistic and sculptural approach to architecture. The third was related to experimental tendency with new urban housing patterns which aimed to search and find more pragmatic, humane solutions within mass high-density housing constructions which were the first to utilize and show examples of "doubletract" buildings. These were primarily realized in Serbia, as continuation of tendencies first expressed in activities of "Belgrade School of Housing".

By summarizing the most significant prerequisites which influenced the emergence of experimental approach to design of collective residential buildings, the following can be highlighted: 1. Devastated urban housing fund in Yugoslavia after the World War II,

2. Large migration of population into cities and the need for mass housing construction,

3. The tendency to achieve maximal "packing" of dwelling units up to the limits of acceptable space minimum for its users, while at the same time establishing more humane patterns of living,

4. Research and discovery of new constructive prefabricated systems and the need to use and test them practically,

5. Imitating current world examples of modernism and the aspiration to achieve and surpass them, and

6. Support of the ruling elite, aiming to promote individual intellectual and creative freedom, particularly expressed in architectural competitions.

On the other hand, the most significant consequences which emerged as the result of the tendency to implement innovations and experiment in the filed of housing architecture were the following:

1. The aspiration to test in a practical way new prefabricated constructive systems in construction of larger housing complexes all over Yugoslavia and their subsequent presentation to the world,

2. Devising a specific functionalistic approach to organization of housing spaces, developed systematically back at the time of "Zagreb School" and "Belgrade School of Housing", and

3. Developing new aesthetic expressions, which on the one hand represented a reaction to current architectural trends in Europe, while on the other hand reflected the aspiration to conceive an architectural expression suitable for newly formed socialist society.

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