

Multi-family housing architecture in Belgrade

Models and development

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Abstract— The focus of this work is to define multi-family housing transformation in Belgrade. The transformation is studied out through comparative analysis by detecting the relations of cause and effect among social changes, culture of habitation, technical and technological criteria and functional-spatial apartment structure. The review of the Belgrade housing architecture development singled out 4 models of housing as typical ones. These models, which are here presented chronologically, follow the trend of development of the apartment and its structure of organization. The choice of characteristic examples which have marked historical periods has been made according to established criteria in order to direct market towards a basic goal: to show how universal organizational schemes have been transformed, altered and adapted to local habits, character and needs of users. This work highlights the importance of the way in which daily activities are organized through surface distribution and mutual relation and overlapping of functions between living room, dining room and kitchen, etc. thus creating recognizable functional scheme with authentic apartment center. In all examples shown further in this study, tendency to architecturally stimulate and articulate social interaction among building residents is obvious. To this effect, particular attention is paid to common and circulation spaces in the composition. This research was conducted as part of a broader research project titled Research and systematization of housing development in Serbia in the context of globalization and European integrations for the purpose of improving housing quality and standards.

Keywords-multi-family housing; functional organization; transformation; social changes; Belgrade

I. INTRODUCTION

Social and economic status, way of everyday life and dwelling culture, political and economic circumstances, as well as construction technology greatly influence the form and structure of dwelling. Apartment structure very realistically reflects a character of everyday life of an individual, as well as overall contextual circumstances. This paper deals with the development of apartment in relation to its „contents and concept“ whereby the different socio-political, economic, technology and social changes influence the apartment space, its value in use, adaptability, economic disposition. Each of these factors, has had its own development path, but, in certain moments, has followed the development line, thus more or less influencing, accelerating or, occasionally, even constraining the transformation. We start from the assumption that the

apartment and user both are elements of a dynamic social and spatial system. The mentioned transformation will be shown on typical examples of the apartment in Belgrade, following the transformation of all contextual characteristics influencing.

These four models were explored and analyzed through established criteria determine contextual conditions in which multiple housing architecture has to change accordingly to follow the constant change in market demands.

Even though contextual elements are the same through time, the intensity and orientation to certain aspects shift from one field to another through history pushing the architecture to follow up those changes. That results in special attention given to different professional goals in different times improving the diversity of applicable housing models. This study challenges the differences between these models searching for new qualities in housing organization principles and judging the achieved performance in explored architecture. These criteria that can be recognized through following study are basically systematized into 4 categories:

- Political and economical context

This aspect addresses several issues starting with historical circumstances relevant to given political situation, ideology and social system. These conditions strongly affect the overall state politics toward housing architecture, type of ownership, standard, normative and prices.

- Social context

Very important aspect describing how architecture is affected by the way how people dwell, the culture of dwelling, and on the other hand, how these specific needs and habits of inhabitants are influencing the architecture. This is also relevant to the general understanding of taste, wishes, aspirations and value system of people searching of ultimate suitable housing units tailored to their needs.

- Ecological context

Global perception and treatment of this aspect in relation to housing architecture also varied through time. Relation to this aspect, starting with almost conditional orientation towards nature and climate in architecture of modern movement through totally neglected interest in transition periods, led to the current efforts to enforce attention to these issues in contemporary construction through law.

- Technological context

The huge construction, endeavors of the society and large scale mass production of multiple housing calls for rationalization of construction processes by prefabricated and cost-effective industrialization, which is quite the opposite to the small scale interpolations in historical downtown city center with unique structural systems and private investors. Relations of these aspects to changes in the way of perceiving the housing architecture of certain periods are also subject of this study.

It will be clearly underlined what kind of impact does every above-mentioned aspect has to architecture and in what scale in particular period of multifamily housing development specify in those four identified models.

II. CHRONOLOGICAL REVIEW OF THE APARTMENT DEVELOPMENT

The review of the Belgrade housing architecture development singled out 4 models of housing as typical ones. These models, which are here presented chronologically, follow the trend of development of the apartment and its structure of organization. The choice of characteristic examples which have marked historical periods has been made according to established criteria in order to focus this study towards a basic goal: to show how universal organizational schemes have been transformed, altered and adapted to local habits, characteristics and user needs.

The way in which the area for daily activities, mutual relationships and overlapping of functions of living room, dining room and kitchen through forming authentic center of the apartment have been emphasized as a particular value of given examples. Also, in all examples, tendency to architecturally stimulate and articulate the level of social interaction between all building residents is obvious. To this effect, particular attention is paid to common spaces and circulation spaces in the architectural composition.

The history of multi-family housing architecture in Belgrade begins with the first concepts on ideal of urban living after the times of Ottoman backwardness that could have been taken only from European models. At the beginning of 20th Century, several architects at the Belgrade Great School established first and technical standards in architecture through the subject "Making Plans for Houses and Settlements". Thought at the first university Simeon Prica, Atanasije Nikolić, Emilijan Josimović, Mihailo Valtrović, and later Dragutin Đorđević, Dragutin Milutinović, Andra Stefanović, then Nikola Nestorović, Dimitrije Leko, and others, were the professionals who gained education in various European towns. Their return to the country marked the beginning of a new period of architecture in the years to come.

A. The period on the Eve of the World War II

Under the influence of a new spirit of that time, which became dominant at the world and European level, a conflict arose between the established eclectic architecture and academism in architecture, on the one hand, and modern movements, on the other hand. At the time, new, young

Belgrade architects M. Zloković, B. Kojić and D. Brašovan emerged on the architectural scene.

In the nineteen-thirties and forties, the last foothold of academism came with educated M. Borisavljević who, still advocating the tradition of European academism, began to fight against modern movements in architecture. However, the reality was quite different. His views were not accepted and the Belgrade community in the time around 1939 was already firmly oriented towards modern movements.

What has always been a specific characteristic of the housing architecture in Belgrade is the fact that housing unit schemes came from European cities, and then to a certain extent has been adapted to the local needs and lifestyle. This fact was characteristic of both, the architects of modern and eclectic orientation (see "Fig. 2" and "Fig. 3" below). This was actually local characteristic, feature of Belgrade residential architecture of that time - much more in terms of form and architectural expression than in domain of functional organization. Functional organization of apartment was designed so that rooms were grouped around common, transient dining room, as well as separation of kitchen area - household, which was entered from an open air balcony (see "Fig. 1").

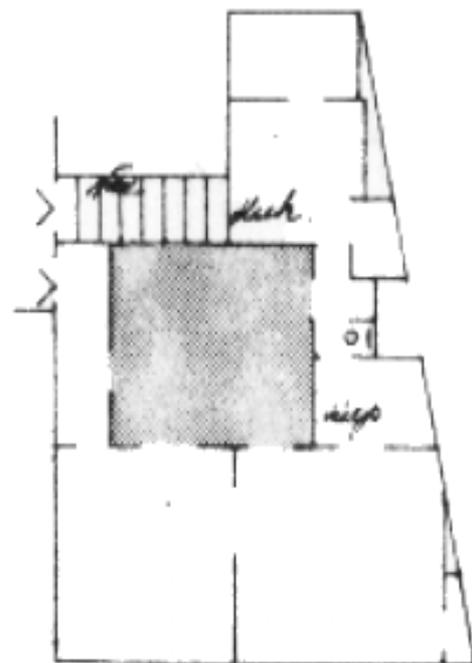


Figure 1. Floor plan of apartment in the Starine Novaka Street in Belgrade, 1937. Architect Miladin Prljević.

Insisting on this dwelling scheme with a central space provided the possibility for the family to gather around the table. Also the quality of this scheme was the possibility to satisfy tenants' ambitions associated with social needs and dwelling habits. It provided maximum use of narrow lots because, due to speculations with land, the construction lots were mercilessly exploited. This scheme can be considered as typical for the construction of rental apartments in Belgrade in

the period between nineteen thirties and beginning of the Second World War. When rental apartments built to suit the way of life led by civil servants' and trading families, at the same time were the means for securing the rents on invested capital.



Figure 2. Residential building in the Krunska street No. 50, Belgrade, 1932. Architect Svetozar Jovanović. (photo by V. Lojanica)



Figure 3. Residential building in the Krunska street No. 39, Belgrade, 1939*. Architects: Prof. Petar i Branko Krstic Arch. (photo by V. Lojanica)

B. Period immediately after the World War II

Reconstruction of the country which was devastated by the war definitely removed from the architectural scene everything that might have been identified with, at that time already ideologically overcome, private ownership orientations. A modern, avant-garde orientation in architecture was not only socially but even politically desirable, a referent identity. The housing development and distribution was carried out by the society. Social housing was exclusively a community care and a symbol of social equalization.

Old urban matrix became too small for new waves of population moving to the towns. The solution was sought in developing big social housing complexes of adapted standard and on sites located at outskirts and fringe areas of towns. It was the era of socialism and social programs, worker's housing and minimum standards. The problem with these apartments was in disproportion between the spatial needs and available surface area, particularly with apartments with the so-called "separate kitchen" which lacked a space for dining table and family gathering.



Figure 4. Proposal for a common dining area near the kitchen

The nineteen-fifties were characterized by separation of Eastern Bloc and turning toward the West, bringing back the prewar themes, efforts for functional improvement of housing space by promoting new elements in organization of apartments. At the professional gathering on improvement of housing held in 1957, "eating in extended communication" which would bring previously mentioned necessary comfort, was presented.

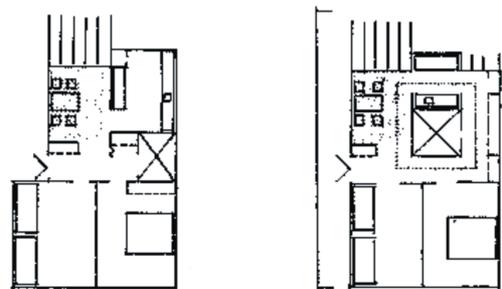


Figure 5. Prototype apartment for four people with extended circulation a.) Baylon, Aleksic, Milenkovic, Hastic, b.) MilenkoTrlic, Second international exhibition: *Family and household*, Zagreb, 1958.

With arrival of socialism, new social relations in which the apartment should also cease to be one of the characteristics of class differentiation required a new approach. First of all, the society was the one to provide apartments for everyone and in which each individual could develop their individual life (complete isolation), at the same time participating in family's common life. That is how "rental" apartments emerged and contents of the apartment changed. A tendency to provide each

family member an isolated space for one or two members, as well as a separate space for family as a whole, such as living room or integrated kitchen, was observed in the first standards which regulated some issues in construction of apartments built by the society for its own needs.

C. Period of self-management socialism

The period of nineteen-sixties and seventies was marked with numerous competitions, mostly focused on the topic of multi-family housing. The architecture constructed in the New Belgrade area represented the spirit of international style which brought unification, globalization, gigantism of form, repetitiveness, and big series, but, at the same time, also a new lyricism of the Modern, a new visual-plastic theme area within the same program (see "Fig. 6"). The architectural designs market was clearly directed towards quality functional organization. This dedication to function, on the one hand, and aspect of comfort, on the other hand, provided significant results and contributed to affirmation of the Belgrade community and rapid rise of the „Belgrade school“ of housing architecture, at Yugoslav level, and, perhaps for the first time, a step ahead of Europe in this problem area (Martinović, Čanak, Petrović, Lenarčić, Lojanica, Jovanović, Cagić, Stjepanović, Karadžić, Janković).

Actually, the "Belgrade school" is a synonym for the period of intensive construction of the former Yugoslavia, the then achievements and achieved quality. It was a lucky circumstance that significant human and architectural values were introduced in concepts of many residential buildings thanks to many architects who, particularly relative to the competitions, had enough strength and knowledge to overcome a part of imposed rigidity and limitations.



Figure 6. Apartment in residential settlement Julino brdo, Belgrade, 1967-71. Architect Milan Lojanica, Predrag Cagić, Borivoje Jovanović

This period was characterized by major achievements in the field of functional organization of apartment space. Striving to obtain high-quality solutions, the investors were announcing architectural competitions and establishing competent commissions. The intense social needs for new apartments, limited funds and competitive spirit motivated the designers to create rational solutions for highly usable apartments. Along

with design practice, this period was also characterized by a large number of theoretical papers which dealt with housing, with special emphasis placed on the theory of needs and spatial interpretation of apartment structure and organization.

The present paper offers an analysis of the achievements and values from that period, today considered a common good, and still used and implemented in modern projects.

- Organization conforms to the biological rhythm of the family (layouts structured into day and night zones)

„The life in the apartment is organized in certain number of rooms which, functionally connected, determine the apartment space. Starting from the standpoint of strict functional division, there are three basic groups of rooms in the apartment: a) living room; b) bedroom and rooms for personal hygiene; as well as rooms for c) housekeeping. However, a precise division of certain functions may be limited to certain rooms, because in the most of the space in the apartment, various functions interweave. This results partly from the living needs in the apartment and partly because economic reasons require the apartment size to be reduced to an extent which would, relative to the existing conditions, enable carry out social equalization [1].“

In housing practice, there is a known thesis of division into day and night activities so that apartment organization conforms to the biological rhythm of the family (see "Fig. 7").

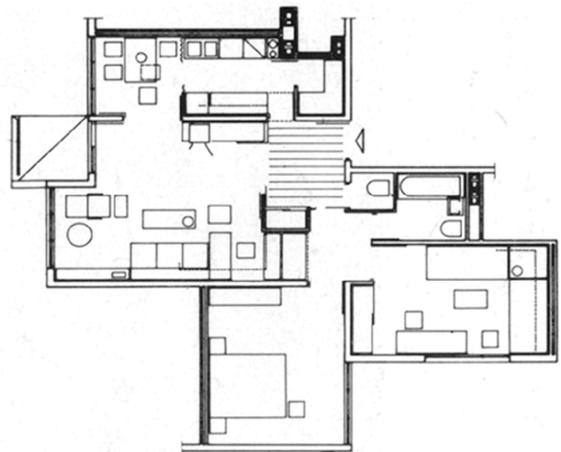


Figure 7. Apartment in residential settlement Julino brdo, Belgrade, 1967-71. Architect Milan Lojanica, Predrag Cagić, Borivoje Jovanović

However, due to the above mentioned search for solution to increase the area of certain rooms for the purpose of decreasing total useful floor area of the apartment per family member or tenant, it was planned to put a bed for one family member in the living room. In all recommendations regulating the issues of the design and construction of apartment, save for recommendations of the Ministry of Construction of the FPRY issued in 1947, it was allowed to have a bed for one family member in the living room which was, at the same time, a common room for all family members living in the apartment. In this way, neither gathering was undisturbed, nor could a person using the bed have privacy.

- Dining as the addition to extended circulation (gravity center of the apartment)

As a result of mentioned search for solution to increase the area of certain rooms for the purpose of decreasing total useful floor area of the apartment per family member or tenant, it was planned to put a bed for one member in the »living« room. In 1957, at the Seminar on Economics of the Household, new solutions were sought so as to appropriately solve the issue of family gathering at one common place in form of extended communication.

A fireplace as a gravity center of the apartment has been a specific feature in this region since ages, but, this time, it became a standard. The family table is a part of our tradition, but in conditions of dislocated family, the reasons for its survival got lost, so it has found itself in a new role – the role of a multipurpose point – a regulator of elastic features of the apartment and its extended usability, being the place corresponding with the most vital points through which they supplement each other, as well as become rich.

“Due to the way of life in a contemporary society, everyone is completely engaged outside his/her home, this having negative effects on family strengthening. In addition to this, it has been concluded that in our circumstances a four-member family (parents and two children) gets at the best an apartment containing two rooms with kitchen, thus having no place where family could gather outside their individual rooms... thus, and out of this reason, the extended communication was proposed [1].”

The possibility of family gathering in the apartments without living room in an extended communication is shown on two characteristic examples. In this way, dining was no longer planned in a separate room but, by using a part of space for communication, an economical space for situations not requiring privacy in quiet individual rooms were shaped. The layout indicates a new approach to extended communication around a common table (see “Fig. 8”). Simultaneously with extended communication, other elements enriching the contents of the apartment emerged and introduced changes into a new organization as compared to traditional concept of the apartment. Closer connection of kitchen with extended communication which gave a new impulse to common life in the family: an addition in the form of space for some household contents (sewing, ironing, hobbies...) or an extended part of communication for children to play, etc. — were new points where the life was organized in the apartment and which were being adapted, increasing or decreasing according to the needs.

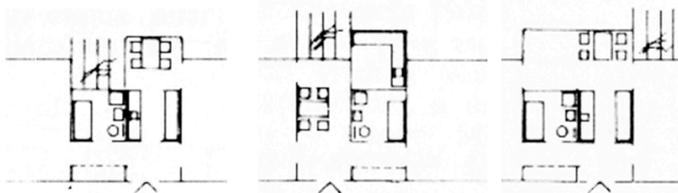


Figure 8. Award-winning competition project, Block 61 and 62, New Belgrade, apartment variations, 1971. Architects D. and M. Marušić, M. Miodragović

- Circular connection

One of the layouts at the competition (by Branislav Milenković) solved the apartment with extended communication around a terrace, thus indicating a new approach to urban apartment design.

A circular connection has proven to be a very good motive of the apartment. By opening the freedom and possibility to choose the direction of movement, the apartments have got a completely new quality and greater value-in-use. This concept contributed to overlapping and interweaving the day and night zone functions. Activities were more connected to spaces than to spots, points and spheres. The connecting zone came out of strict polarization; it became closer, more elastically placed, and began to cooperate with the day zone of the apartment (see “Fig. 9”).

The sphere of household was remodeled, more freely located, became more communicative, and also met the aspiration of beneficiaries to directly participate in the space, i.e. possibility to spontaneously include or exclude them.

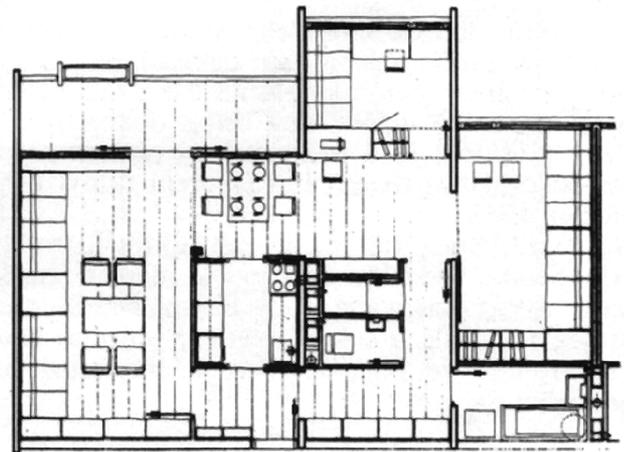


Figure 9. Apartment in residential settlement Blok 22, Novi Beograd, 1968. Architects: Božidar Janković, Branislav Karadžić, Aleksandar Stjepanović.

- Technical block as an anchor point

From the structural aspect, aspect of technology, as well as economic aspect, formation of a defined, strong, compact technical block is a very rational approach in the process of designing the architectural composition of the entire apartment. This element has become a specific motive in structuring the apartment organization, very often enabling the principle of circular connection. Block 22, First Award: Božidar Janković, Branislav Karadžić, Aleksandar Stjepanović (see “Fig. 9”), the layout brings about a new way of treating the space with a common table and a quiet, intimate part of apartment with the circulation around it.

- Loggia as an anchor point

Open space of loggias has often been a very important element of apartments. Besides being a quality by itself, this space has been used as an element allowing natural light to penetrate deep into the interior of the apartment. There were

also concepts treating the loggias as a porch; it has become a space through which one enters the apartment (see “Fig. 10”).

As Živković writes sociological studies have shown that, regarding the position of the balcony/terrace, the tenants equally preferred a kitchen balcony and room balcony/there were more of them who preferred a living room balcony over bedroom balcony/. There was an interesting tendency: the larger the apartment, the greater need for living room balcony/terrace, and vice versa, the smaller the apartment, the greater the need for kitchen balcony/terrace [2].

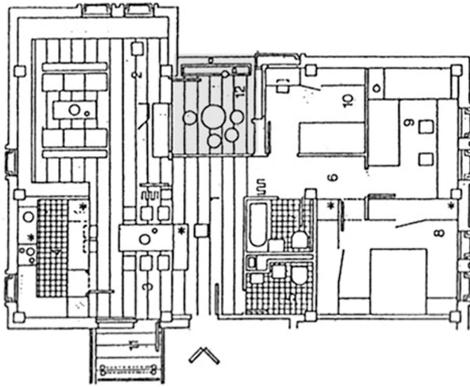


Figure 10. Apartment in residential settlement Cerak Vinogradi, Belgrade, nineteen-eighties, architects: Prof. Darko Marušić, Melanija Marušić, Nedeljko Borovnica

- Two centers, division by generations

The issue of family polarization, i.e. the need for grouping and socialization according to age, at young-elderly relation, was relevant for the development and balance of relationships in a family group. As an alternative to the traditional organization of space with clear division into day and night zone, the concept of apartment with two centers has emerged out of the need for optimal functioning of life of two generations. This concept was first presented at the Symposium „Apartment and Housing“ in Belgrade in 1971. Two centers provide space for separate socialization of children and parents to allow each other the undisturbed rhythm. It was possible to classify the rooms for social and private life into two groups according to the needs: the first one was the zone for entertaining, and the latter was the zone of its extension – the family table (see “Fig. 11”).

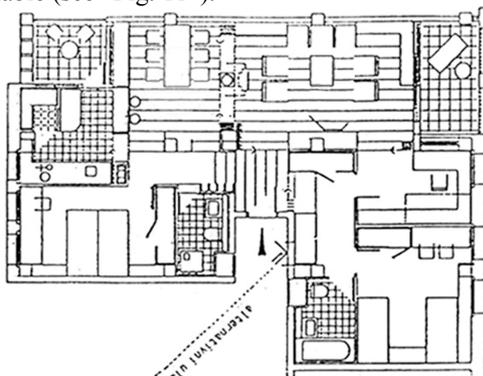


Figure 11. Apartment in residential Settlement Cerak Vinogradi, Belgrade, nineteen-eighties, architects: Prof. Darko Marušić, Melanija Marušić, Nedeljko Borovnica

- Flexibility

The studies dealing directly with the function and organization of apartments are presented in annual publications of the Yugoslav Institute for Town Planning and Housing (JUGINUS). They include the studies by Branko Aleksić, “Apartment – an adaptable frame” (1969); Branko Aleksić, “Contribution to considerations for perfect formulation of apartments” (1970), and others. The paper “Minimum standard apartment” is a study analysis conducted by a group of authors. The analysis included survey of housing poverty in Belgrade (Arch. Milan Lojanica and Sociologist Ruža Petrović) [4]. This is a study which represents more than a usual documentation, in which suggestions for solutions of minimal standard apartments were also given, as well as possible ways of using the space and its adaptation to current users. This feature was of great importance considering that a great number of apartments were built for unknown users. Their flexibility could at the same time represent a measure of their value. From this point of view, the organizational scheme has been analyzed considering the “intensity of using the apartment surface [3]”. As Jovanovic Nenadovic writes this represents the concept of housing design that has a large level of use so becomes optimal for a wide range of family situations. It can be determined by a variety of activities through time with the aim of cost-effectiveness. [4]

The presented example of the layout of the apartment for three persons in blocks 61 and 62 in New Belgrade shows that the apartment may be adapted for greater number of tenants through minimal changes, thereby to remain within the limits which, in terms of sociology and comfort, and considering present situation of our housing inventory, may be accepted [5].

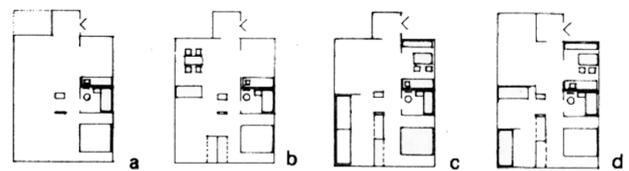


Figure 12. Flexibility of apartment unit, (P = about 45—48 m²), a) basic organization, b) initial shape, c) 4 family members, d) 4 family members – parents separately from children. Architect Milan Lojanica

- Multi-family housing individualization

The idea of the then apartment organization was to provide an isolated space to every individual for his/her privacy, thus, providing opportunity to each family to live in such apartment. As the first reaction to these instructions, this resulted in the request to increase surface area of certain rooms, and also initiated the first step in creating social differences, which cannot be avoided even today when considering the construction of lower standard apartments.

- Dimensional coordination of functional organization and structural system

According to the concept of its function and in addition to traditional division, spatial orientation and insulation, the apartment is increasingly becoming the object of research with relation to its structure, as well as to the building and its

structure, as well as structural system. Optimization of apartment organization scheme has always been in coordination with rationality and cost effectiveness of structural systems.

D. Period of transition

In the world architectural manifests dating from the beginning of nineteen-eighteen, theoretical studies of Venturi, Rossi, and Crier may be found who slowly directed architectural market more towards the form than towards efficiency, towards historical relevance than towards aesthetics of the Modern, as well as more towards regional than towards internationalism. (Lojanica, Cagić, Jovanović, M. i D. Marušić, Borovnica, M. Perović and others)

The nineteen-nineties brought architectural „Big Bang“. After post-modernism of Venturi and Roux, after destructivism of Derrida i Johnson, after critical regionalism of Frampton i Jackson's late modernism, there came the time of pluralism. Architects were preoccupied with creating heterogeneous opposed compositions.

In Serbia after the period of intensive residential construction during the 1970s, there was a long period of stagnation in all areas. Greatest achievements of the previous period in the domain of residential organization seem to be forgotten. However, new solutions point to the direction of further development in the field of residential space organization. The consequence of the transitional period resulted with the situation of irrational rationalization. The quality and number of buildings was reduced. Tradition in mass construction of housing architecture and analysis of special quality was discontinued; construction of apartments became a matter of market and economy, while the price became the only apartment valuation criteria. Once established as a symbol of equalization, apartment now became a synonym for social difference. Evident crisis in investment policy resulted with economic disbalance and space dehumanization. Thus there was no information on the quality of residential buildings and the residential construction in Serbia, so the whole field of housing was left without clear policy and model of development.

The new era driven by the forces of the market economy, privatization, and collapse of planning marked the period of transition from socialism to capitalism. In that process, between the destroyed central system and corrupted transitional institutions, the idea of collectivity has been replaced with individual action. Open market and economic values have become more important than the aspect of humanity. This new values system resulted with the large number of illegal buildings at the best locations in postsocialist Belgrade.

III. APARTMENT ORGANIZATION IN TERMS OF PERFORMATIVITY

“When a mundane act is embraced by architecture, this simple gesture is amplified as a theatrical event and space becomes the fulcrum of a performance. In some cases, the constructed space establishes a stage, and the inhabitant's rituals become the performed act. In others, the constructed

space takes on animus, and the space itself becomes the performer. Within the diversity of architectural performance, one common trait is a heightened experience of space, which occurs through a living and reciprocal performance between dweller and dwelling. When architecture is designed to perform, rituals take on new meaning, filling space with story, and enlightening our daily encounters with designed space [6].”

The manner of using apartments and their flexibility are the essentially performative characteristics of the apartment, not so much in terms of specific architectural expression, as in the manner of using the space. As such, residential architecture is fundamentally performative in the sense that performativity is not a new quality, but a feature that becomes actualized especially in modern times.

The feature of flexibility appears as a consequence of the lack of space and the need for making the contents more complex. Analysis of characteristic examples shows the tendency of making the daily activities more complex along with the reduction of the number of spatial determinants that define them. Reduced differentiation of the contents increases the possibility of mutual overlapping and permeation of the contents, in other words, the flexibility of functional organization. In accordance with this residential needs the aspiration should be to realize the maximum quality and variety of contents for the purpose of performativity and flexibility of residential space. In difference to precise specialization of space according to activities which was typical for the apartments built at the beginning of XX century, the functional organization of the contemporary apartment should be characterized by a multifunctional and neutral residential space which enables flexibility and changeability of the residential needs. Permeation of the contents is especially important in terms of the performativity because it stimulates and enables movement and changeability. Stimulated interaction which emerges between dwelling and dweller establishes a more direct relationship with space and a new dwelling experience.

IV. CONCLUSIONS

Today apartments are determined by the restrictive conditions of the open market economy. Made for society of consumers, a potential variety of organization schemes is standardized according to the best-selling ones, creating unrecognizable mass of commercial housing without human meaning. The organization of apartments and their arrangements are subordinated to the most economical building and maintenance technology. Since no possibilities for innovations of spatial logic are realizable, architectural efforts are directed toward façade rendering that could give building a more attractive face for market. Reduced to the solitary commercial products which aim to dominate surroundings, new housing blocks are rapidly filling up all the voids in downtown areas as well as in the outskirts of cities in transition. These massive buildings transformations have no capacity to simulate the development of new spatial and social potentials.

The best exceptions from mainstream housing production were made by architects supported by state agencies. In these examples had been demonstrated an ambition to initiate meaningful housing activities through the quality of apartment structure. In that terms of limited financial condition can be develop initiatives to experiment with designs strategies in field of architecture (see "Fig. 13-16"). In such occasions some advanced architectural concepts can be realized and thus create a new opportunity for design of models of contemporary apartments.

Architectural production has had to adapt according to very fast and unexpected social and political changes. This period is characterized by a distinct lack of critical thinking, especially in residential construction. Individual action and initiative in massive illegal construction followed by the economic crises had a crucial influence on the apartment transformation.

Previous apartment schemes, profoundly analyzed and studied plenty of times, were the subject of numerous symposiums and studies. In this context, adequate functional solutions were developed and transformed. The contemporary apartment organization were not guided by some dwelling models, thus were left to markets and a designer as an individual. The Belgrade school of residential architecture has established good apartment organization schemes and recognizable models, current in the contemporary moment. Almost all of the ten established characteristics have been maintained in contemporary examples, but have changed their context which, to great extent, resulted in redistribution of importance of certain characteristics.

Main problems in apartment organization can be detected in the following facts:

- Total floor space area is often emphasized, while apartment-user relation is neglected.
- The living room is most frequently of the same size regardless of the number of family members.
- Lack of space for family gathering in case of a bed for a household member in the living room

Characteristics of apartments which were recognized and certified as values in previous period have not the same influence and importance as they once used to have. The very attempt to preserve established values in newly formed conditions has become coincidence, the selection of architects, inertia in design methodology or a habit of users.

Organization conforms to the biological rhythm of the family (layouts structured into day and night zones) remains a dominant characteristics, particularly with two-room and larger apartments.

Dinning as the addition to extended circulation (gravity center of the apartment) ceases to be a gravity center of the apartment. Such layouts still appear in apartment organization, but do not have important role in apartment composition any more, and are no longer an additional value for users due to changes in modern way of life.

Circular connection in some examples remains a motive of apartment, although its value is reduced only to possibility of

communication, and not to the use of apartment in various regimes.

Technical block as an anchor point remains a value of contemporary apartment, particularly as its structural and technological characteristics.

Loggia as indoor point ceases to be an additional quality of apartment after adoption of the law that equalizes the price of square meter for a terrace with that for indoor living space.

Two centers, division by generations becomes a value of no importance for architects, because the number of users who use apartments in this way is rapidly decreasing.

Flexibility could be a characteristic having the most potential for development nowadays. However, economic factors and purchasing power of users have to great extent become a limiting factor.

Multi-family housing individualization as a characteristic has completely disappeared, and is not considered in design process, amongst other things also because of the changes in structure of generations of a family.

Dimensional coordination of functional organization and structural system exists at basic level, and examples of use of non-standard materials and experiments in this sense are rare.

The development path of the Belgrade apartment architecture requires certain criteria, standards and attitudes to be corrected or altered to some extent. They are actually changed by the development itself, but in certain stages of the development of social, cultural, economic, political and other circumstances and perceptions they have to be adapted accordingly.

The attempt and tendency of architects is that people accept coexistence, identify themselves and accept the apartment space as a part of „their world“. Out of this reason, an architect must deal with sociology and culture as much as he/she deals with architecture. In this sense, this type of task may be a chance and challenge for young architects.



Figure 13. Building for the Belgrade University employees, Block No. 32, New Belgrade, Serbia, 2008. Architects: Prof. Branislav Mitrović, Arch, Marina Šibalić, Arch.

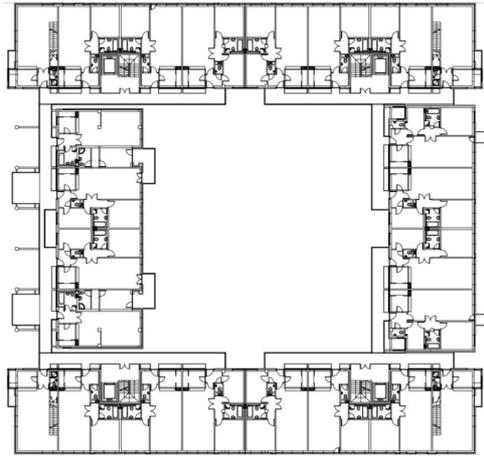


Figure 14. Floor plan, Building for the Belgrade University employees, Block No. 32, New Belgrade, Serbia, 2008. Architects: Prof. Branislav Mitrović, Arch, Marina Šibalić, Arch.



Figure 15. Residential building in Bulevar kralja Aleksandra No. 520, Belgrade, Serbia, 2007. Architect: Ass. Prof. Dejan Miletić, Arch.

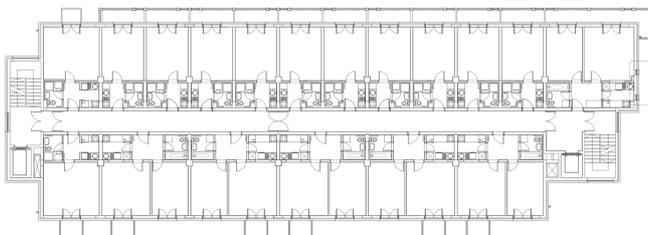


Figure 16. Residential building in Bulevar kralja Aleksandra No. 520, Belgrade, Serbia, 2007. Architect: Ass. Prof. Dejan Miletić, Arch.

Users may be concluded that maybe the initiative lies with them. Organization of future tenants, undertaking the responsibility for the construction, is one of the possible solutions in the contemporary moment. Such an approach would also provide an opportunity to architects working for known beneficiaries to further develop the established schemes and models.

Housing now must be determined by distinctly defined contextual levels. Interactions, inter-impacts and inter-conditionality of these levels are very strong thus requiring an all-comprising and comprehensive approach in their consideration and research.

Although it has never been officially abandoned as obsolete, the scheme of the contemporary Belgrade apartment must be studied in more detail so as to establish new values revise the old ones from contribution of “Belgrade school”, as well as the ones from 1930ies trying not to forget where we were once in quality of multiple housing architecture production.

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