

## MORPHOLOGY AND CITY LANDMARKS - A MIRROR IMAGE OF NEW BELGRADE

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**Summary:** *The change in political and cultural climate that occurred with the end of World War II had a direct impact on understanding the importance of the role that architecture played in promoting the generally accepted social values of the new society and state. One of the basic urban themes in the design of new spaces and cities is respect for the spirit of the place, which in the case of designing New Belgrade was an interesting issue. The new city was created as a result of numerous competitions, where each block was treated separately. It can be said that the architecture of the residential buildings of New Belgrade is the architecture of modernism, while the city is planned according to the principles of a functionalist city. As a consequence, there is a difficulty in navigating the space, because the blocks resemble each other. Exceptions are certain objects that stand out for their height, size or purpose. The instrumental system of orientation by blocks works much better than the numbering of entrances on the streets. Through the analysis of the two blocks, which are different according to the set of established criteria, the importance of the morphology of the block from the aspect of the existence of city benchmarks that give recognizability to the space will be pointed out. The criteria usually overlap and permeate each other, influencing each other. This topic opens space for the analysis of the flexibility of the model and the possibility of different interpretations of the organization of space, design, layout of functions. The question is in which direction will New Belgrade build its new identity? Should we leave the monument of one time with small, not so structural finishing touches and allow the image of the city to remain as it is, or should we influence the space by changing the masses, colors, the concept of modernist design?*

**Keywords:** morphology, city landmarks, New Belgrade, identity

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## 1. INTRODUCTION

The need for additional city landmarks in the idea of building a new center of Belgrade on the river arose when the idea for it. The change in political and cultural climate that occurred with the end of World War II had a direct impact on understanding the importance of the role that architecture played in promoting the generally accepted social values of the new society and state.

The morphological monotony of the buildings, as well as the absence of human dimension of the urban space, additionally influenced the alienation of people and the city. With its development, New Belgrade followed many trends in contemporary urban and architectural thought. Technical achievements enabled the realization of creative solutions as a benchmark of architecture of modern cities, so the first rappers appeared in the new city in the form of public buildings as points in the central zone, whose mutual distance is much greater than in old Belgrade.

As the longest period of development of New Belgrade was based on the principles of the Athens Charter, so this municipality took over the function of housing as a priority. The stages of construction brought new residents to new blocks every year. The basic approach to construction was focused on rationalization in the production of apartments, so it was usually industrialized and prefabricated, which led to the unification of urban forms of housing structures. Over time, this problem has been perceived, so we can see an attempt to differentiate the new urban units of the blocks from the neighboring ones in their urban solutions or architectural forms, while individual housing structures within one block remained the same or very similar.

Today, the current issue of the Sava amphitheater will try to create its own image of Belgrade, both structurally and in terms of identity. However, most of the competition solutions and ideas for the Sava Amphitheater refer only to the left bank of the Sava - Savski Venac municipality, while the New Belgrade part is seen as a partially positive solution with a lot of free space for "modifications".

Again, there is the problem of the identity of the place and the image that space leaves. In the multitude of identical buildings of relatively similar masses, only a few buildings stand out in the silhouette of the city. From the aspect of humanity, this space is visually completely monotonous, it does not state, does not indent, does not give guidelines.

Therefore, the paper will consider the relations of morphology of individual blocks and wholes from the aspect of the existence of city benchmarks that give recognizability to the space, on the example of New Belgrade. By analyzing adequate examples through the criteria defined by the previous research, the questions and problems given by the thematic framework will be pointed out.

## 2. CITY LANDMARKS – A REFLECTION OF THE SOCIAL AND PHYSICAL IMAGE OF NEW BELGRADE

Built successively and in stages, New Belgrade is an expression of the professional abilities and knowledge of Yugoslav urban planners and architects through, for a longer period of the city's post-war history. The conquest of swampy, unusable land, and its

transformation into a contemporary modern city center worthy of European countries, embodied socio-political action of strategic importance for the state. As a stage for presenting urban concepts and a permanent testing ground for architectural ideas, New Belgrade has become a worthy example of the principles of Le Corbusier's "radiant city" during the decades of its continuous formation.

At the beginning of the third millennium, as we often pompously call this intersection moment, Belgrade is facing the opening of major urban issues - Belgrade on the water, projects of the third Belgrade, NBG city, etc. If the image of the city is presented as one of the important issues, opinions are divided. We pay special attention to the spatial benchmarks and the type of observation of this space in the remodeling of New Belgrade. This would be limited primarily to the central zones, places of higher flow.

If we pay attention to the panorama of New Belgrade, there is not a single building that would catch the eye of observers except the Business Centre Ušće building and the recently reconstructed Museum of Contemporary Art. (Figure 1.)



*Figure 1. Panorama of New Belgrade from the river*

Heights and mass ratios are fairly uniform. There is no art in setting up individual objects. The planning document (PDR) of the New Belgrade Center - New Belgrade City (connecting blocks 25 and 26) is being prepared, which should make a step in creating an identity. The preparation of documentation for this area of New Belgrade was initiated back in 2007, when the work of the authors Jovan Mitrović and Dejan Miljković won first place. Completion of planning documentation, announced in early 2016. Namely, the space, in addition to its landmarks and the axis that would mark the central pedestrian zone, should continue the principle of a functionalist city, only much more humane, without pompous squares (such as the plateau in front of the former Federal Executive Council – SIV building), and again with a minimum construction index, which should preserve the effect of "breathing space".

Observing the silhouettes of both sides of the river and New and old Belgrade, from the new Sava amphitheater - the current urban problem, it can be concluded that the silhouette of old Belgrade will probably get certain spatial markers along the river, in addition to the existing fortress, Kosačićev venac, Temple of Saint Sava, etc. The space is already determined by visual dominants, and by inserting new ones, the urban structure of the whole cannot be endangered in many ways, or, more precisely, there are greater limitations. The New Belgrade part, on the contrary, has a specific urban structure, which could lose its point with the excessive introduction of much-needed markers (benchmarks). As Radović states, "socio-economic processes are changing the shape of the urban system and physical structures as a whole, and yes, on the other hand, there are still parts of the city that we still use today without changes. Therefore, the dynamics of physical forms and their constancy the structure of the city shows full vitality and the ability to last and change." [2] New Belgrade is a new urban creation, almost intact and

different from the old city center. There are rare examples of changes in the urban characteristics and physical structure of a functionalist city, given the age of the idea.

### 3. MORPHOLOGY AS A SIGNIFICANT FACTOR IN THE IDENTITY OF THE CITY

The identity of the city, in short, represents the unique symbolic "face" of the city: what marks it, what makes it recognizable. The identity of a city can be defined as a set of unique features and characteristics that provide lasting recognition of one city compared to other cities, by which it differs from them and is recognized as special. The identity of a city consists of physical-material and immaterial features, and as its basic components, following Edward Relph [3], we can list the physical appearance, ie the environment (natural and built), the activities that take place in that environment and the meanings that people ascribe to both.

In the last 20 years, we have witnessed new, different construction in New Belgrade. Namely, probably oversized green areas have been turned into new plots on which buildings of a completely different type from the modernist New Belgrade have been built. Such a way of building gave a certain identity and increased the profitability of the space. The emergence of several large "shopping mall" facilities in the territory of Belgrade in our country is often characterized as a degradation of urban life and as a negative phenomenon that indicates the expansion of consumer society in the image of Western countries. However, such spaces in our country are gradually being transformed from a purely commercial space into a space where free time is spent, where all those activities that take place in traditional public spaces and on the street take place.

According to the classification of the French anthropologist Marc Augé, objects such as the shopping center "Ušće" belong to those objects that he calls non-places, that is, those spaces that are not impressive enough to be called places. Such facilities are highways, hotels, airports, supermarkets, so those spaces that are "the same everywhere", which we do not remember in any special way and which we perceive as "generic" forms, forms that are constantly repeated.

### 4. THE ROLE OF CITY MARKERS IN THE IDENTIFICATION OF NEW BELGRADE

Each "place" has a name that characterizes it more closely. However, in an environment such as New Belgrade, in the territory that was abducted from the swamp, there are few areas whose name determines it. Even the administrative names envisaged by the urban plans were not "celebrated" with their imagination. The regions and blocks differed only by numbers. As the facilities were similar, the residents orientated themselves by counting the bus stations. This problem was best felt by the architects. During the seventies and eighties, the authors tried to give each new block a specific character (and thus develop an iconic system). "New Belgrade" sounded bulky, impractical and soon grew into "Novak" or "Novać". [4]

The first landmarks in the form of public buildings also appeared, but they represented very scanty information, given their mutual distance. The Central Committee building, the SIV Palace, the Municipal Building and the Fountain, as points on the central New

Belgrade transversal, are as far apart as Republic Square and the Church of St. Mark, Slavija and Terazije, or the beginning and end of Knez Mihajlova Street. To say "I live near the Municipality" would be the same as "I live near London Building", and to live on Republic Square. Due to that, administrative names began to come into general use during the seventies.

## 5. CITY BLOCKS AS A MORPHOLOGICAL FRAMEWORK OF NEW BELGRADE

Urbanized space, from a morphological point of view, is a projection of a social order, it appears as a result of complex relations of social and economic phenomena that in history portray one moment of the observed society. The city block represents a spatial-functional organization, a concept of the city by which the authors try to outline evolution. Characteristic models of the city block are observed throughout history, which can be classified into two major periods:

- the historical period of building cities before the 20th century, to which the traditional city block corresponds;
- different models that appear from the beginning of the XX century, when the period of modern planning begins. [5]

Unlike the traditional city block, which is a model of spontaneous development, in the period of modern architecture, open block models are created, which open discussions and directions of thinking towards the postmodern city block. The period of modernism, which is the period of construction of New Belgrade, is characterized by the tendency to omit individual and authorial in the direction of industrialized construction and planning efficiency, while in postmodern urbanism the question of the role of architecture and architect in building the city is revived.

"Block" was and remains a unit of measure of New Belgrade. The instrumental system of orientation by blocks works much better than the numbering of entrances on the streets. Streets in the true sense do not exist. It happens that the distance between two adjacent even numbers in the same street is over half a kilometer.

## 6. CRITERIA FOR THE ANALYSIS OF THE RELATIONSHIP BETWEEN MORPHOLOGY AND URBAN LANDMARKS

The analysis of the relationship between morphology and city landmarks in New Belgrade will be performed on the basis of a set of criteria that will best show the current state of blocks and parts of blocks, whose selection was made on the basis of recognizability and importance in terms of identity and potential for this city municipality. Bearing in mind that one of the key topics that occupied the Yugoslav architectural public during the fifth decade of the last century was the issue of monumentality in contemporary architecture, the previous research selected the following criteria that are relevant to the topic:

**Criterion 1.** The period of construction - is important for understanding the relationship between morphology and rappers, because political events in the country played a major role in the emergence of the new city.

**Criterion 2.** Physical element of the constructed structure - physical characteristics include various components such as: texture, spaces, shapes, details, symbols, types of objects, purpose, population, maintenance of objects, etc.

**Criterion 3.** City reference - landmarks, benchmarks, rappers or accents in space are synonymous with simple physical elements of very different dimensions. The basic physical characteristic is the uniqueness and strikingness of each feature in the context. City references are recognizable by their purity of form and contrast, with special emphasis on prominence in relation to the spatial location. New Belgrade is characterized by landmarks in the form of individual buildings that stand out for their height, but also complexes whose purpose and purpose of construction was particularly impressive or wholes of cultural and historical significance.

**Criterion 4.** Open spaces - appear as private and public urban spaces. Private are courtyards, intra-block open areas in some cases, while public open urban spaces are those whose function is to enable and facilitate communication and which are accessible to all. First of all, they are parks, squares, squares, pedestrian streets, promenades along the coast.

**Criterion 5.** Natural elements - in the analyzed examples, the proximity of the river as a natural element, spatial disposition in terms of sunshine, ventilation, natural green area, but also those created to justify the concept of Le Corbusier's city, is of the greatest importance.

## 7. EXAMPLE ANALYSIS

### Block 13 - Palace of the Federal Executive Council in New Belgrade

Block 13 is a part of the territory of the city municipality of New Belgrade between Mihailo Pupin Boulevard, Ušće Street, Nikola Tesla Boulevard and the service road to block 12. The predominant purpose within block 13 is public, encompasses the state administration and includes the palace of the Federal Executive Council (SIV), today the complex of the Palace "Serbia", with arranged free and green areas, as well as the commercial zone for fuel supply stations. The car access to the Palace building is intended exclusively for the use of employees and everyday visitors, while the movement and parking regime is regulated by certain restrictions and prohibitions for other users and traffic participants.

The year of the beginning of the construction of the Palace (1947) is also a year of importance in the construction of New Belgrade in general. The reinforced concrete construction of the palace, at the time of the complete cessation of works on the construction of New Belgrade until its completion in 1962, was a respectable example according to which all the conceptual and urban plans of the future city were determined. [8] It is this fact that speaks of the unbreakable ties and mutual influences between the building and its wider environment, so that is also the reason why this building is the reference of the new city on the left bank of the Sava.

It is located in the central position of block 13. (Figure 2.) The palace complex includes the main building (orientation height 30.5 m) and two dislocated one-storey auxiliary buildings in the part of the complex closer to Nikola Tesla Boulevard - East and West annexes that are not physically connected to the building, and which are buried in the atrium while in the space above there are canopies. The representative exterior of the building corresponds to the modern and luxurious interior design, realized according to

the project of the architect Mihailo Janković, which makes this building one of the pioneering examples of "total design" in domestic construction. The building is firmly attached to the ground. The four facades open in an extremely symmetrical manner towards wide paved accesses. The classical solid foundation, endless rows of pilasters and the monumental portico of the central pavilion were applied. The impression of the building of a large horizontal space was met with approval and positive criticism from the general public when the construction of the building began. Today, the building represents the seat of state administration.



Figure 2. Position of the landmark in relation to block 13.

Unlike the concept of the new monumentality of the international modern movement, which primarily involved the design of urban units, Yugoslav architects were forced to explore issues of monumentality on the architecture of individual buildings such as this one. Aesthetic and visual values are highlighted by the position of the building in space and a special park solution of the environment.

The author, who was entrusted with the project in 1952., decided to introduce a colonnade of pillars along the entire front ground floor zone of the building, which achieved a connection with the immediate natural environment and relieved the general impression of the whole. The open space is determined by approaches, plateaus, parking, and in front of the main entrance there is a representative fountain (area of about 1,350 m<sup>2</sup>), which with its aesthetic and technological values is one of the best solutions of its kind in our country. The space around the palace is designed in a landscape style, with simple reduced lines of paths and access, which together with the building forms a unique and harmonious spatial-architectural whole.

By placing it next to the water itself, which was supposed to take on the function of a mirror, the symbolic value and monumentality of the object takes on a higher aesthetic and symbolic level. Other, smaller in size and practically less important buildings were placed as an accompaniment to the main building in the depth of the belt that is oriented towards the city.

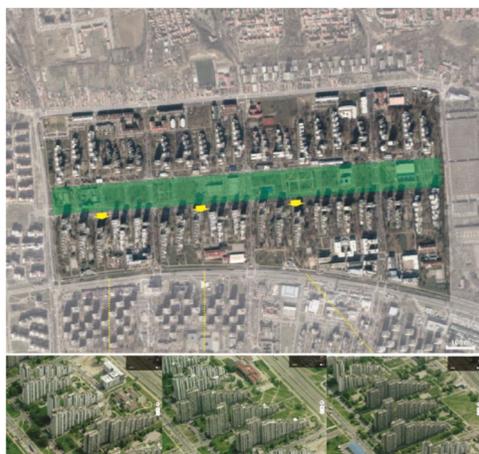
The block is dominated by a landscaped green area, planned and built in the middle of the XX century, as an essential part of a modern city in the spirit of the Athens Charter (with a monumental building in the greenery). The green area consists of a ground-floor part of a representative character in front of the main entrance to the palace and a part decorated

in a free English style with massifs of deciduous and coniferous woody species. In the contact area along the streets that border the block, there are tree lines.

It could be said that the general conception of the building arose from the idea, attitudes and way of thinking about the future city, and that after the construction it essentially influenced the final urban structure of New Belgrade. The potentials of the observed block are reflected in its disposition, because it is located within a wider coastal area important for creating the image and identity of the city. Also, this block consists of special units and individual objects of cultural-historical and architectural-urban values, which give the subject space a strong visual and cultural identity.

### Blocks 61 to 64

An important direction in which mass housing construction is directed can be symbolically represented by a residential complex in blocks 61-64, in the shape of stairs (built in the phases 1973–1980).



*Figure 3. Open spaces line as intra-block surfaces, blocks 61 to 64, New Belgrade. Appearance (in order) of residential buildings in the south of blocks 61, 62 and 63.*

The blocks are divided into northern and southern, and are divided by streets and parks. Conceptually, the solution of Josip Svoboda is an expression of the so-called heroic modernity, oversized structures and urban domination. In that period of development of architecture and urbanism, dimensional urbanism ruled in the local environment, which defines not only the layout of buildings in the settlement, roads and other planning elements, but also the volumetric shape of buildings. On the example of these blocks, the idea of giant steps with foreheads from two to three storeys high dominates. The role of the constructive system in constituting the spatial structure of a specific shape of an object is especially important, because the given form is just built and assembled by the spatial module of the system 3.60m x 4.20m x 2.80m or 4.20m x 4.20m x 2.80m. Here, an atypical idea of an object for prefabrication, in its realization, was transformed into a dynamic artistic-ambient structure.

Staircase residential buildings, floors Gf + 3 to Gf + 19, give a specific appearance to the observed blocks. Rectangular bases are oriented on the longer side towards the inside of

the blocks and side streets, while the number of storeys "decreases" from the inside towards the main border roads.

The open spaces in the observed example are intra-block arranged and unarranged green areas, but also the spaces between the stepped residential buildings. On the stretch of open areas that is visually common for these four blocks (Figure 3.), the objects of service activities, shops and the associated spaces intended for parking.

Bearing in mind that the period of construction was a period of strong influence of ideology and defined political goals, the resulting projects mostly reflect this ideology. On various examples and projects we can see in what sense the architects applied these ways of materialization in their work - whether with an emphasis on monumentality, whether economy and saving of materials, space or structural elements, or uniformity in design. (Figure 4.)



Figure 4. Uniformity in the design of residential architecture. Groups of three typical buildings: a) block 61, south; b) block 63, south; c) block 62, north.

## 8. CONCLUSION

Previous research examines the problem of the non-existence of rappers in much of New Belgrade, as a modern city created in the 20th century. In some blocks, with the new construction of smaller subunits, there was a trend of the appearance of the visual effect of humanity as opposed to the already detected monumentality, which is achieved by sizes and relationships adapted to pedestrian.

New Belgrade is planned with buildings in greenery, which in practice has proven to be one of the greatest qualities of the realized urban space. A special value in the urban fabric is the greenery, which is an integral part of the New Belgrade blocks. It can be said that greenery with its function, as well as the spatial organization itself, represents a green oasis that has its place and role in the formation of the city landscape.

The question of the direction of transformation of the observed space is raised, so that everyone gains in quality in terms of recognizability. Will the existing megastructure be preserved as it is, without major changes in form, and thus preserve the identity and meaning of a time? Or, which is much more probable from the financial aspect, the image of New Belgrade will be reconstructed and the concept of the city-park will probably be lost to some extent.

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## МОРФОЛОГИЈА И ГРАДСКИ РЕПЕРИ – ОДРАЗ СЛИКЕ НОВОГ БЕОГРАДА

**Резиме:** Промена политичке и културне климе која је наступила са завршетком Другог светског рата имала је директног утицаја на схватање важности улоге коју је архитектура играла у промовисању опитеприхваћених друштвених вредности новог друштва и државе. Једна од основних урбанистичких тема у пројектовању нових простора и градова јесте поштовање духа места, што је у случају осмишљавања Новог Београда представљало интересантно питање. Нови град је настао као резултат многобројних конкурса, при чему је сваки блок третиран посебно. Може се рећи да је архитектура стамбених објеката Новог Београда архитектура модернизма, док је град планиран по принципима функционалистичког града. Као последица долази до појаве отежаног сналажења у простору, јер блокови наликују један другоме. Изузетак су поједини објекти који се издвајају својом висином, величином или наменом. Инструментални систем оријентације по блоковима функционише много квалитетније него нумерација улаза по улицама. Кроз анализу два блока, који су разичити по сету успостављених критеријума, указаће се на значај односа морфологије блока са аспекта постојања градских репера који дају препознатљивост простору. Критеријуми се обично преклапају и узајамно прожимају, утичу једни на друге. Ова тема отвара простор за анализу флексибилности модела и могућности различитих интерпретација организације простора, обликовања, распореда функција. Поставља се питање у ком правцу ће Нови Београд градити свој нови идентитет? Да ли оставити споменик једног времена уз мале, не тако структуралне дораде и дозволити да слика града остане оваква каква јесте или пак утицати на простор променама маса, боја, концепта модернистичког пројектовања?

**Кључне речи:** морфологија, градски репер, Нови Београд, идентитет