

ROLE OF BUILDING MORPHOLOGY IN ESTABLISHING OF THE URBAN CONTEXT

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Summary: Different designing approaches allow visual, morphological, conceptual and coloristic harmonization when it comes to facing existing and newly planned structures in populated areas. The architectural environment is a unique entity in which the objects are interpolated on the principle of taking the characteristic elements from the environment or by using the new forms which achieves focus. Surrounding structures therefore receive different perceptual impressions. Morphological harmonization of newly designed buildings is often of great importance to the visual experience of space, and so a number of urban-architectural parameters such as construction and regulation lines, roof height ranges, the conceptual division of the dimensions of the building, number of floors, etc., are relevant to the question of breeding and raising quality of the urban context. In the case of buildings in Novi Sad, the issue of context in terms of visual perception will be presented and analyzed.

Keywords: morphology, context, concept, Novi Sad

1. INTRODUCTION

When shaping the urban tissue, a devised strategy constructed by a professional public community is of great importance, thus influencing the transformation of the image of the city. The seals of considerations, that can be read in the physical structure of each settlement, indicate traces of various influential forces of a certain time in the history of

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the city and of its physical frame. The dominance of climatic, topographic, economic, political, sociological and ideological influences is most clearly read through the structure of the built environment and the objects that were created in a given period. Nowadays, as in earlier epochs, a guidance in designing streets, squares and blocks as well as the architecture that forms them is present, which is reflected in the implementation of a large number of urban laws, regulations and recommendations. "If we want to understand the city as a complex social phenomenon, it is necessary to have the skill of reading the map of its social meanings" [1] because the image of settlement develops in accordance with the social aspirations and needs. By applying planned regulations, aimed at improving the quality of urban space, the city and the community experience a synchronous gradation, which controls the genesis itself. The unity that emerges corresponds to the basic principles of the profession which emphasize the proportions and harmony of both the parts and the whole, and point to the context and the concept. Programmatic and molding compliance between objects and wholes, contributes to highlighting architectural typologies, stylistic characteristics and spatial features of the adopted environment. As a result, the surrounding space becomes very readable to the viewer, who thus acquires the ability to understand the physical framework. The morphology of the object and the level of integration into the context in which it originates, puts architecture in a few specific relations with the urban environment it is located in, by means of which the way of viewing and experiencing the space itself is affected and formed.

2. VISUAL PERCEPTION AND THE LINK BETWEEN ARCHITECTURE AND ITS CONTEXT

Due to established relations that are identified between the elements, the way of looking at a single facility or a continuous segment in the city structure can affect their significance in the mental map of individuals, as well as in the collective consciousness of the community. Certain characteristics that define the morphology of the object, such as the selection and arrangement of elements, proportions, hierarchy, size, geometry, rhythm, harmony and symmetry, point out the character of the building to the viewer. On the other hand, the position in relation to other objects, its function, materialization, composition, will emphasize its significance in the wider environment. The recognizability in the consciousness of the user of space occurs as a result of the acceptance of certain procedures and regularities while conceptually solving an architectural form, and all under the influence of a networked system of forces which dictate the trends of development of the city's image. "One can not imagine a separate discussion about rhythm or proportion without, at the same time, thinking about harmony, symmetry or module" [2] which is why a clever blending or emphasizing of certain segments on the facade of the building or in the dimensions, creates a characteristic structure distinctive in space. The established sequences that the observer, usually unconsciously, can comprehend, help him or her in orientation and understanding the space in which they found themselves, as a shape in architecture "refers not only to the space and the activities that take place in it. A shape is also the

bearer of the meaning, what is nowadays commonly called a sign." [3] The readability of urban structure is a quality that is pursued in determining the morphological characteristics of the building which are to be adopted. The relation of architectural form and urban environment might have different intensities, thereby, it may connect these entities of space or separate them emphatically. Regularities occurring in the built environment affect the observer to recognize a particular object according to the typology, significance, stylistic belonging, time of construction, or to accept/comprehend it as a part of a whole that he/she saw and experienced.

3. URBAN CONTEXT AND ARCHITECTURAL BUILDING AS A RESULT OF MORPHOLOGICAL FORMATION

The significance it has today, Novi Sad has gained through over three hundred years long development that classifies it among the centres of culture, education and administration in the wider region. The visible layers in the physical structure of the city, the changes in the street network, the shape of the blocks and the construction system, clearly point out the formed wholes within the urban tissue. They are the result of many compromises made during its development, because the image of the city is, above all, a map of compatibilities adopted at different moments in its history. Novi Sad, very impressively carries the diversity of the narrow streets of the historical core, the regularity of construction from the second half of the XX century, as well as the density of multifamily housing conditioned by the expansion of the residential typology at the beginning of the XXI century.

The centre of Novi Sad is a characteristic entity in which the interpolation and acceptance of the concepts of design and the harmonization of certain parameters led to the formation of the urban context in which the border between architecture and environment is very well displayed and read. The ambience of the streets and squares was achieved through the compliance of the surrounding layer of buildings and their homogenous morphological characteristics. A well designed selection of stylistic elements on the facades successfully created the historicity that the oldest area of the city displays to anyone residing in it. Limitations regarding the colouristic and contemporary expressions on the facades, such as various types of advertising, are reduced to the extent that will not impair the scenic of the street area itself. Regularities in terms of the height of the cornices and the ways of opening the facades, provide the unity among objects making an authentic context with enough characteristic details and elements that do not allow homogeneity to turn into monotony nor to cause difficulties in navigating, orientation and reading the place.

Areas created by the rules of construction enacted after the end of World War II, were formed as city blocks framed by an orthogonal street network within which a residential or public construction of clear spatial characteristics was placed. Free standing objects, or humanely sequences of objects and large free surfaces, characterize the construction of the second half of the XX century in Novi Sad and are recognizable in the visual perception of observers in the area of Liman and Novo Naselje. By accepting the regulations for the construction of that period, city parts were obtained which, in

functional terms, met the needs of quality extended housing, and in terms of design, determined the parameters of space, that satisfied the existential and environmental needs of the residents. At the same time, with the established parameters, morphologically new and specific urban areas were built. The formation of public as well as residential buildings in this period, had clear guidelines from the point of positioning, approach, taking up space and materialization of the building, which contributed to the perception and recognition of the character and purpose of these objects. The architecture of public typology of this period separated itself in a morphological sense from the context in which it is embedded and is viewed completely independently from its environment, that is largely subordinated to its representative form. The most recent transformations, the city has undergone entering the XXI century and the transition process, due to the need for expansion of urban areas for the purpose of increasing the housing capacity. The changes certain areas of the city experience and go through nowadays, are reflected in the new framework of various engineering and urban planning conditions by which, structurally and typologically recognizable wholes are built. Areas of Grbavica and Detelinara, as well as the outlines of the new city boulevards, represent spaces in which the individual facility became unimpressive. Clear rules shape each building, however, one can not testify to the fact that, in the case of these areas "architectural structures reveal the meanings: spatial, social, cultural, historical, technical, economic, political, visual, urban, etc." [4]

The lack of a unified concept in the design of houses in these areas, manages to depreciate the deliberation and compliance with certain architectural principles and to ensure the absence of identity of architecture in a continuous series of street facades. The contradiction that arises between the honored planned guidelines, regulatory line, roof cornice, number of floors and the complete individuality within the concept while establishing relations among elements, colors and materials, gives these parts of the city "the impression of hurry, temporality, confusion." [1] The described spatial framework has led to the lack of identity in the areas of new construction, blending facade canvases on adjacent buildings in a way that makes the diversity of colors and the coordination of morphological elements linked in an unbroken series from which it is impossible to extract an architectural object nor achieve a particular harmony with the urban context. The concept of such design marginalizes the significance of the object, puts it in the background and makes it impossible to separate it as an entity in relation to the environment. A consistent morphology of houses, and a different interpretation of the same idea, is increasingly being recognized as typical in the parts of the city that are developing.

4. CONCLUSION

The identity of space is formed by characteristic structures that define the physical framework and affect the experience of the environment, the silhouette, and the general recognizability. People become bound to the spaces they live in, to the centres of settlements or places they most often visit, thus the responsibility of each profession which shapes and forms these places is primarily oriented towards a healthy and pleasant

community development. The genesis of Novi Sad unfolded in stages, and each new phase brought different postulates which disassembled the city in several parts. The transformations that can be viewed on the plan are not always visible in space and can not be recognized in the urban morphology, which, on the example of the city, points to both positive and negative consequences. Defining an environment adequate for people requires the adoption of proportional and harmonious wholes that preserve the ambience and allow residents or visitors to bind to them, while creating disproportionate wholes atypical to the environment triggers a reaction of the observer.

"There are different approaches to designing new buildings to suit their architectural surroundings" [5] and the morphological integration, in this case takes precedence when choosing the most appropriate approach. On the example of the Centre, it was found that all objects that are formed morphologically follow the existing architecture, retain the vertical and horizontal differentiation, construction line and planar parsing. Thus the last decade has bestowed the city with a series of new objects that in terms of materials and colors, style and finished general expression correspond to the modern principles and architecture, but in terms of context, support the status quo and preserve the ambience. The subject of this work is not an analysis and valorization nor even a justification for such designing solutions, but rather the evaluation and indication to the importance of morphological fitting on the issue of size and horizontal and vertical harmony in space. A free standing building, unlike a sequence, leaves the possibility of easier fitting in the immediate surroundings, since as a unique structure, it has fewer determinants to be met, thus fully fitting or denying the environment. In the area of Liman it was found that the blocks are also organized by free standing structures, in terms of morphology they can have the same recognition and ambientality as the areas in the city Centre. However, under general impression one must also indicate the historicity, scenic, spirituality, culturality that the areas in the centre have thanks to the historical layers which influenced the creation of the spirit of the place, that the blocks of Liman and Novo Naselje don't possess.

"At the first observation of visual values" public spaces and buildings dating from the beginning of the XXI century "provide information primarily on commonality of architectural elements by which they are formed, positions relative to the observer, composition" [6] and therefore they are becoming a uniform structure with less expressiveness. Only the segmented whole created by facades in a row in these cases, is not sufficient to point out the differences in morphology, but in visual terms it creates a characteristic disharmony when it comes to identity. Due to residential production that is quantitatively dominant, the new parts of the city are gaining visual, functional and environmental expression that does not cause a positive reaction in a society that remembers the spaces as they were prior to radical transformations. In order to retain an authentic expression in each area of the city, a strong and defined attitude must be honored during design orientation and morphological harmonization of the existing and newly designed. A moderate relationship that is thus established will protect the urban environment from a chaos that would arise in a free interpretation of the city, and otherwise, by enforcing a planned policy, it will prevent an apathetic homogeneity which leads to the loss of identity and social disintegration.

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MORFOLOGIJA OBJEKATA U ULOZI FORMIRANJA URBANOG KONTEKSTA

Rezime: *Različiti pristupi projektovanju dozvoljavaju vizuelno, morfološko, konceptualno i kolorističko usaglašavanje kada je u pitanju suočavanje izgrađenih i novoplaniranih struktura u naseljenim sredinama. Arhitektonsko okruženje predstavlja jedinstvenu celinu u koju se objekti interpoliraju po principu preuzimanja karakterističnih elemenata iz neposrednog okruženja ili korišćenjem novih formi kojima se postiže akcenat, a okružujuće strukture dobijaju često drugačiji perceptivni utisak. Morfološko usaglašavanje novoprojektovanih objekata često je od velikog značaja za vizuelni doživljaj prostora, te je tako niz arhitektonsko-urbanističkih parametara poput građevinske i regulacione linije, visine krovnih venaca, konceptualnih podela u gabaritu objekta, broj spratova i drugo, značajno za pitanje oplemenjivanja i podizanja kvaliteta urbanog konteksta. Na primeru novosadskih objekata, u radu će biti prikazano i analizirano upravo pitanje kontekstualnosti sa aspekta vizuelne percepcije.*

Ključne reči: *morfologija, kontekst, koncept, Novi Sad*