INTERIOR IN CONTEXT: PRINCIPLES OF INTERIOR AND EXTERIOR INTEGRATION

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Abstract: The subject of this research includes design principles through which the integration of interior and exterior can be achieved. The principles are grouped according to the role they play in achieving the relationship between outer and inner space. Two directions of possible interactions are considered: a) the influence of the interior on the exterior and b) the influence of the exterior on the interior.

The structure of design principles is conceived by applying the deductive method and is derived from the basic motives that most often cause interactions between the interior space and the environment. The analysis of characteristic motives, which are mainly a consequence of the extroverted or introverted nature of the user, the desire for intimacy or presenting material status, etc., formulates design principles that provide an answer to the needs for integration of interior and exterior. The principles are clearly presented using characteristic examples of modern concepts of spatial organization and interior design.

The main goal of the research is to determine a methodical structure of creative principles, which enable the integration of interior and exterior, and supporting that relation at the same time, but also to check the stance that the architect's shaping of the user's desire to perceive the immediate environment is sufficient for the basic connection of external and internal space. In addition, it is important to emphasize that for higher levels of the mentioned integration, it is necessary for the user to see, but also to be seen, i.e. that there is a mutual interest in the interaction of both the user of the interior space and the observer who experiences the interior from the environment.

The results of the research indicate, first of all, the existence of a larger number of creative principles by means of which it is possible to connect the interior space with the immediate environment. On the other hand, the paper states a close cause-and-effect relationship of motives, which arise from the specific users' needs and the architect's competence to recognize the wishes of users and articulate them in a contextual visual expression.

Keywords: architecture, interior, context, human needs, experience of space.

INTRODUCTION

Influential factors that determine the context of each interior space or building can be: a) program (human needs and users' desires conceived in the form of a project task), b) location (natural or artificial), and c) time (socio-cultural and technical-technological). Influential factors include the basic parts that determine the levels and types of design process arrangement as well as the ways in which they are embodied in space. These factors must be understood, analyzed and adopted in order for the building to be integrated into its context. In architecture, there is a view that a house designed in response to its specific urban and natural environment is called contextualism. It should be emphasized that contextualism is not a style, but a creative preference or tendency, and that in a certain sense, and in different ways, it is always present in architecture.² If the previous attitudes are translated to the level of interior space, i.e. interior design, identical relations can be ascertained that exist at the level of the architectural object as well. In the domain of interior design, the context encompasses the entire physical structure of the building to which that interior space belongs, but also all the other mentioned factors, more broadly.

Numerous researchers have dealt with the interpretation of the context in architecture,³ however, there are quite a few scientific papers dedicated to the relations between interior and exterior. One of the significant papers on this topic is the work of Leila Ayoub and Hidetsugu Kobayashi, who analyze the concept of interior openness in an architectural context and its role in various human existential needs, as well as cultural and social interests.⁴ Marija Stamenković and Aleksandar Keković dealt with the analysis of the interior of commercial buildings by the method of defining the boundaries of the designed internal space and the external environment, i.e. the connection of spaces for different purposes. The authors conduct a concise classification of the way of connecting the interior with the outside environment, emphasizing that the relationship between interior and exterior is primarily realized through openings on the façades, then, by modeling and materializing the entrance front and accentuating elements in the interior with

¹ Д. Марушић, Пројектовање 2: Вишепородично становање – Свеска 4, Београд, 1999.

² M. Tabarsa et N. Younes, "The Role of Contextualism in Architectural Design of Museums", *Journal of History Culture and Art Research* 6/1, 2017, 356.

³ C. Alderson, "Responding to Context: Changing Perspectives on Appropriate Change in Historic Settings", APT Bulletin: The Journal of Preservation Technology Vol. 37, No. 4, 2006, 22–33.; L. Ayoub et H. Kobayashi, "The Concept of Openness in the Architectural Context", *Journal of Architecture and Planning* Vol. 66, No. 546, 2001, 305–313.; B. Brent, Arhitektura u kontekstu, Beograd, 1988; K. Demiri, "New Architecture as Infill in Historical Context", Architecture and Urban Planning No. 7, 2013, 44–50; L. Farrelly, The Fundamentals of Architecture, Lausanne, 2007; K. Frampton, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in: Postmodernism: A Reader, ed. T. Docherty, 2016; A. S. Jakobsen, (ed.) Context 2010/2011, Aarhus, 2012.; Д. Марушић, Пројектовање 2: Вишепородично становање – Свеска 4, Београд, 1999.; P. Panić i R. Dinulović, "Odnos nove i stare arhitekture: Projektovanje novih objekata u istorijskom okruženju", u: Zbornik radova Fakulteta Tehničkih nauka No. 5, 2009, 1731– 1734.; C. Smith, "Inside-Out: Speculating on the Interior", IDEA Journal, 2004, 93–102.; M. Stamenkovič i A. Keković, "Analiza enterijera kroz povezivanje unutrašnjeg prostora sa spoljašnjom sredinom", Nauka + Praksa 11, 2011, 69–74.; V. Stanković Šimčić, (2010) "Integracija staro-novo", Arhitektura raziskave br. 2, 2010, 31–40.; M. Tabarsa et Y. Naseri, (2017) "The Role of Contextualism in Architectural Design of Museums", Journal of History Culture and Art Research 6/1, 2017, 354–365.; etc.

⁴ L. Ayoub et H. Kobayashi, "The Concept of Openness in the Architectural Context", *Journal of Architecture and Planning* Vol. 66, No. 546, 2001, 306.

colors and lighting.⁵ In an essay entitled "Open or closed apartment" ("Отворени или затворени стан") Mihailo Čanak states that there is an internal and external openness of the apartment and that external openness can be planned (desired) or utilitarian (imposed), as well as that it directly depends on the natural, built and social environment.⁶

In this research, by applying scientific analysis, the possible directions of interactions between the interior space and the environment will first be considered in more detail, and then the principles of connecting the interior with the exterior will be ascertained and formulated. The aim of this paper is to examine the characteristic relations of interior space to the immediate and wider context and to check the view that for a complete synthesis of interior and exterior it is necessary to have a two-way relationship and interest in connecting them.

DIRECTIONS OF INTERIOR AND EXTERIOR INTERACTION

Analyzing the different types of relations between the interior and the exterior, two possible directions of interaction can be stated: a) exposing the interior to the exterior and b) integrating the exterior into the interior. The mentioned interactions between the interior and the exterior occur as a consequence of different motives (users or architects) that aim to meet specific human needs. When the motives are clearly defined, they can be conditioned by the wishes of the user, or they can be part of the architect's attitude on a certain topic or space. The most common motives of users that determine the connection between the interior and exterior are present in situations when:⁸

- 1. the user wants to be seen,
- 2. the user does not want to be seen,
- 3. the user wants to see but not be seen,
- 4. the user wants to to be seen but not to see.

These motives are mainly a consequence of the extroverted or introverted nature of the user, the desire for intimacy, presenting material status, etc. On the other hand, in addition to the mentioned motives of the user, which the architect integrates and interprets through his creative vision, the architect can strive to apply different concepts: organic approach to architecture and interior design, expressiveness of space, performative façade, motifs from the environment, etc. In addition to the aforementioned creative motives, there are other influences that architects take into account when deciding which concept of external openness of the plan will be applied.

⁵ M. Stamenković i A. Keković, "Analiza enterijera kroz povezivanje unutrašnjeg prostora sa spoljašnjom sredinom", *Nauka + Praksa* 11 (Niš), 2011, 69.

⁶ М. Чанак, "Отворен или затворен стан", Архишекшура и урбанизам 38 (Београд), 2013. 67.

⁷ It is important to point out that the subject of this research is not the indirect relationship between interior and exterior through the intermediate (inbetween) space, but the direct relationship between interior and exterior.

⁸ L. Ayoub et H. Kobayashi, "The Concept of Openness in the Architectural Context", *Journal of Architecture and Planning* Vol. 66, No. 546, 2001, 308.

Table 1. Motives for the emergence of external openness of the plan (Source: Ђ. Алфиревић и С. Симоновић Алфиревић, "Отворени план у стамбеној архитектури: Порекло, развој и приступи просторном интегрисању / Open-plan in Housing Architecture: Origin, Development and Design Approaches for Spatial Integration", *Архишекшура и урбанизам* 43, 2016, 51).

a) Natural influences:	b) Impacts of the built environment:	c) Social influences:
 orientation of living spaces towards natural motifs and views in the environment, orientation of living spaces opposite to the direction of strong and dominant winds, 	orientation of living spaces opposite to loud noise sources, orientation of living spaces opposite to the sources of visual, acoustic, olfactory and other disturbances in densely populated areas, etc.	 orientation towards inner courtyards and atriums in places of potential social unrests, orientation of living spaces towards inner courtyards as a part of cultural and architectural
orientation of residential premises to the south (in northern countries),		heritage (Middle East), • orientation of living spaces towards the environment in stable and peaceful environments (northern Europe), etc.
blocking the sunny sides of living spaces (in tropical regions), etc.		

Depending on the aspect of observing the relationship between interior and exterior, i.e. with which goal their connection is formed, the directions of interaction can be distinguished. If viewed from the aspect of the interior, it will be considered the introduction of elements from the exterior to the interior in terms of their mutual integration, and vice versa – if viewed from the aspect of the exterior, it is important to expose the interior and the way it is experienced from the outside. There is, of course, a situation when it is important for both the interior and the exterior space to achieve a mutual relationship, which achieves the strongest connection, as is the case with some public buildings (such as shopping and cultural centers, exhibition spaces, etc.). In such cases, there is no significant need for the intimacy of the interior space, but instead there is a mutual interest and need to experience the interior from the exterior and the exterior from the interior space.

PRINCIPLES OF CONNECTING INTERIOR AND EXTERIOR

a) Opening the interior to the exterior

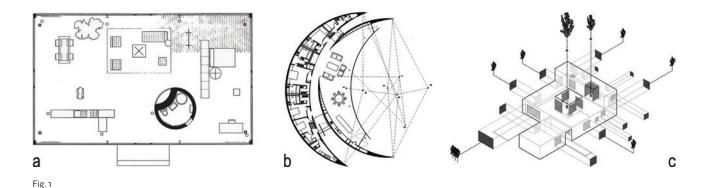
The openness (extraversion) of the interior to the exterior is achieved in several ways: a) by designing an adequate size of openings and their arrangement on the façade, b) by configuring the interior, c) by applying an enfilade with a "bright background", d) by designing regulated communication that ends with a view, etc. According to the authors Leila Ayoub and Hidetsugu Kobayashi, the openness of the interior does not only mean achieving visual transparency, but is connected with the experience of all the senses. By combining different experiences, the identity and character of the space that makes up different atmospheres can be achieved.¹⁰

Size and layout of façades' openings

The size of the openings and their arrangement on the façades can be of great importance in establishing relations between the interior and the exterior, especially if

⁹ A. Rapoport, "The Study of Spatial Quality", The Journal of Aesthetic Education 4/4, Special Issue: The Environment and the Aesthetic Quality of Life, 1970, 81.

¹⁰ L. Ayoub et H. Kobayashi, "The Concept of Openness in the Architectural Context", Journal of Architecture and Planning Vol. 66, No. 546, 2001, 311.



the openings are in a direction that connects motifs from the environment with the most common positions of their perception from the interior. So, not any opening on the façade is purposeful, but only the one that connects the motifs from the environment with the positions of static use or directed movement in the interior from which the motifs can be seen. When designing, it should be considered whether the motifs from the environment can be characteristic shapes such as trees and rocks, certain parts of the landscape or the whole panorama, because the level of openness to the environment can directly depend on it. The degree of façade openness has a significant role in achieving the relationship between interior and exterior, because increasing the size of the openings and their number reduces the solidity of the boundary that separates the interior from the outside. (Fig. 1)

The most significant buildings characterized by the introduction of external motives in terms of defining the concept are the Glass House in New Canaan (Glass House, New Canaan, Philip Johnson, 1949) and the Farnsworth House in Plano (Farnsworth House, Plano, Ludwig Mies van der Rohe, 1951). In both examples, the existence of a natural environment around the buildings was significant, which gave the architects the opportunity to establish a complete external openness of the plan. 11 A representative example of one-sided openness of interior space to the environment is the Crescent House in Winterbrook (Crescent House, Winterbrook, Ken Shuttleworth, 2000), in which the curved shape of the living space directs all views from the interior towards the picturesque sequence of the immediate environment. A particularly characteristic example is the Princeton House in Princeton (Princeton House, Princeton, Levenbetts, 2014), whose compact primary form at first glance does not suggest that the concept of visual impression was taken as a starting point. However, all the window openings on the building are arranged in such a way that certain views to the immediate natural environment can be seen from the interior like framed paintings.¹²

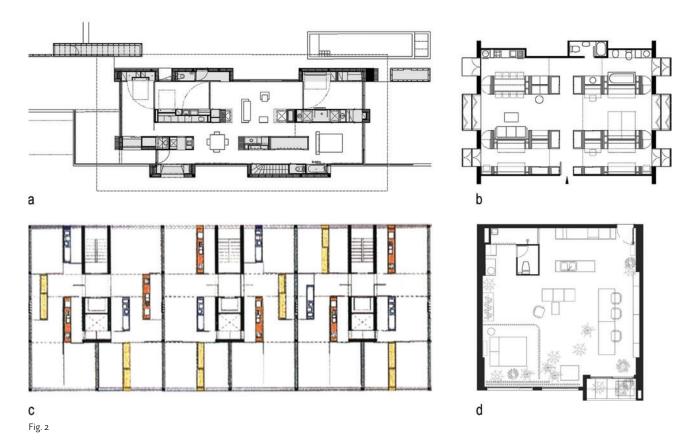
Interior space configuration

By configuring the interior space, ¹³ a more significant opening of the interior to the exterior environment can be achieved by applying an open plan, the concept of flexibility and fluidity of the space, etc. In the housing concept called "ABC System"

¹¹ М. Чанак, "Отворен или затворен стан", *Архишекшура и урбанизам* 38 (Београд), 2013, 67; Ђ. Алфиревић и С. Симоновић Алфиревић, "Пројектантски принципи за постизање просторности у стамбеном простору / Design Principles for Achieving Spatiality in Living Space", *Архишекшура и урбанизам* 48 (Београд), 2019, 41.

¹² D. Alfirevićet S. Simonović Alfirević, "Constitutive Motives in Living Space Organisation", Facta Universitatis: Architecture and Civil Engineering, Vol. 16, No. 2 (Niš), 2018, 196.

¹³ *Configuration* in architecture usually implies the arrangement of parts or elements in a certain shape, space or composition.



by ACTAR Team (ABC System, concept, ACTAR Team, 1996), the spaces in the apartment are differentiated into closed and open, between which flexible partitions are arranged. All closed spaces (sanitary and accessory rooms) are designed in the form of elongated volumes, and disjointedly distributed in the open plan space. In situations where movable partitions are removed, the living space becomes fluid and it is from the entire depth of the apartment that it becomes possible to perceive the environment. A similar approach has been applied to social housing in San Sebastián (Social Housing, San Sebastián, José Aranguren Lopez, José González Gallegos, 1994) and "Stretched Houses" in Lyon (La Maison Etiree, Lyon, Barres & Coquet, 2011). In the above examples, the integration of the interior and exterior is achieved by moving flexible partitions, and thus the interior space becomes integrated with the environment. 14 (Fig. 2) At the Riverpark Apartment in Ho Chi Minh City (Rivaparc Apartment, Ho Chi Minh City, Nhabe Scholae, 2018), the entire interior of the apartment has been converted into a single whole, while movable translucent partitions allow the whole space to be seen from the entrance, as well as integration of interior with the environment.

Unlike the application of an open plan that allows a wider opening zone towards the façade and the environment, there are other forms of configuring the space, such as introducing directional communication with the view at the end, which can be physically defined as a corridor or just indicated as an enfilade. In both situations, the experience of interior and exterior integration is achieved during the directed movement through the space, where at one or both ends there is a façade opening that allows a view towards the surroundings. The experience of integration with

¹⁴ Ђ. Алфиревић и С. Симоновић Алфиревић, "Пројектантски принципи за постизање просторности у стамбеном простору / Design Principles for Achieving Spatiality in Living Space", *Архишекшура и урбанизам* 48 (Београд), 2019, 43.



the environment can be achieved from static positions in the interior, by opening the view in places where the person stays for a long time, such as kitchen counter, dining table, living room furniture, office desk, etc.

Dematerialization of the boundary between outside and inside

The term dematerialization implies the level of physical and visual decomposition of an element in the interior (shape or surface), which in a certain sense makes it "porous" and allows it to be seen through. In a broader sense, dematerialization implies freeing architecture from the traditional constraints of strength, stability and durability in a physical, social and psychological context. ¹⁵ By dematrializing the membrane that separates the outer and inner space, a more intense connection between them is achieved. The most intense experience of the unity of space is provided by transparent panels such as glass membranes, while a moderate experience of integration is achieved by applying semi-permeable barriers such as different types of transens.

A characteristic example of transparent borders was applied at the Museum of Contemporary Art in Kanazawa (21st Century Museum of Contemporary Art, Kanazawa, SANAA, 2014), where dematerialization of the façade membrane produces the effect of unity of the exterior and interior space. A similar approach to space integration is present at The Glass House in New Canaan (Philip Johnson, 1949) and the Farnsworth House in Plano (Farnsworth House, Plano, Mies Van Der Rohe, 1951). The impression of "erasing" the façade membrane is achieved by using large format glass panels or their direct structural contact without metal profiles. (Fig. 3)

The role of the interior in achieving the expressiveness and performativity of the façade

Viewed from the outside, the opening of the interior to the exterior can affect the experience of space integration in situations when the façade of the house is transparent and when the architecture or colorism of the interior achieves the expressiveness or performativity of the façade. In order for the interior of the house to attract attention from the outside, it is necessary that there are certain visual motives, unexpected aesthetic expression or events in it. On the other hand, it is important that in the environment, especially in the surrounding ground floor, the architect determines the positions from which the interior can be observed for a longer time, which can strengthen the relationship between outside and inside.

¹⁵ D. Alfirević et S. Simonović Alfirević, "Design Principles for Achieving Interior Spatiality", in: 1st International conference SmartArt – Art and Science Applied: From Inspiration to Interaction, Belgrade, 28–30.11.2019, ed. M. Prosen, Belgrade, 2020, 144; А. Чарапић, "Да ли је материјализација архитектуре неопходно материјална", Архишекшура и урбанизам 22–23 (Београд), 2008, 25.



At the Takeo Kikuchi shopping center in Shibuya (Takeo Kikuchi, Shibuya, Schemata Architects, 2012), the architectural concept of the building is crucially defined by the spatial organization behind the façade membrane. The arrangement of the elements in the interior is characterized by the modularity of the division and the rhythm of the profile on the glass facade, from which the complete composition is created. The movement of users and the colorism of the interior make a type of experience that can be seen from the environment. A similar concept was applied at the Sendai Mediatheque (Sendai Mediatheque, Sendai-Shi, Toyo Ito, 2001), where the unity of the façade and the interior is not emphasized, but the glass membrane is dematerialized, and the interior becomes a visual extension of the surrounding space. At the Georges Pompidou Cultural Center in Paris, the ground floor area in front of the building has been designed so that the interior of the center can be

b) Introducing the exterior into the interior Physical introduction of exterior elements into the interior

experienced as a visual performance. (Fig. 4)

In situations when the elements, which are most often from the natural environment, have a higher level of aesthetic values, there are justifiable reasons for their integration into the interior. These are usually rock segments, massive stone blocks of attractive shape, trees, water surface, etc. Their natural expressiveness can contribute to the impression of an organic unity of the interior with the exterior. Natural elements can be a physical part of the interior space, when in the interior they can be experienced in the form of a tactile surface, or due to thermal conditions they are fenced, because they still belong to the exterior space.





Fig. 6

A typical example of this stance is Fallingwater House (Mill Run, Frank Lloyd Wright, 1935), where local stone is introduced into the interior to achieve organic unity of the interior and exterior space and gain a sense of living in a natural environment. A similar approach was applied to the Miyahata Ruins Museum (Fukushima, Furuichi and Associates, 2015) and the Barud House in Jerusalem (Barud House, Jerusalem, Paritzki & Liani Architects, 2011), where the existing rock segment is visually integrated into the interior, but physically separated behind a glass membrane. (Fig. 5)

Exterior reflection in the interior

The impression of the unity of external and internal space can be achieved by applying reflective surfaces. Their thoughtful positioning, usually on the opposite side from the light source and the natural motif or by placing it on the side that is at an angle of 90 degrees to the direction of the facade, prolongs the visual impression of the synthesis of the exterior with the interior. This approach is evident in R1T apartments in Tel Aviv (R1T apartment, Tel Aviv, Partizki & Liani Architects, 2012), where the application of a reflective ceiling surface introduces an inverted environment into the interior, which gives the impression that the apartment is at a lower height than expected. A similar attitude is evident in the Outdoor House in Milan (Camilla Lunelli Open-air villa, Milan, LAGO), where the application of reflective furniture surfaces forms the impression of intertwining the surrounding forest and interior. (Fig. 6)

Continuity of materials, surfaces and shapes

An important aspect of the interior and exterior integration is the principle of continuity of materials, surfaces and shapes, which involves the physical and visual







Fig. 8

extension of elements from the interior to the exterior and vice versa. The application of this principle is characteristic of spatial concepts in which one wants to achieve the impression of erasing the boundaries between the exterior and interior and create a feeling of being in the outdoor space with all the elements of interior comfort. An example of such stance is evident at the Fallingwater House in Mill Run (Fallingwater House, Mill Run, Frank Lloyd Wright, 1935), House D in Bregenz (House D, Bregenz, Dietrich & Untertrifaller Architekten, 2016) and the house in Pegasus, Pegasus, Dalman Architects, 2020), in which the surfaces of floors, ceilings and walls are extended from the interior to the exterior, thus achieving continuity and the impression of unity of form and space. (Fig. 7)

Flexibility of the boundary between outside and inside

By applying a flexible boundary between the outside and inside, a "pulsation" of space is achieved. The outer and inner spaces are occasionally mixed. If necessary, the inner space is opened and merged with the exterior, which is achieved by using movable (usually sliding or rotating partitions). A characteristic example of exterior and interior synthesis, achieved by the principle of flexibility, is the Storefront for Art and Architecture in New York (Storefront for Art and Architecture, New York, Steven Holl, Vito Acconci, 1993). The layering of the façade, achieved by the composition of rotating panels, enables the opening of the Storefront interior space towards the street, whereby there is also feedback, so that the expressiveness of this gallery space dynamizes and colors the façade towards the street. ¹⁶ (Fig. 8)

DISCUSSION

Summarizing the analyzed issues, it can be stated that there are two basic groups of principles, which have different ways of observing. Some of the mentioned principles can be applied to both aspects (ways of observation) – from the interior to the exterior and vice versa:

- 1. Opening the interior to the exterior:
 - a) Size and layout of façade openings,
 - b) Interior space configuration,
 - c) Dematerialization of the boundary between outside and inside,

¹⁶ M. T., Diez, "Steven Holl: From the Hinged Space to the Chromatic Space", in: Congreso Internacional de Expresión Gráfica Arquitectónica, eds. C. Perea et E. E. Valiente, Architectural Draughtsmanship, Springer International Publishing AG, 2018, 977.

- d) The influence of the interior in achieving the expressiveness and performativity of the façade.
- 2. Introducing the exterior into the interior:
 - e) Introduction of exterior elements into the interior, in a physical sense,
 - f) Exterior reflection in the interior,
 - g) Continuity of materials, surfaces and shapes,
 - h) Flexibility of the boundary between the outside and inside.

Each of the above principles provides an opportunity to achieve the integration of the interior with the exterior, while a stronger effect is achieved by their combination. The most commonly applied principles in architecture are related to the possibilities of modification, perforation or dematerialization of the façade, because "breaking the visual and physical barrier" crucially enables mutual communication between the exterior and the interior. The group of the least used principles refers to the introduction of elements from the environment into the interior, because for the application of this principle it is necessary to have adequate elements that could be integrated through the architectural concept and become part of the interior.

CONCLUSION

The importance of this topic is reflected primarily in the systematization of design principles and a general review of their applicability in different situations when it is necessary to achieve the integration of the interior and exterior. In this research, creative principles are analyzed in general, and their role in both residential and public buildings is considered. Taking into account systematically derived apparatus of analysis, further research could be directed towards specific individual situations. Based on the analysis of different principles, it can be concluded that for the complete integration of interior and exterior, it is necessary to have a two-way relationship and an effort to connect. This can be achieved by dematerializing the façade and directing the observer's attention from the interior to the exterior, as well as from the outside environment to the interior.

ILLUSTRATIONS

1: Introducing motifs from the outside into the interior: a) Glass House, New Canaan, Philip Johnson, 1949; b) Crescent House, Winterbrook, Ken Shuttleworth, 2000; c) Princeton House, Princeton, Levenbetts, 2014. (Source: www.archdaily.com)

Увођење мотива из окружења у ентеријер: a) Glass House, New Canaan, Philip Johnson, 1949; b) Crescent House, Winterbrook, Ken Shuttleworth, 2000; c) Princeton House, Princeton, Levenbetts, 2014. (Извор: www.archdaily.com)

2: Opening the interior with space configuration: a) La Maison Etirée, Lyon, Barres & Coquet, 2011; b) Social Housing, San Sebastián, José Aranguren Lopez, José González Gallegos, 1994; c) Sistema ABC, concept (ACTAR Team, 1996); d) Rivaparc Apartment, Ho Chi Minh City (Nhabe Scholae, 2018). (Source: www.archdaily.com)

Отварање ентеријера помоћу конфигурације простора: a) La Maison Etirée, Lyon, Barres & Coquet, 2011; b) Social Housing, San Sebastián, José Aranguren Lopez, José González Gallegos, 1994; c) Sistema ABC, concept (ACTAR Team, 1996); d) Rivaparc Apartment, Ho Chi Minh City (Nhabe Scholae, 2018). (Извор: www.archdaily.com)

- 3: Dematerialization of the boundary between outside and inside: a) The Glass House, New Canaan, Philip Johnson, 1949; b) Farnsworth House, Plano, Mies Van Der Rohe, 1951; c) 21st Century Museum of Contemporary Art, Kanazawa, SANAA, 2014. (Source: www.archdaily.com) Дематеријализација границе између споља и унутра: a) The Glass House, New Canaan, Philip Johnson, 1949; b) Farnsworth House, Plano, Mies Van Der Rohe, 1951; c) 21st Century Museum of Contemporary Art, Kanazawa, SANAA, 2014. (Извор: www.archdaily.com)
- 4: The role of the interior in achieving the expressiveness and performativity of the façade: a) Takeo Kikuchi, Shibuya (Schemata Architects, 2012); b) Sendai Mediatheque, Sendai-Shi (Toyo Ito, 2001); c) Pompidou Centre, Paris (Renzo Piano, Richard Rogers, 1977). (Source: www.archdaily.com)

Улога ентеријера у постизању изражајности и перформативности фасаде: a) Takeo Kikuchi, Shibuya (Schemata Architects, 2012); b) Sendai Mediatheque, Sendai-Shi (Toyo Ito, 2001); c) Pompidou Centre, Paris (Renzo Piano, Richard Rogers, 1977). (Извор: www.archdaily.com)

5: Characteristic examples of introducing exterior elements into the interior: a) Fallingwater House, Mill Run (Frank Lloyd Wright, 1935); b) Miyahata Ruins Museum, Fukushima (Furuichi and Associates, 2015); c) Barud House, Jerusalem (Paritzki & Liani Architects, 2011). (Source: www. archdaily.com)

Карактеристични примери увођења елемената екстеријера у ентеријер: a) Fallingwater House, Mill Run (Frank Lloyd Wright, 1935); b) Miyahata Ruins Museum, Fukushima (Furuichi and Associates, 2015); c) Barud House, Jerusalem (Paritzki & Liani Architects, 2011). (Извор: www. archdaily.com)

6: Characteristic examples with reflections of the exterior in the interior: a) R1T apartment, Tel Aviv (Partizki & Liani Architects, 2012); b) Camilla Lunelli Open-air villa, Milan (LAGO). (Source: www. archdaily.com)

Карактеристични примери са рефлексијама екстеријера у ентеријеру: a) R1T apartment, Tel Aviv (Partizki & Liani Architects, 2012); b) Camilla Lunelli Open-air villa, Milan (LAGO). (Извор: www. archdaily.com)

7: Continuity of materials, surfaces and shapes on the border of interior and exterior: a) Fallingwater House, Mill Run (Frank Lloyd Wright, 1935); b) House D, Bregenz (Dietrich & Untertrifaller Architekten, 2016); c) Pegasus House, Pegasus (Dalman Architects, 2020). (Source: www.archdaily.com)

Континуитет материјала, површина и облика на граници ентеријера и екстеријера: a) Fallingwater House, Mill Run (Frank Lloyd Wright, 1935); b) House D, Bregenz (Dietrich & Untertrifaller Architekten, 2016); c) Pegasus House, Pegasus (Dalman Architects, 2020). (Извор: www.archdaily.com)

8: Flexibility of the boundary between outside and inside: a,b) Storefront for Art and Architecture, New York (Steven Holl, Vito Acconci, 1993). (Source: www.archdaily.com)

Флексибилност границе између споља и унутра: a,b) Storefront for Art and Architecture, New York (Steven Holl, Vito Acconci, 1993). (Извор: www.archdaily.com)

REFERENCES

Alderson, Caroline. "Responding to Context: Changing Perspectives on Appropriate Change in Historic Settings", *APT Bulletin: The Journal of Preservation Technology* Vol. 37, No. 4, 2006, 22–33.

Alfirević, Đorđe i Simonović Alfirević, Sanja, "Design Principles for Achieving Interior Spatiality" in: 1st International conference "SmartArt – Art and Science Applied: "From Inspiration to Interaction"", Belgrade, 2020, 140–150.

Алфиревић, Ђорђе и Симоновић Алфиревић, Сања, "Пројектантски принципи за постизање просторности у стамбеном простору / Design Principles for Achieving Spatiality in Living Space", Архишекшура и урбанизам 48, 2019, 37–53.

Alfirević, Đorđe i Simonović Alfirević, Sanja, "Constitutive Motives in Living Space Organisation", Facta Universitatis: Architecture and Civil Engineering, Vol. 16, No. 2, 2018, 189–201.

Алфиревић, Ђорђе и Симоновић Алфиревић, Сања, "Отворени план у стамбеној архитектури: Порекло, развој и приступи просторном интегрисању" / "Open-plan in Housing Architecture: Origin, Development and Design Approaches for Spatial Integration", Архитектура и урбанизам 43, 2016, 45–60.

tegration", Архитектура и урбанизам 43, 2016, 45–60. **Ayoub**, Leila et Kobayashi, Hidetsugu, "The Concept of Openness in the Architectural Context", *Journal of Architecture and Planning* Vol. 66, No. 546, 2001, 305–313.

Brolin, Brent, Arhitektura u kontekstu, Beograd, 1988.

Чанак, Михаило, "Отворен или затворен стан", А*рхишекшура и урбанизам* 38, 2013, 66–77.

Чарапић, Ана, "Да ли је материјализација архитектуре неопходно материјална", *Архишекшура и урбанизам* 22–23, 2008, 25–33.

Demiri, Konstantina, "New Architecture as Infill in Historical Context", *Architecture and Urban Planning*, No. 7, 2013, 44–50.

Diez, Maria Teresa, (2018) "Steven Holl: From the Hinged Space to the Chromatic Space" in: *Conference "Congreso Internacional de Expresión Gráfica Arquitectónica*", eds. P. Castaño et E. E. Valiente, 2018, 971–982.

Farrelly, Loraine, The Fundamentals of Architecture, Lausanne, 2007.

Frampton, Kenneth, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in: *Postmodernism: A Reader*, ed. T. Docherty, 2016.

Jakobsen, Annette Svaneklink, (ed.) Context 2010/2011, Aarhus, 2012.

Марушић, Дарко, Пројектовање 2: Вишепородично становање – Свеска 4, Београд, 1999.

Panić, Pavle i Dinulović, Radivoje, "Odnos nove i stare arhitekture: Projektovanje novih objekata u istorijskom okruženju", u: *Zbornik radova Fakulteta Tehničkih nauka* No. 5, 2009, 1731–1734.

Rapoport, Amos, "The Study of Spatial Quality", *The Journal of Aesthetic Education* 4/4, *Special Issue: The Environment and the Aesthetic Quality of Life*, 1970, 81–95. **Smith**, Catherine, "Inside-Out: Speculating on the Interior", *IDEA Journal*, 2004, 93–102.

Stamenkovič, Marija i Keković, Aleksandar, "Analiza enterijera kroz povezivanje unutrašnjeg prostora sa spoljašnjom sredinom", *Nauka + Praksa* 11, 2011, 69–74. **Stanković Simčić**, Vjekoslava, "Integracija staro-novo", *Arhitektura raziskave* 2, 2010, 31–40.

Tabarsa, Muhammad et Naseri, Younes, "The Role of Contextualism in Architectural Design of Museums", *Journal of History Culture and Art Research* 6/1, 2017, 354–365.

Сања Р. СИМОНОВИЋ АЛФИРЕВИЋ, Ђорђе И. АЛФИРЕВИЋ ЕНТЕРИЈЕР У КОНТЕКСТУ: ПРИНЦИПИ ИНТЕГРАЦИЈЕ ЕНТЕРИЈЕРА И ЕКСТЕРИЈЕРА

Резиме: Контекст (лат. contextus – веза, спој речи, смисао) је термин који у општем смислу означава везу мисли у говору. Термин је у употреби у готово свим областима људског стваралаштва, између осталог и у архитектури и дизајну ентеријера. Када се примењује, обично подразумева релацију дела нечега према целини. Један исти појам или елемент може имати различито значење у зависности од контекста у коме се налази. У дизајну ентеријера, као и у архитектури, контекст има два нивоа значења. У ужем смислу, подразумева непосредно физичко окружење око облика или простора који се пројектује. У ширем смислу, контекст је скуп свих утицајних фактора који утичу на конципирање пројектног решења.

Предмет рада овог истраживања су пројектантски принципи путем којих се може постићи интеграција ентеријера и екстеријера. Принципи су груписани према улози коју имају у остваривању релација између спољашњег и унурашњег простора. Разматрана су два смера могућих интеракција: а) утицај ентеријера на екстеријер и б) утицај екстеријера на ентеријер.

Структура принципа је постављена помоћу дедуктивног метода и изведена је из основних мотива који најчешће узрокују интеракције између унутрашњег простора и окружења. Анализом карактеристичних мотива, који су углавном последица екстровертне или интровертне природе корисника, жеље за интимношћу, за приказивањем материјалног статуса и др., формулисани су пројектантски принципи који пружају одговор на потребе за интегрисањем ентеријера и екстеријера. Принципи су прегледно приказани помоћу карактеристичних примера савремених концепата просторне организације и ентеријера.

Основни циљ истраживања је да се постави систематична структура стваралачких принципа, који омогућавају остваривање и јачање интеграције ентеријера и екстеријера, али и да се провери становиште по коме је за елементарно повезивање спољашњег и унутрашњег простора довољно да архитект уобличи жељу корисника да види окружење, док је за више нивое интеграције неопходно да корисник види, али и да буде виђен, тј. да постоји обострани интерес за интеракцијом и корисника унутрашњег простора и посматрача који доживљава ентеријер из окружења.

Резултати истраживања указују пре свега на постојање већег броја стваралачких принципа помоћу којих је могуће повезати унутрашњи простор са непосредним окружењем. Са друге стране, у раду је констатована блиска узрочно-последична релација мотива, који проистичу из специфичних потреба корисника и спремности ствараоца да препозна жеље корисника и артикулише их у контекстуалан визуелни израз.

Кључне речи: архитектура, ентеријер, контекст, људске потребе, доживљај простора.