DOI: 10.22616/j.landarchart.2022.20.08

Objects-memes in the architectural organization of attractive urban public spaces

Alina Holovatiuk, Nellya Leshchenko

Kyiv National University of Construction and Architecture, Ukraine

Abstract. A methodology is proposed for the architectural organization of new and activation of existing abandoned, degrading urban spaces and their transformation into attractive public spaces through the introduction of new architectural objects-memes into them, which will bring new emotional and functional content to these places. The notions of a meme in architecture and object-meme are introduced and scientifically substantiated. The last one is proposed as a tool for activating and increasing the attractiveness of existing and new various urban public spaces and, in particular, city parks and squares. The questions that object-meme must solve for this are generalized and systematized. Based on an international sociological video experiment on the perception of different people in different urban public spaces, the characteristics of the last ones, which evoke positive emotions in most people in them, were analyzed and summarized. Recommendations are systematized on the architectural and functional organization of such spaces, in particular city squares and parks, and the placement of objects-memes in them. Approbation of the put forward theoretical provisions is presented in the conceptual projects for the creation of a new city square in the historical part of Kyiv and the revitalization of the existing degrading park in the Gran-San-Blas area in Madrid.

Keywords: objects-memes; public space; squares and parks

Introduction

The issues of activating and increasing the attractiveness of existing urban public spaces, as well as creating new, attractive, and comfortable for people, remain relevant for the present and require new approaches to solve them. We are talking about increasing their architectural, cultural, social, and economic attractiveness for a high-quality and interesting stay in them for different people. There is a need for a new methodology for creating new or transforming existing urban public spaces into attractive ones and finding new tools to bring new emotional, cultural and functional content to these places and attract people to them. This will allow both to revive abandoned urban spaces and to get new attractive and active ones, which will revive the city as a whole and ensure its sustainable development.

It should be noted that many scientists from around the world have been studying urban public spaces. In their scientific theories, they touched on various aspects of this issue. It is necessary to note the works of J. Gehl [4], M. Gusev [5], J. Jacobs [6], O. Dida [3], K. Lynch [18], and N. Sosnova [27], concerning the urban environment and urban lifestyle. It is also worth highlighting the studies of the emotional and aesthetic component of public spaces carried out by C. Day [2], A. Ikonnikov [13], P. Nas [19], G. Osychenko [21], N. Shebek [26], their landscape components - in the works of Yu. Ivashko [14], T. Kuzmenko [14], S. Li [14], P. Chang [14], I. Rodichkin [23], L. Ruban [24], the

issues of transformation and activation of degrading historical urban spaces - in the articles of N. Leshchenko and V. Tovbych [16, 17]. Of great importance are the theoretical works on the phenomenological approach to the creation of the architectural environment by E. Husserl [12], C. Norberg-Schulz [20], M. Heidegger [7], A. Perez-Gomez [22], and D. Weir [22], as well as the architectural projects of A. Siza [25], P. Ursprung [8], J. Herzog [8] and P. de Meuron [8], S. Holl [9], P. Zumthor [28]. It is also worth highlighting the works devoted to the study of social evolution and behavioral mechanisms in society by R. Dawkins [1] and D. Kahneman [15].

The analysis of the previous theoretical and practical experience in studying urban public spaces and park areas, in particular, showed a significant contribution of these scientists and practicing architects to solving various aspects of this problem, but the issue of their semantic architectural stereotypes has not been studied enough. There are no scientific works on the influence of the objectsmemes, identified in this article as conditionally super-contextual semantic architectural stereotypes of urban public spaces, on their activity and attractiveness. This is the reason for the relevance of this study. It is determined by the need to give recommendations and show practical architectural objects-memes can influence the attraction of people to new urban public spaces, parks, and squares, as well as increase the attractiveness and activity of existing ones that are currently inactive or abandoned and empty.

The aim of this research is to propose a methodology for activating and increasing the attractiveness of urban public spaces through the insertion of new architectural objects-memes into them, which will bring new emotional and functional content to these places. And also to show on examples the practical application of the put forward theoretical provisions. The scientific novelty lies in the introduction and scientific substantiation of the notions of a meme in architecture and objects-memes, as tools for activating and increasing the attractiveness of existing and new various urban public spaces and, in particular, city parks and squares.

Materials and Methods

A methodology is proposed for activating abandoned, degrading urban spaces and transforming them into attractive ones through the introduction of new architectural objects-memes into them, which will bring new emotional and functional content to these places. This methodology includes the following research stages and their corresponding methods.

- 1. Logical analysis to define the notions of "semantic architectural stereotypes", "architectural memes", "objects-memes" and establish their relationship. Objects-memes were defined as conditionally super-contextual semantic architectural stereotypes of urban public space.
- 2. By generalization, 6 groups of questions were identified (namely: cognitive, aesthetic, compositional, functional, socio-economic, urban planning), which objects-memes solve to activate existing and form new urban public spaces, including city squares and parks, that positively affect on person's feelings in them.
- 3. Using the video experiment method, an international sociological study the "Architecture and Happiness" was conducted and information was obtained on the perception of urban public spaces by different people, and the relationship and influence of the urban public spaces on a person's feeling of happiness in them were determined. The video experiment included a video survey, analysis and systematization of the data obtained, the creation of a video series of the most interesting answers, and the synthesis of the characteristics of an urban public space that is close to ideal, causing positive emotions for a person in it, as well as objects of public spaces that cause the greatest emotional response.

The video survey was conducted both in person and remotely. Respondents were asked to answer 8 questions. For the remote survey

questions were recorded on video and presented online. The longest question was 50 seconds. All questions were interconnected with each other - from general ones related to the theme of happiness and its feeling to specific ones, which concerned objects of architecture and urban public space, as well as what people notice in them in the first place and what they focus on afterward. The survey ended with questions about the characteristics of an ideal or almost ideal public space of the city for each respondent personally and about the importance of material wealth against the backdrop of a comfortable and happy public space.

Each video with the answers of one person took 30-40 minutes. Based on their analysis, the most frequently occurring answers for each of the 8 questions were identified and their percentage ratio was established. The most interesting of them were systematized respectively in 8 series. The duration of each episode is 20-30 minutes. The answers received became the basis for the synthesis of the characteristics of the urban public space, which causes a positive response in a person, and which causes a negative one.

- 4. By the methods of formalization and generalization, the characteristics of the urban public space, close to ideal, evoking positive emotions in a person, were identified, which became the basis for recommendations on its organization.
- 5. With the help of systematization, recommendations on the architectural and functional organization of urban public spaces and the placement of objects-memes in them were summarized as ecological, compositional, morphological, cognitive, functional, and socio-economic.
- 6. The method of experimental design was applied to test the put forward theoretical provisions and create concepts for the city square and revitalize the park.

Further, the article reveals the above stages of the study, shows the influence of architectural memes on the activity and attractiveness of urban public spaces, particularly city squares and parks, and gives practical recommendations for placing objects-memes in them. And also their effectiveness is demonstrated in the examples of organizing a new city square on the site of an abandoned territory in the historical part of Kyiv and revitalizing the degrading city park in the Gran San Blas area in Madrid.

Results and Discussion

The notion of a meme in architecture. Objects-memes are conditionally supercontextual semantic architectural stereotypes of urban public space

Each urban public space, including city squares and parks, is determined by certain semantic architectural stereotypes. They bring a certain meaning to this place, define its features and identify it. They form certain characteristics of this place, thanks to which it becomes recognizable and attractive. The place attracts different people who come there on business or spend their free time.

So, the semantic architectural stereotypes of a certain urban public space can be determined as objects, fragments, or details - symbols that carry a certain stable semantic meaning and identify the content and purpose of this place and its perception by a person, providing its semantic content [11]. For example, the town hall or city scales are semantic architectural stereotypes of any city market square.

By analogy with the commonly used notion of a meme, it's possible to define the notion of a meme in architecture. A meme in architecture (architectural meme) is any physical object of the architectural environment with a message and meaning embedded in it, which are clear to everyone at the first acquaintance with it and do not require the necessary explanations and urban context, is popular and relevant for different places, provides their semantic content and easy person's perception [10].

Unlike the generally accepted notion of a meme, architectural memes are always material and carry not only an emotional, cultural and meaningful but also a functional message. And this message is relevant for any public space in the city.

And if we trace the connection between architectural memes and semantic architectural stereotypes, then architectural memes can be defined as semantic architectural stereotypes that are not conditionally tied to any context. Their content is always clear, regardless of the context. However, their form can be adapted to the context in which they are replicated. The original meaning of architectural memes can also change, and then they will perform a different function in a different space.

Architectural memes manifest themselves through the objects-memes. They can be defined as follows.

Objects-memes are integral objects that carry a certain stable semantic meaning, are understandable to everyone at the first acquaintance with them and do not require the necessary explanations and urban context, and, therefore, are conditionally supercontextual semantic architectural stereotypes, provide the semantic content of any urban public space and its perception by a person, and they can adapt to any context [11].

In general, most urban public space landscaping objects can be considered objects-memes. These may include traditional sculptures, lanterns, flowerbeds, benches, fountains, as well as facade elements (immersive 3D billboards, green facades, murals) and the building as a whole (galleries, buildings with arcades and colonnades on the ground floor), which are part of, shape, or separate one space from another, as well as modern kinetic sculptures, strumps, open pavilions, and even immersive performances.

A certain architectural object can become an object-meme only if it goes through the stages of "memization" and has such characteristics as precedence of occurrence (should carry information about the source of its occurrence); objectivity (should have content and functionality understandable to everyone) and replicability (be able to replicate); universality (to be supercontextual); "virality" (easily and quickly spread and bring resonance in a new place).

Thanks to the objects-memes, the very long and difficult to describe the meaning of space is conveyed more simply - due to their specific location in it, through their shapes, dimensions, textures, colors, and their combinations, as well as introduced functions. This meaning affects a person, becomes clear to him, depending on how much he focuses on these objects, how much they impress him. They can also tell a person how to behave in a space, what is allowed, and what is forbidden to do.

So, it is possible to summarize the issues that objects-memes should solve to activate existing urban public spaces and in the formation of new ones, in particular, city squares and parks, which are positively affected a person's feelings in them, namely:

- cognitive they should become environmental landmarks and attractors;
- aesthetic they should increase the visual quality of the space;
- compositional should organize and physically fill this place;
- functional should contribute to its functional content;
- socio-economic also should help to attract attention and attract people to this space, thereby increasing its social and economic activity;
- urban planning should determine the urban centers of gravity.

Characteristics of an urban public space that evokes positive emotions in a person

Thanks to the international video experiment "Architecture and Happiness", it was possible to obtain information about how different people perceive urban public spaces. A total of 1981 respondents from 29 countries were involved in the

survey. Of these: 41% - men, 59% - women; 3% - under 13 years old, 24 % - 13-20 years old, 51 % - 20-30 years old, 13 % - 30-60 years old, 9 % - 60 years and older. At the same time, 56 % of respondents consider themselves happy or very happy, 11% - were partially happy, 10% - were more unhappy than happy, and finally 23% - answered that they are not happy at all. The vast majority of the happy are women aged 18-23 (67 %), and the vast majority of the unhappy are men aged 25-30 (55 %).

Among the respondents, 68% of those who are likely to be observers of certain events in urban public spaces, and 32% of those who are likely to become their active participants, were identified. This is important when filling the urban public space, both with places for active actions and places for quiet rest, and observing these activities.

It has been established that there are no specific objects or certain elements that are guaranteed to make architecture and space happy. There are situations in which a person is on an emotional upsurge, gets new impressions, and reacts positively to the environment. Or certain events that impressed and liked occurred in a certain space, and as a result, a person developed positive memories of this space. Consequently, certain actions and events in the architectural environment affect the perception of it by a person. The fact remains indisputable that for a positive perception there must be an active urban public space, which is provided with a variety of functional content and its high-quality arrangement.

After analyzing and summarizing the answers of the respondents, the qualities of existing urban public spaces which positively affected people's moods and those which caused negative emotions were identified. The formers are characterized by the following: 1) natural, environmentally friendly coatings and finishing materials; 2) forms that mimic the natural environment; dimensions 3) corresponding to the human scale; 4) surface texture imitating natural coatings or their motifs; 5) the presence of objects or surfaces in their decoration, that dampen the noise of the city, absorb sound ("green facades", natural and artificial "screens"); 6) the absence of very bright, pulsating light for etc. lighting and advertising, Successful combinations include combining artificial water features (such as fountains) with places for leisure socializing, street food, etc.) (seating. complementing them with places for creative activity (street "live" music). Among morphological combinations, the most acceptable combination of fluid forms with broken lines, and not focusing on only one type.

The characteristics of objects that cause negative emotions are: 1) aggressive broken lines, and sharp forms; 2) repulsive design with far from natural color combinations; 3) disharmonious textures; 4) the presence of signs of damage to objects (soot, cracks, dirt, etc.); 5) the absence of forms or objects in general that protect a person from various adverse weather conditions; 6) the presence of inappropriate inscriptions, graffiti.

experiment confirmed the hypothesis regarding the objects-memes, which are connecting "bridges" between a certain urban public space and a person's feeling of happiness in it. A person remembers a certain space, and he likes it because of the events that take place there and the positive emotions he has experienced there. Objects-memes help to activate this space through its emotional, cultural, meaningful, and functional content. They activate certain actions and events in it, with which a person will later associate this place and for the sensation of which he will return there again. So, the objects-memes can be considered as tools for evoking an emotional response, activating fantasy, associations, and a positive reaction of a person to a certain place and to what is happening in it. And thanks to these sensations, a person feels happy in this place.

By formalizing and generalizing the answers of the respondents from the video survey, it is possible to identify the characteristics of urban public space, close to the ideal, evoking positive emotions in it, namely:

- the unity of natural and artificial surfaces;
- coziness through the selection of small spaces in the overall composition and their connection into one whole;
- the co-scaling of all objects and space as a whole with a person;
- natural colors of ordinary artificial elements of space;
- safety and attractiveness in the evening hours due to the presence of artificial lighting;
- cognitive ease due to the presence of landmarks and attractor objects, which can also become objects- memes;
- accessibility for different people; activity and comfort due to the presence of places protected from adverse weather conditions;
- uniform distribution of the various functions in the space to evenly load and activate the various events in it.

These characteristics became the basis for recommendations on the architectural and functional organization of urban public spaces, in particular, squares and parks, and the placement of objectsmemes in them. The proposed recommendations were systematized as:

 ecological - a harmonious combination of natural and artificial components in the surface finish of objects (objects-memes) and entire planes of spaces, equipping them with elements for power



Fig. 1. The project site, 2021 [the authors' photo archive]

and energy accumulation from renewable natural sources;

- compositional co-scaling with a person and allocation of "chamber" places in the overall space, combining them with a common connecting element - a new object-meme; the possibility of hyperbolized scale only in some details of objects-memes for their attractiveness; morphological - the use of a combination of rectilinear and curvilinear forms in the shaping of new objects-memes, in the allocation of individual areas or levels in the existing space, and the formation of levels in the new one;
- cognitive the use of natural colors in the decoration of all artificial surfaces of the space, which are the background, and the possible use of bright colors to highlight certain details or objects-mems, which should become its environmental landmarks and attractors; the introduction of elements of artificial lighting to highlight new objects-mems, as well as the provision of possible different lighting scenarios for daily and holiday activities and events in space, which will contribute to its attractiveness;
- functional filling the space with different functions and their even distribution for attractiveness and activity of different zones of squares and parks and avoidance of point load;
- socio-economic ensuring accessibility of spaces for all people, filling them with equipped places for a comfortable long stay, which together with the functional filling will provide their social and economic attractiveness; avoidance of dangerous crossing of pedestrian and transport routes.

The above theoretical provisions were tested in the creation of the concepts of a new urban square in Kyiv and the revitalization of an abandoned park in Madrid. These projects, described below, illustrate the proposed recommendations for creating an active and attractive urban public space in place of the abandoned and unused.

The concept of a new city square named after Vasyl Slipak on Andriivsky Descent in Kyiv

The project site is located on Andriivsky Descent 33/6, in the Podilsky district of Kyiv, in the heart of Podil. It is included in the complex protection zone of cultural heritage monuments. There are several architectural and urban planning monuments of local importance on the adjoining territory. The surrounding buildings are also formed by significant and ordinary valuable historical buildings. The place for the future square is allocated from the west and south by ordinary valuable historical buildings, from the north and east - by Borychiv Tik Street and Andriivsky Descent, respectively [Fig.1].

To date, the site is not used in any way and is gradually losing its social value, and its neglected state greatly reduces the aesthetic and architectural value of the existing historical urban environment as a whole. The idea of creating an art square on this site, which combines memorial and various urban functions, will contribute both to the restoration of the architectural value of the historical environment and the attraction of different people, which will greatly increase its social and cultural value.

This concept of organizing a square - a new urban public space - was based on such principles as: hereditary continuity and diversity; cognitive ease; compilatority; attractiveness; multifunctionality and variety of functions. To reveal them the following techniques were used: the combination of "active", "neutral" and "passive" zones of space into a single whole; filling it with chamber "half-closed" places; preservation of traditional material and color in decoration; symbolism in the visual design of objectsmemes or their details.

The new square will become a symbol of memory for the outstanding Ukrainian singer, man-patriot Vasyl Slipak, who died fighting for the independence of Ukraine, and at the same time a modern active place for



Fig. 2. The concept of a new city square named after Vasyl Slipak in Kyiv, 2021 [created by the authors]

urban cultural events, as well as a place of resting and leisure for locals and guests of Kyiv. The proposed memorial sign - the treble clef - will become a new architectural semantic stereotype of this place and a symbol of the eternal song that Vasyl Slipak carried to people, and which will now be performed by other people from the open stage of the city square.

The idea of using the notes from the Ukrainian folk song, Vasyl Slipak's favorite song, "The moon in the sky, the stars are shining" in the decor of the fence of the public square is also symbolic. The words from its text are perforated on the stainless steel strips fixed on the first section of the fence wall. Other parts of this existing wall have been proposed for a themed mural.

The existing relief and landscape of the site are harmoniously integrated into the new public space - used as an amphitheater and terraces for relaxation, tactfully inscribing in the surrounding context. The scale of the space and all new elements in it is subordinated to the existing historical one. The interests of both the surrounding urban environment and landscape and, first of all, the people in them, their comfort of movement, and different durations of stay are taken into account. It is proposed to arrange fountains in the center of the square. They will bring freshness on hot days, will attract people to this place, make them feel comfortable, and will also serve as entertainment for the children.

The square is multifunctional. It has places for both quiet rest and cultural activities, impromptu music concerts, dances, and masterclasses on them, as well as places for outdoor coworking. Everyone can comfortably spend their free time, take an active part in the ongoing urban performance, or just watch it.

The amphitheater, fountains, thematic murals on the existing wall enclosing the space of the square from the west, places for coworking and quiet rest – these are new objects-memes that will become attractors for this place, increase its architectural, emotional, semantic, and functional value. They will attract different people with different interests to this place, will activate the daily urban performance in it, and get bright impressions and positive emotions from what is going on. As a result, the space will be alive and may become one of the favorite places in the city for many people [Fig. 2].

The above recommendations are an illustration of one of the most effective combinations of different techniques for the architectural and functional organization of urban public space and in particular the square, namely: the use of terracing and "geoplastics" in combination with the introduction of a contrasting bright color in some details, parts and whole planes of space, the creation of murals on the blank facades of buildings and filling the space with active urban sites. Together, they greatly enhance the effects of qualitative changes to create an attractive, iconic place in the city, interesting and convenient for different people.

The concept for the revitalization of a park in the Gran-san-Blas area of Madrid

This concept was made as part of the international competition "Multicomfort House", where it received the second prize.

The design site was located at Calle Nueve 6-10 in the Gran-San-Blas area in the western part of Madrid. The area was mostly built up in the 50s and 60s of the last century with typical 4-5-story residential buildings. Approximately 30 % of its inhabitants are elderly people. Here you can freely walk without a crowd of tourists - the area is considered residential and industrial.

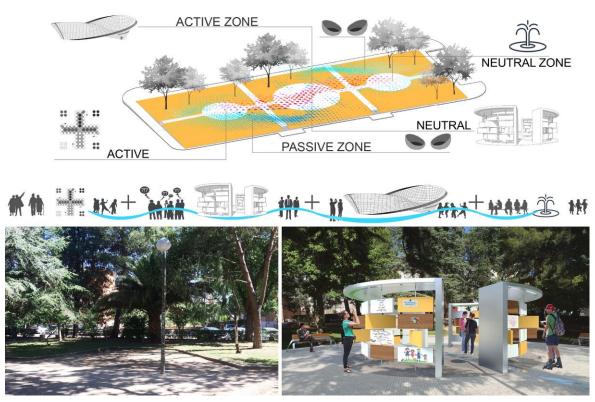


Fig. 3. The revitalization concept of a park in the Gran-San-Blas area of Madrid, 2017 [created by the authors]

The main objective of this project was a new vision of urban revitalization for a community living in characteristic typical buildings located around the abandoned area of a small park. Among the priorities are improving the quality of living, as well as turning an abandoned park into a place for a comfortable stay, attractive to people of all ages.

The key principles applied in the concept of the revitalization of the park in Gran-San-Blas were compilatority; following: attractiveness; multifunctionality and variety of functions. They were revealed in such techniques as the combination into a single whole of "active", "neutral" and "passive" zones of the space; filling it with chamber places; as well as the introduction of a contrasting bright color in some details and entire planes. To accommodate new potential objects-memes in the park, the principles of situational tolerance and cognitive ease were proposed with their disclosure in such techniques as preservation of traditional material and color in the decoration of new objectsmemes to maintain the coloristic integrity of the space; the combination of the originality of form with an unusual functional content of the objectsmemes; introduction of new objects-memes as environmental landmarks and attractors [Fig. 3].

So, according to the concept in the park, it was proposed to single out and combine into a single whole its "active", "neutral" and "passive" zones. This makes it possible for different people with different preferences to find a place to comfortably

spend their free time. The "active" zone was presented by two themes - "Active Recreation" and "Cultural and Cognitive Space". The first theme included outdoor playgrounds, designer swings, traditional Spanish street games. The second was a public art object - the "Infinity Cognition Ribbon", which brought a cultural and cognitive function to the park. It is a potential object-meme. The "neutral zone" was formed by the "Wish Board" installation, where every conscientious resident of the district will be able to express their comments, suggestions, and wishes for its improvement for consideration by the local authorities. The Wish Board itself is also a potential object-meme, could be relevant elsewhere and easily replicated The "active" and "neutral" zones with their functions were united by a common artificially created stream - the "Water Ribbon", which is the axis of the park, as well as another object-meme. Places for a quiet rest were strung on it, which formed the "passive" zone of the park.

A new object-meme – the "Wish Board", was proposed to be made in bright yellow, with a frame in the form of an unclosed circle and with moving elements that can rotate around its axis. Such morphological and coloristic solutions are aimed at highlighting and attracting people's attention to this object. Its attractiveness was also enhanced by its location on the central compositional axis, between the two entrances to the park.

An artificial stream - the "Water Ribbon", symbolizes the unity and diversity of space and emphasizes the continuity of the historically established recreational significance of the park and its content (places for meetings, communication, pastime, relaxation, or solitude). It is also a new object-meme — an attractor and landmark that provides attractiveness, comfortable microclimate, and a cognitive lightness of space. Its symbolic meaning of diversity is manifested in the change of form and separation in a single space of the park of different functional areas, open active and chamber "closed" for relaxing rest, which attracts the attention of different people.

Thus, the attraction value and activity of the park after its revitalization will be ensured both by the uniqueness of the proposed objects for its filling – the "Wish Boards", the "Infinity Cognition Ribbon", the "Water Ribbon", and by the places for traditional street games and comfortable quiet rest. These are all new objects-memes that functionally and morphologically reinforce each other and together lead to the revival of this place and its positive emotional content.

Conclusions

Summarizing all of the above, it can be noted that the proposed methodology for the architectural organization of new and the activation of abandoned urban public spaces through the introduction of new objects-memes into them, which will emotionally and functionally fill these places and will help attract different people, is effective. This is confirmed by

the approbation of the put forward theoretical provisions in the developed concepts of organizing a new and revitalizing an existing square and park in different cities of different countries. The proposed practical recommendations for the architectural and functional organization of urban public spaces and the placement of objects-memes in them are also relevant to different places, including urban squares and parks, and provide an opportunity to activate and increase their attractiveness.

The results of the conducted sociological video experiment show that such transformations are necessary to improve the quality of many existing public spaces in different cities of the world. And objects-memes can become tools for activating them, increasing their attractiveness, and attracting people's attention. They will become the "bridges" connecting a certain urban public space with positive emotions and people's feeling of happiness in it. The interconnection of this space and the positive feelings of people in it occurs through the receipt by them of impressions and emotional responses from certain actions and events, which can take place in this place exactly due to its certain characteristics and be activated by new meme objects. It is for getting positive emotions from a comfortable stay in a certain place that people will return to it again. And this will revive this place, increase its architectural, social and economic value. And in general, the attractive and active urban public spaces become indicators of the activity and liveliness of city and its sustainable development.

References

- 1. Dawkins, R. The Selfish Gene. Moscow: ACT CORPUS, 2013. 512 p.
- 2. **Day, C.** Places of the Soul: Architecture and the Environmental Design as a Healing Art. London: Aquarian, 1990. 280 p.
- 3. **Dida, O.** Principles for the Creation of Attractiveness of Town' Architectural Space. Ph.D. thesis. L'viv: "L'viv Polytechnic" National University, 2015. 286 p.
- 4. Gehl, J. Cities for People. Washington: Island Press, 2010. 280 p.
- 5. **Gusev, M.** *Principles_of formation and development of the city landscape.* Ph.D. thesis. Kyiv: Kyiv National University of Construction and Architecture, 2021. 225 p.
- 6. Jacobs, J. The Death and Life of Great American Cities. New York: Random House, 1961. 460 p.
- 7. **Heidegger, M.** Building Dwelling Thinking. Poetry, language, thought. New York: Harper & Row, 1971, p. 143–161
- 8. Herzog, J., de Meuron, P., Ursprung P. Portfolio. Natural History. Zürich: Lars Muller Publishers, 2005, p. 186-201.
- 9. Holl, S. Parallax. NY: Princeton Architectural Press, 2000. 350 p.
- Holovatiuk, A. Understanding the term of meme from the general and architectural point of view. Space & Form, 2020, No. 44, p. 71–78. https://doi.org/10.21005/pif.2020.44.B-04
- 11. **Holovatiuk, A.** *Semantic architectural stereotypes of the city's public space*. Ph.D. thesis. Kyiv: Kyiv National University of Construction and Architecture, 2022. 257 p.
- 12. **Husserl, E.** Phenomenology. Logos, 1991, vol. 1. p. 12-21.
- 13. **Ikonnikov, A**. Art, environment, time: Aesthetic organization of the urban environment. Moscow: Sovpainter, 1985. 334 p.
- 14. Ivashko, Yu., Kuzmenko, T., Li, S., Chang P. The influence of the natural environment on the transformation of architectural style. Landscape architecture and Art. Scientific Journal of Latvia University of Agriculture, 2020, vol.15, p.98-105. https://doi.org/10.22616/j.landarchart.2019.15.11
- 15. **Kahneman, D.** *Thinking, Fast and Slow.* N Y: Farrar, Straus and Giroux, 2011. 499 p,
- 16. **Leshchenko, N., Tovbych, V.** Modern approaches to the revitalization of historical ex-industrial architecture. *Wiadomosci Konserwatorskie. Jornal of Heritage Conservation*, 2019, No. 60, p. 51–58. http://www.scopus.com/inward/record.url?eid=2-s2.0-85094118461&partnerID=fpDjhFsn

- Leshchenko, N., Tovbych, V. Revived degraded monuments of fortification architecture potential for the historical small towns' development. *Budownictwo i Architektura*, 2020, No. 19(1), p. 47–54. https://doi.org/10.35784/bud-arch.906
- 18. Lynch, K. The Image of the City. Cambridge: MIT Press, 1960. 328 p.
- 19. Nas, P. Cities Full of Symbols. A Theory of Urban Space and Culture. Amsterdam: Leiden University Press, 2011. 303 p.
- 20. Norberg-Schulz, C. Genius Loci: Towards a Phenomenology of Architecture. NY: Rizzoli, 1979. 216 p.
- 21. **Osychenko, G.** *Methodological basis for the formation of the urban environment aesthetics.* Dr.Sc. thesis. Kyiv: Kyiv National University of Construction and Architecture, 2015. 372 p.
- 22. Perez-Gomez, A., Weir D. Towards an Ethical Architecture. Vancouver: Simply Read Books, 2006. 260 p.
- 23. Rodichkin, I.D. The Architect's Quick Reference Guide: Landscape Architecture. Kyiv: Budivelnyk, 1990. 335 p.
- 24. **Ruban, L.** *Methodological foundations of the architectural and landscape organization of coastal and water areas.* Dr.Sc. thesis. Kyiv: Kyiv National University of Construction and Architecture, 2020. 560 p.
- 25. Siza, A. Writings on Architecture. Milan: Skira Publishing, 1997. 208 p.
- 26. **Shebek, N**. *Theoretical bases of harmonization of the architectural environment*. Dr.Sc. thesis. Kyiv: Kyiv National University of Construction and Architecture, 2013. 347 p.
- 27. **Sosnova, N**. *Theoretic and Methodological Bases of Formation of Public Spaces of Ukrainian Cities*. Dr.Sc. thesis. L'viv: "L'viv Polytechnic" National University, 2021. 429 p.
- 28. Zumthor, P. Atmospheres. Architectural Environments. Surrounding Objects. Basel: Birkhauser, 2006. 76 p.

AUTHORS:

Nellya Leshchenko, Doctor of Science (Architecture), Professor of the Department of Information Technology in Architecture, Kyiv National University of Construction and Architecture. Sphere of activity – landscape architecture, restoration-reconstractive transformations, theory of architecture. Address: Department of Information Technology in Architecture, Kyiv National University of Construction and Architecture, Povitroflotskyi Avenue, 31, Kyiv 03037, Ukraine. E-mail: nellya_leshchenko@ukr.net orcid.org/0000-0002-3198-4554

Alina Holovatiuk, Ph. D (Architecture), Kyiv National University of Construction and Architecture. Sphere of activity – urban public spaces, eco and bio architecture. Address: Department of Information Technology in Architecture, Kyiv National University of Construction and Architecture, Povitroflotskyi Avenue, 31, Kyiv 03037, Ukraine. E-mail: deppyjo1212@gmail.com orcid.org/0000-0003-4705-1027

Kopsavilkums. Tiek piedāvāta metodika jaunu pamestu, degradējošu pilsēttelpu arhitektoniskai organizēšanai un esošo pamestu, degradējošu pilsēttelpu aktivizēšanai un pārveidošanai par pievilcīgām publiskām telpām, ieviešot tajās jaunus arhitektūras objektus-mēmus, kas šajās vietās ienesīs jaunu emocionālu un funkcionālu saturu. Tiek ieviesti un zinātniski pamatoti jēdzieni mēms arhitektūrā un objekts — mēms. Pēdējais tiek piedāvāts kā instruments esošo un jauno dažādu pilsētas publisko telpu un jo īpaši pilsētas parku un skvēru aktivizēšanai un pievilcības palielināšanai. Jautājumi, kas objektam-mēmam tam jāatrisina, ir vispārināti un sistematizēti. Balstoties uz starptautisku socioloģisko video eksperimentu par dažādu cilvēku uztveri dažādās pilsētas publiskajās telpās, tika analizēti un apkopoti dati, kuri lielākajā daļā cilvēku tajās izraisa pozitīvas emocijas. Sistematizēti ieteikumi par šādu telpu, īpaši pilsētas laukumu un parku, arhitektonisko un funkcionālo organizāciju un objektu-mēmu izvietošanu tajos. Izvirzīto teorētisko nosacījumu aprobācija ir sniegta konceptuālajos projektos jauna pilsētas laukuma izveidei Kijevas vēsturiskajā daļā un esošā degradējošā parka atdzīvināšanai Gran-San-Blas rajonā Madridē.