

ENVIRONMENT AS AN OBJECT OF RESEARCH IN ARCHITECTURAL DESIGN

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Abstract. The article "Environment as an object of research in architectural design" is devoted to the analysis of the phenomenon of "architectural environment" in order to identify the qualities and capabilities of the design object that still is not taken into account in the design practice of DAE. The definitions of "environment" as an interdisciplinary phenomenon (philosophy, pedagogy, psychology, sociology, etc.) are considering, the concept of "architectural environment" is clarify in relation to the specifics of the designer's professional activity. The characteristics, signs, properties, parameters, and criteria for the formation of the environment are established. Such positions as "boundaries and composition", "structural and component certainty" and the functions of the environment in the cultural context are also considered. This information is summarize in tables. A comparison of traditional and innovative methods and areas of research on the architectural environment. Emphasis is placed on the fundamental positions that remain outside the scope of researchers' interests: environmental scenario, scene, dynamic composition, environmental situation and dialogues, spirit of the area, spirit of the times, atmosphere of the environment, lifestyle and artistic image of the architectural environment.

Key words: architectural environment, dynamic composition, design, subjective emotional image, cultural context, design practice.

Relevance. It is important to resolve the contradictions in the theory and practice of architecture, namely:

- contradictions caused by constant changes in all spheres of modern life and the inconsistency of the ways of organizing the architectural environment with these changes;
- contradictions at the level of organization of design processes, which are associated with the need to reorient to real and potential needs that are constantly changing;
- contradictions associated with the lack of a formed culture of consumers who do not know how to professionally formulate an order and insufficient attention of architects to their interests;
- contradictions related to the insufficient understanding of the humanistic role of architecture in the modern world, the lack of ideas about architecture in professional thinking and the creative process as a way of organizing all types of environmental interaction (with space, time, the object world, nature, culture, values of society, the individual, etc.)

Today's design approaches are characterized by a change in flexibility and a rejection of stability and immutability.

The modern trends in environmental creativity, which treat the environment as a work of art and are inspired by a new typology, consider the function to be a source of imagery, emphasize synergistic phenomena within the environment, the idea of development within traditions, etc. In the context of the above, it is advisable to clarify the concept of "architectural environment" as an object of design in the DAS, to identify the characteristics and parameters of the environment that are not traditionally taken into account in the design process, but without which the essence and objectives of environmental design are obscured. This will allow us to put forward new strategies and tactics for the renewal and development of the architectural environment.

The problem of the study – is the phenomenon of "architectural environment" as an object of design in DAS.

Analysis of recent studies. The cultural and human-centered approaches to the assessment of the environment have been study in the field of pedagogy and philosophy of education (O.

Bondarevska, N. Boritko, B. Gershunsky, A. Valytska, N. Krylova, etc.) This is the area of scientific knowledge that is allowing us to identify such qualities of the environment as activity (L. Vygotsky); dynamism (L. Novikova); community (V. Rubtsov); configuration (V. Rubtsov); configurability, which is determined by the poles of subject: the subject of culture and the subject of goals and objectives of human development; saturation (resource potential); structuredness (the way it is organized); integrative (S. Sergeev); vectoriality, cultural relevance (N. Krylova); sphericity (V. Radionova); systemicity (V. Yasvin), etc.

The analysis of scientific literature showed that in the field of architecture the subject of research was the subject-spatial environment in its systemic integrity (V. Aronov, V. Glazychev, O. Gutnov, A. Ikonnikov, V. Shimko), a comprehensive study of the humanistic (Lynch), semantic (Nuberg-Schultz) and psychological aspects of the environment. Shimko) and others), a comprehensive study of humanistic (K. Lynch), semantic (K. Nuberg-Schultz) aspects of the environment and the psychology of environment perception (R. Sommer, G. Proshansky, A. Rappoport, E. Hall). A. Ikonnikov provides several definitions of the environment, the most capacious of which we consider to be following: environment is a spatial and temporal whole that includes physical objects, forms of behavior, and systems of human activity. This is a concept that reveals the connectedness of the world, the connection of the microcosm of our "I" with social life and the immensity of the universe [p.126]. He also believes that the living environment is the entirety of the conditions of human existence, which is considering in different spatial dimensions. The environment is a changeable, moving, continuous system, the existence of which connects space, time and movement into one whole [p.26]. V. Glazychev, O. Gutnov, A. Ikonnikov, G. Zabelshansky, I. Lezhava, A. Rappoport, I. Rosenson, S. Stepanova, V. Shimko, N. Morgun, L. Reznitskaya, A. Skopintsev and others consider the environment from the standpoint of a scenographic approach, socio-cultural scenography, as a performance of life that does not finish.

Modern domestic scientific thought does not go beyond the generally accepted interpretations of the phenomenon of the "architectural environment", starts from its limited understanding, and does not use an expanded set of possibilities in design practice. The achievements in the theory of architectural design relate to a separate area of research interests. Authors such as A. Asherova, Y. Bozhko, A. Belikov, V. Holoborodko, and V. Mironenko are working on the problems of architectonics, combinatorics, and ergonomics in design. Regulatory documentation on architectural and design design, the specifics of architectural drawings are studied by O. Horbyk, A. Lomovskyi, V. Smoliak, V. Ocheretnyi, V. Kovalskyi, and others. The issues of architectural and design composition, artistic forming, geometry and semiotics are reflected in the works of V. Krynskyi, I. Lantsov, M. Turkus, V. Mykhailenko, M. Yakovlev, O. Kashchenko, S. Semka. The issues of reconstruction of public buildings and complexes are summarized by O. Sleptsov, V. Timokhin, N. Shebek, T. Malik, S. Semka, and others adhere to historical and cultural priorities and established concepts in the study of architectural design categories.

There is a contradiction between the degree of scientific interest in the phenomenon of "environment" and the lack of development of a categorical apparatus that is basic for the theory and practice of environmental design. This determined the object, subject, purpose and object of the study.

The object of research - is the phenomenon of "architectural environment".

The subject of the research - is the characteristics of the architectural environment (properties, qualities, parameters, boundaries, structural and component composition, etc.), which allow to expand the professional capabilities of designers of the architectural environment.

The goal is to identify and summarize the characteristics of the phenomenon of "architectural environment", to outline a new problem field in the study of the environment as an object of design.

Objectives:

-to reveal the concept of "environment" from interdisciplinary, general philosophical positions;



- to generalize the characteristics of the phenomenon of "architectural environment";
- to identify "white spots" and promising directions in the study of built environments.

There are many definitions of the environment in scientific sources of different directions, among which we will highlight the following: environment is a spatial and temporal whole that includes physical objects, forms of behavior and systems of human activity. The living environment is the entirety of the conditions of human existence, which is considering in different spatial dimensions. The environment is a changing, moving, continuous system, the existence of which connects space, time and movement into a single whole. Environmental formations are classifying according to various characteristic features: by origin; by the scale of space development; by dominant functions; by perception, etc. The following characteristics of the environment are: plasticity; activity; dynamism; community; configurability; saturation; integrative; cultural relevance; sphere; system. The following parameters of the environment were defining: breadth; intensity; modality; degree of awareness; stability; emotionality; generalization; dominance; coherence; activity; mobility. It was found that the environment is defined by boundaries and composition. The boundary determined by the scale, the ability to assimilate; the composition is a set of conditions, circumstances surrounding a person. The unit of measurement of the environment is a person, a group of people; the unit of design is the environmental situation. According to researchers, the components of the environment that define its structure are: environmental systems, material, process subjects; human factors; program of environmental activities; physical environment (architecture, external and internal design, combined elements, etc.). The main functions of the environment are: goal-setting and meaning-making; reproduction of values; accumulation, storage and transmission of the best elements of culture; evaluative and normative; communicative; social integration; organizational; recreational; development of the material and spatial environment. Among the functions of the environment are: functions-goals (adaptive, syndicate, creative); functions-methods (communicative, informational, cognitive, emotional, conative, creative). Let's try to summarize this information in the form of Table 1.

Table 1. SUMMARAZING THE CONCEPT OF “ENVIROMENT»

ENVIRONMENT	STRUCTURE	FUNCTIONS	OPTIONS	FEATURES
1	2	3	4	5
type of socio-cultural practice; object and subject of design, resource of joint activity; derivative of environmentally creative actions and existing tradition, reflecting a certain way of life; zone of interaction of various systems; system of relations; system of objects and means of natural, social and subject environment; system of influences; fact, factor, conditions, means of development	subjects of the process; human factors; physical environment; material manifestation; spatial-subjective; social; behavioral and event programs; environment; spiritual manifestation; world of mass communication; subcultural manifestation; activity; attitude; values;	organization of a system of influences and conditions that create opportunities for the disclosure and development of interests; creation of conditions that ensure the possibility of meeting personal needs; creation of life technologies in accordance with natural and social characteristics of development;	latitude; intensity; modality; degree of awareness; stability; emotionality; generalization; dominance.	plasticity; activity; dynamism; community; configurability; saturation; structuring; integrative nature; vectorization; cultural relevance; systematization; mobility; ability to assimilate adaptation; specificity uniqueness integrity openness

	signs; symbols; information field; spatial field of certain relations; force field.	information and cognitive function; goal setting and meaning-making; reproduction of values; accumulation, storage, transmission of culture; evaluative and normative; communicative; social integration and self-evaluation function; organizational; recreational; development of material and spatial environment		certainty variability; historicity
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The most general classification features are showing in Figure 1. It demonstrates the division from 2 fundamental blocks - objective reality and subjective perception, personal or group interests. It is the first block of environmental sustainability that is the object of project research. Subjective factors and information are the most significant in terms of ensuring the individuality, identity of the environment, its recognition and viability. The analysis of research in the field of culture and architecture (O. Gutnov, A. Ikonnikov, et al.) allowed us to identify the following features and properties of the environment: it is specific, unique, as a system - holistic, open, continuous, changing, historical; it manifests the unity of the static and dynamic; it is a sphere of activity and a situation that obliges to certain forms of behavior; its spatial characteristics have a shape, geometry, image, ecology; it can be designed, modeled, changed, created; it educates; its integrity is not closed on itself, but is associated with socially determined forms of human behavior; its formation is aimed at: organization of functional processes; consolidation of the structure of values; ensuring established forms of behavior (Table 2). The architectural environment is a specific spatial and temporal formation that integrates content and social relations, and stimulates individual actions. It is historical, open, and ready for development.

The architectural design approach is environmental. The object of research and design is the architectural environment. The design is based on a way of life that generates different environmental situations. According to the researchers, the environmental approach implies the unity of the "shell" (object-spatial environment) and life content (functional processes).

Table 2. DESIGN AND PERSPECTIVE CONCEPTS OF THE "ARCHITECTURAL ENVIRONMENT" PHENOMENON

Architectural environment	
A work of environmental art, the unity of the "shell" (object-spatial environment) and life content (environmental processes); a force field in which systems of unequal, individual centers interact.	
Structural and	Architectural basis, processes, equipment and means of their interaction;

component composition	various environmental situations derived from lifestyle; variety of functions - variety of forms - variety of impressions; multilayer structure - tiered reflection in perception; peculiarities of perception and experience of space and time; diversity of scenarios; "Chrono tope", "visual and force field", "total image of the environment", "space-time frame", "cultural layers and pictures", "markers - thematic zones - integrated scenario", "loci and patterns", environmental dialogues; architectonics - plasticity - light and color state of the environment
Signs and properties	The environment is specific, unique, as a system - holistic, open, continuous, changing, historical; it manifests the unity of the static and dynamic; it is a sphere of activity and a situation that obliges to certain forms of behavior; its spatial characteristics have a shape, geometry, image, ecology; it can be designed, modeled, changed, created; it educates; its integrity is not closed in on itself, but is associated with socially determined forms of human behavior; its formation is aimed at organization of functional processes; consolidation of the structure of values; ensuring established forms of behavior. The discrepancy between the real model of the environment and its image in the mind is due to the exaggeration of details and properties that are somehow related to the values important to the individual
criteria	Each system (subsystem) at any time in its history should have a compositional integrity: a clear, understandable idea; a conscious accent-dominant structure; a necessary minimum of active artistic, moral, aesthetic and other themes that correspond to the general figurative orientation.
functions	adaptive-adaptive, communicative-dialogical, humanitarian-axiological, event-based, humanitarian-cultural, personality-oriented, ecological-psychological, behavior modification, structural-functional, systemic, integration, harmonizing, etc.
specifications	image of the environment, the integrity of a series of artistic and aesthetic impressions; freedom of self-development; emotional saturation, figurative system, environmental atmosphere, spirit of the area, emotional sign, personal image of the environment
Artistic image of the architectural environment	

A variety of functions leads to a variety of forms, which, in turn, create a richness and diversity of impressions. The unity of the environment is determined by a holistic structure that does not cover the entire space, but is created from a series of main nodes connected by linear elements. Therefore, the whole is represented as a force field in which systems of unequal, individual centers interact. At any given moment, all systems form a single complex, specifying the state of the whole in the chronotope. The criterion for the formation of an environmental formation: each system (subsystem) at any point in its history must have compositional integrity: a clear, understandable idea; a conscious accent-dominant structure; the necessary minimum of active artistic, moral, aesthetic and other themes that correspond to the general figurative orientation. The essence of the movement is to move to higher and higher levels of system organization. The environmental approach requires that all elements, objects and details (regardless of their source and place in the environmental system) be subordinate, consistent in their influences and actions. The main problem in environmental specificity is the problem of interconnection of system components.

Environmental researchers face the following tasks: to distinguish a number of levels from elementary units to the complex as a whole; to find a connection between the integrity at the level

of the structural unit and at the level of the environment. To do this, large elements are divided into structural units, each of which is clearly defined, i.e., should be perceived as a whole, sufficiently characterized by its qualities, so that the pattern of connecting such units into a single organism can be easily recognized. Each class must also have special features that are easy to recognize. In other words, a separate fragment of integrity must meet the requirements by limitation; interconnection, compactness; recognition.

The multilayered structure of the architectural environment is reflecting in our perception in layers. At any stage of the development of any structural element, the following tasks need to be addressing: to ensure the integrity of a series of artistic and aesthetic impressions connected by a common space, concept, time, action, etc.; to balance the parts of the whole; to provide, by various means, the level of freedom of self-development that corresponds to the place of the component in the semantic and aesthetic hierarchy of the environment. Each level has peculiarities that determine the perception of space and time; qualitative differences are determining by the attitude of a person to each of them. The perception of space and time depends on a particular situation; the experience gained by a person. The discrepancy between the real model of the environment and its image in the mind is due to the exaggeration of details and properties that are relating to the values important to the individual. The consciousness does not perceive the neutral, indifferent, insignificant for a person. Such factors do not create a personal image of the environment. The environmental approach emphasizes taking into account the personal factor - the subjectivity of each person's perception of the environment. In this regard, the design task is to form a positive subjective emotional image that is forming in the contact of a person with a real model of the environment. On this way, it is advisable to take into account the experience of theatrical and staging activities of famous architects, the scenographic approach to environmental design (E.G. Craig, Frank Gehry, D. Pawson, S. Kalatrava, H. Koike, Latvian School of Architecture, etc.) We would like to highlight an innovative approach in which space plays the role of an independent environmental actor, "deconstructivism", the concept of minimalism with the movement "from nowhere to nowhere", spatial experiments with nylon structures on a frame, art techniques: collapsible equipment accompanying and duplicating people's relationships; spatial situations with a variety of scenarios; application of avant-garde, comic book, grotesque, plane decoration techniques; realization of style mix, eclecticism, images of "man-made ruins"; support for the trend towards conditional environmental theater, mystery, show etc. This allows us to expand the conceptual apparatus of the "architectural environment" with such concepts as "chronotope", "visual and force field", "total image of the environment", "spatial and temporal framework", "cultural layers and pictures", "experienced time and space", "markers", "mise-en-scene", "thematic zones", "loci and patterns", etc. The system of impressions is formed from a number of scenarios that are not synchronized, do not cover a single space, and act both autonomously and overlapping. In this case, the architectural environment acts as a "moving substance" that is perceived in the dynamics of interaction with users, in spatial complications, metamorphoses, and the superimposition of "pictures". It is realizing in the organization of functional, semantic, visual, "hereditary", etc. connections for various conditions of contact between a person and the environment. The lifestyle is the scenario impulse; the artistic image of the architectural environment, the ambient atmosphere, the spirit of the area, the emotional sign of the environment are the goal and result of the design activity.

Based on the above, the emphasis on design and project analysis of the architectural environment is changing. Attention is focusing on cultural meanings, the meanings of environmental forms, identifying the structure of emotions and their material carriers, activity scenarios, stable types of human behavior, ensuring freedom of choice, and focusing on the psychological aspects of perceiving the environment.

Compositional tasks: determining the principles of style formation, identifying internal impulses, signals that provide aesthetic guidance; ensuring the integrity of a series of artistic and aesthetic impressions connected by a common space, concept, time, action, etc.; determining the

culminating system of reference points; creating an open system of forming, the emergence of an artistic image of a work of environmental art.

Conclusions. There is a wide international scientific interest in the phenomenon of "architectural environment" as an object of study, which allows extrapolating the achievements of philosophy, psychology, pedagogy, cultural studies, etc. into the field of architectural design. The definition and analysis of this concept makes it possible to focus on design reserves.

Environment is a spatial and temporal whole that includes physical objects, forms of behavior and systems of human activity. The living environment is the entirety of the conditions of human existence, which is considering in different spatial dimensions. The environment is a changing, moving, continuous system, the existence of which connects space, time and movement into a single whole. *The architectural environment* is a specific spatial and temporal formation that integrates subject content and social relations, stimulates individual actions. It is historical, open, and ready for development.

The architectural environment acts as a "moving substance" that is perceived in the dynamics of interaction with users, in spatial complications, metamorphoses, and the superimposition of "pictures". It is realizing in the organization of functional, semantic, visual, "hereditary", etc. connections for various conditions of contact between a person and the environment. The lifestyle acts as a scenario impulse; the artistic image of the architectural environment, the ambient atmosphere, the spirit of the area, and emotional sign of the environment are the goal and result of the design activity.

The article identifies and generalizes the characteristics of the architectural environment that allow expanding the professional capabilities of designers of the architectural environment and outlines a new problem field in the study of the environment as a design object. The emphasis are placing on taking into account the personal factor - the subjectivity of the perception of the environment by each person, the task is to investigate the sources of formation of a positive subjective emotional image formed in the contact of the individual with a real model of the environment. On this way, the experience of theatrical and staging activities of famous architects, the stenographic approach and the art approach, which expanded the conceptual apparatus of the "architectural environment" with such concepts as "Chrono tope" "visual and force field", "total image of the environment", "space-time frame", "cultural layers and pictures", "time and space experienced", "markers", "thematic zones", "loci and patterns", etc. The lifestyle acts as a scenario impulse; the artistic image of the architectural environment, the ambient atmosphere, the spirit of the area, and emotional sign of the environment are the goal and result of the design activity.

The subject for next research may be the clarification and in-depth analysis of the identified concepts, means of their graphic interpretation, etc.

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СЕРЕДОВИЩЕ ЯК ОБ'ЄКТ ДОСЛІДЖЕННЯ В АРХІТЕКТУРНОМУ ДИЗАЙНІ

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Анотація. Стаття «Середовище, як об'єкт дослідження в архітектурному дизайні» присвячена аналізу феномену « архітектурне середовище» задля виявлення якостей та можливостей об'єкту проектування, які досі не враховані в проектній практиці ДАС. Розглянуті визначення «середовища» як між наукового явища (філософія, педагогіка, психологія, соціологія тощо), уточнено поняття «архітектурне середовище» стосовно специфіки професійної діяльності дизайнера. Встановлені характеристики, ознаки, властивості, параметри, критерії сформованості середовищного утворення. Розглянуті такі позиції як «межі та склад», «структурно- компонентна визначеність» , функції середовища в культурологічному контексті. Ця інформація узагальнена в таблицях. Зроблено порівняння традиційних та інноваційних методів та напрямків дослідження архітектурного середовища. Здійснено наголос на принципових позиціях, які залишаються поза сферою інтересів дослідників: середовищ ний сценарій, мізан сценічний малюнок, динамічна композиція, середовища ситуація та діалозі, дух місцевості, дух часу, атмосфера середовища, спосіб життя та художній образ архітектурного середовища.

Ключові слова: архітектурне середовище, динамічна композиція, дизайн, суб'єктивний емоційний образ, культурний контекст, дизайнерська практика.