

<https://doi.org/10.51301/ace.2024.i2.03>

Art image in architecture and its structure

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Abstract. The article discusses the specifics of the perception of architecture as a complex spatial information system. The concept and features of the artistic image in architecture are considered. The purpose of the work is to assess the importance of the figurative component in the system of factors influencing the process of architectural design, as well as to trace the mechanism of influence of the artistic concept, its expression in an architectural work. Architecture is binary by nature, i.e. it combines material and spiritual (figurative and artistic) principles.

Keywords: *artistic image, artistic reality, artistic concept, creative process, aesthetics.*

1. Introduction

Creative goals and tasks are set and solved by scientists as well as artists, writers and architects, but they solve them in different ways - art, for example, thinks in images. And in science there is logic as a universal tool of thinking, applied in any science, this is the law of identity, the law of contradiction, the law of the excluded third. There is also logic in art, but this is the logic of artistic thinking. A distinctive feature of art is the presence of an artistic image. In general, this is any phenomenon creatively recreated by the author in a work of art. It is the result of the artist's comprehension of any phenomenon, process.

An artistic image is a special form of artistic thinking that allows us to see the world through the prism of artistic expression. It is a kind of symbolic reflection of reality, which can be created by various artistic means. Art uses the language of images, expresses reality not passively, but actively, meaningfully. The artist's ability to translate a thought into an image should be active, that is, to overcome the material, to embody the image in the material, only then will a work of art «arise». One of the spheres where the artistic image manifests itself in all its beauty and splendor is architecture.

Architecture, as an art, has its own characteristics and unique characteristics. It combines functionality and aesthetics, practical benefits and artistic value, this is its specificity. An architectural work is always twofold – it serves specifically practical purposes – and at the same time expresses a thought, an idea of general significance. It combines the material, the non-figurative, and the figurative, the spiritual, combines utility and beauty [1]. And it is through the artistic image that creates this unity that architects create unique spaces, buildings and structures, leaving their mark on history and culture. We understand the architectural image with our soul, but it is quite difficult to translate it into the language of concepts. This applies to an architectural image more than to a verbal, or pictorial, or sculptural image. Architecture, like music, belongs to abstract art. Music is able to convey, like no other art, all the movements of the soul.

And the main thing here is that a work of architecture, like any great work of art, is a person's path to the highest.

The artistic image in architecture can be expressed in various ways. It can be realized in the form of grandiose and majestic structures that inspire awe before the power and greatness of the human mind. Structures such as the Eiffel Tower in Paris or the Pyramids of Giza in Egypt become symbols of nations and are the embodiment of an artistic image in architecture.



Figure 1. Architectural ensemble in Giza



Figure 2. Tower in Paris (France), arch. Eiffel

However, an artistic image can also be realized in the smallest details of an architectural ensemble. Every line, every element of decor, every proportional ratio has its role in creating an overall aesthetic impression. The architect, as an artist, strives to find harmony and balance between form and function, creating a space that evokes emotions and admiration from the viewer.

An artistic image in architecture can also be symbolic. Buildings and structures often carry a deep meaning and reflect the cultural, religious or historical values of society. For example, the State Hermitage Museum in St. Petersburg, in addition to its architectural beauty, is a symbol of Russia's rich history and culture.



Figure 3. The Winter Palace - The State Hermitage Museum in St. Petersburg, arch. Bartolomeo Francesco Rastrelli

The artistic image in architecture allows us to see familiar things and places in a new light, revealing their hidden beauty and emotional potential. It allows architects to express their ideas and emotions, their individual unique style, creating unique spaces and structures. The artistic image in architecture is not only a form of artistic thinking, but also a way to penetrate into the depths of the human soul and take us into the world of beauty and inspiration. And, nevertheless, architecture is not limited to the presence of an artistic image, which «is not given, but arises, is born», in the words of Eisenstein [2]. And this figurative beginning has a multi-valued and even somewhat indefinite character in the art of architecture. The image in architecture has the advantages of depth, strength, but not accuracy. The artistic image turns out to be broader and more significant than its original intention, and the power of its impact is difficult to explain. Architecture is dominated by ideas. Architectural ideas can be global, like the Voisin Le Corbusier plan for the center of Paris. And there are local ones – the plastic and functional idea of a specific project.

Architecture is one of the most powerful and expressive arts, able not only to meet the practical needs of society, but also to evoke emotions and impressions. The artistic concept in architecture is a key factor determining the form, function and aesthetic impact on the environment.

Artistic reality in architecture should be understood as an artistically organized space subordinated to the performance of functional tasks and forming an emotionally saturated atmosphere that conveys the artistic concept of the world and personality. The main quality of artistic reality in architecture is artistically mastered space.

An artistic concept in an architectural work begins with an idea, which is then developed and implemented. It can be inspired by various factors, including cultural, historical, social and environmental aspects. Architects strive to create a harmonious combination of functionality, aesthetics and meaning in their works so that they serve not only utilitarian

purposes, but also bring beauty and depth to the environment.

One example of an artistic concept that has found expression in an architectural work is the Gothic style. He became famous for his grand cathedrals, such as Notre Dame in Paris or Westminster Abbey in London.



Figure 4. Notre Dame Cathedral



Figure 5. Westminster Abbey in London

Gothic architecture sought to express spiritual depth and sublimity through the use of high vaults, rosettes, flying arches and intricate details. Each element of the Gothic cathedral served the whole, creating an impression of grandeur and mystery. This style of architecture became the embodiment of medieval religiosity and culture, and its concept still influences modern architecture [3].



Figure 6. The Pantheon in Rome

The author of the Pantheon, Apollodorus of Damascus, is believed to have created a model of the universe, he embodied the ancient worldview and ancient cosmogony in a cylindrical building. So, the height of the dome, which symbolizes the celestial sphere, and the cylinder, which symbolizes the earthly space, are equal. This balance of the earthly and heavenly space symbolizes their consistency and harmony [4]. Uniform load distribution is carried out due to a multi-tiered system of arches. Plastic treatment of the walls and the dome creates a horizontal rhythm, descending upward caissons, to a light hole with a diameter of 9 m. The rhythm of the massive marble pillars and orders of the lower tier reveals the monolithic geometric shape of the interior space.

Modern architects also strive to express their artistic concepts through their works. For example, Zaha Hadid, a famous architect, is known for her bold and innovative projects. Her works are often characterized by organic forms, dynamism and unusual use of materials. Hadid strives to create buildings that stimulate the imagination and cause surprise, embodying his artistic concept in every detail and proportion.

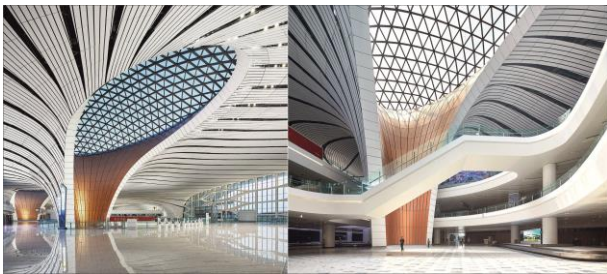


Figure 7. Beijing Daxing Airport, arch. Zaha Hadid

A rhythmic row of vertical pylons of the Officers' House in Almaty supports a bright, powerful attic floor, elongated throughout and facing the Memorial of Glory in the park named after 28 Panfilov Guards - a means of expressing the essence of the building, the embodiment of military harmony, organization, subordination, heroic beginnings. The artistic concept is revealed by three iconic means: 1) through plastic: the strict rhythm of the pylons is superimposed on the smooth curve of the building and conveys the idea of military harmony and organization; 2) through the texture of the surface and the method of processing granite, which the pylons are lined with: the rough nature of the stone, its inherent hardness symbolize the heroic beginning; 3) through the language of color: a contrasting combination of protective green and light beige openness is used in the building.



Figure 8. Officers' House in Almaty

To express an artistic concept in an architectural work means to create not only a functional structure, but also a work of art that can transport us to another dimension. It is important that the artistic concept is firmly connected with the surrounding space and reflects its unique features. The environment, natural or equally anthropogenic, the construction site, carries the main message of creating an architectural form – this is how the image of the Le Corbusier chapel in Ronchamp arose - amazing views of the green sea of the forests of the Franche-Comté region and the Vosges mountain range (France-Germany) were reflected in the artistic image of the chapel of Notre-Dame-du-Fr [5].



Figure 9. Le Corbusier - Chapel of Notre Dame du Haut

The artistic concept in architecture is an integral part of the creative process of architects. It allows you to create unique and inspiring works that not only serve practical purposes, but also have an aesthetic and emotional impact on people. The artistic concept in architecture helps to shape the environment, reflect culture and history, as well as inspire and bring beauty into our lives.

2. Materials and methods

Architecture, as art, is permeated with artistic images that not only determine the appearance of buildings, but also affect the visual perception of space. This article is aimed at analyzing the structure of the artistic image in architecture and revealing its key role in the formation of visual experience. Immersion in the analysis of image elements, such as shape, color, and composition, will help to understand how these components interact, creating unique aesthetic characteristics of architectural works. Within the framework of a structured approach, we will also consider how visual perception in architecture turns into a means of expressing emotions and has an impact on the functional aspects of buildings, emphasizing the importance of the synthesis of beauty and practicality in design.

A system of architectural elements, practically expedient and logically meaningful, are used as a means of communication between people in the course of their activities, forming the semantic basis of the language of architecture. The elements of the image in architecture are the main building blocks that form the visual perception of the building. Let's analyze the key concepts of the system of architectural elements.

1. Shape:

- Geometric form view: analysis of geometric shapes of a building, such as rectangles, circles, or combinations thereof, and how they interact to create complex shapes – geometrically clear or irrational.

- Shape structure: Consideration of how structural elements and their proportions affect the visual shape of a building.

2. Color:

- Palette: the study of the choice of a color palette in architecture and its impact on perception. For example, warm shades can create comfort, and cold ones can create a feeling of coolness. Color is able to support and reveal the spatial design and, above all, the shape of the volume [6].

3. Line:

- Direction: evaluation of the direction of lines, their angles and lengths in the context of a building that affect the perception of structure and dynamics.

4. Texture:

- Materials: the study of the use of various materials and their textures in architecture, including stone, glass, wood, and how they affect the feeling of the surface.

5. Composition: the composition plays a key role in shaping the visual perception of the building, combining its elements into a harmonious whole. Within the framework of the architectural composition, several important aspects are highlighted:

- Balance: symmetry and asymmetry: the study of symmetrical and asymmetric compositions, where the distribution of mass and elements creates a visual balance or lack thereof, the analysis of the balance between the various elements in the building to achieve harmony in visual perception.

- Proportions: golden ratio - the use of proportions based on the golden ratio to achieve harmony and aesthetic balance in the placement of elements.

- Rhythm: consideration of repetitive elements and their distribution, creating rhythm and dynamism. The rhythmic development of the composition can go horizontally or vertically, in a square, circle, less often – in an oval. Thus, rhythm organizes perception.

According to B.R. Whipper [7], «in architectural composition, the decisive word belongs not to the forms themselves (constructive and decorative), but to their scale, proportions and rhythm. The artistic impact of architecture is based on these three concepts». The study of the interaction of these means helps to understand how an artistic image is formed in architecture and how the viewer perceives and evaluates each element of the building.

One of the most important qualities of an artistic image is its individuality, concreteness. Through careful management of the system of architectural elements, the composition in architecture can emphasize the individuality of the building, expressing its functionality and aesthetics. This carefully balanced approach to composition is the key to creating visually appealing and harmonious architectural images. Dissatisfaction with the facelessness of a mass typical building indicates the absence of artistry in its images.

The emotional aspect of architecture concerns the ability of buildings to evoke emotions in viewers and residents. The emotional impact of architecture is determined by the highest aesthetic need of cognition. Let's analyze the key elements of this aspect:

1. Form and expressiveness:

- organic shapes: the study of organic shapes and their ability to evoke emotional reactions, such as circles and smooth curves, which are often associated with harmony and peace.

2. Color palette:

- psychology of color: consideration of the psychological impact of colors on human emotions, for example, the use of warm tones to create comfort or cold ones for a sense of stability.

3. Light and shadows:

- the play of light and shadows: how light falls on a building and creates shadows can affect its perception, causing feelings of mystery or security.

4. Materials and textures:

- warmth and cold: reaction to the use of various materials and textures, such as wood, stone or glass, in the context of their emotional background.

5. Context and symbolism:

- historical context: how the historical context or symbolism associated with a building can evoke emotions, for example, a combination of styles to convey a certain atmosphere.

Using these emotional elements in architecture, architects and designers have the opportunity to create structures that are not only functional, but also evoke lively and deep emotional responses from viewers and consumers.

The functional aspect in architecture focuses on how the design and structure of a building respond to the needs and purposes of its use. Let's consider the key elements of this aspect:

1. Spatial organization:

- efficient use of space: how the various zones and rooms in the building are organized for optimal functioning and convenience of consumers.

2. Ergonomics:

- adaptation to human use: considering human scale, movement and convenience to create ergonomic spaces.

3. Technical innovations:

- introduction of technologies: how new technologies can be integrated into the design of a building to increase its efficiency and meet modern needs.

4. Sustainability and energy efficiency:

- environmental sustainability: the use of materials and technologies that promote environmental sustainability and energy efficiency.

5. Flexibility of space:

- adaptability and changeability: how a building can be adapted to different functions and needs over time without major changes in its structure.

6. Safety and amenities:

- Safe and comfortable conditions: ensuring the safety of residents and creating comfortable conditions inside the building.

The integration of these functional aspects into the design of architectural objects allows not only to create beautiful structures, but also to ensure their optimal use in terms of practicality and efficiency.

3. Results and discussion

Architecture is not only a collection of physical structures and materials, but also art that can generate emotional reactions in people. It has a huge emotional potential that can influence our feelings, mood and memories.

The artistic perception of architecture begins with the first glance at a building or structure. Constructive forms, lines, proportions, colors and textures — all these elements play an

important role in creating an emotional connection between the viewer and architecture. For example, high and fast lines can evoke a sense of dynamics and energy, while smooth curved lines can evoke a sense of harmony and tranquility.

However, the emotional impact of architecture is not limited only to the appearance of the building. Internal arrangements, lighting, spatial compositions, and even sounds and smells affect our perception. Different styles of architecture, such as Gothic, Baroque, modernism or modern minimalism, evoke different emotions in us. For example, Gothic cathedrals with their majestic glass windows and stained-glass windows can evoke awe and admiration, and modern glass skyscrapers can evoke a sense of strength and progress.

The emotional potential of architecture is also manifested through connection with the environment. Buildings that fit into the landscape and consider its natural features can create harmonious interaction and tranquility. Architecture can also influence social interaction by creating public spaces that facilitate meetings, exchanges and collaboration [8].

In addition, architecture can be associated with our memories and emotional states. The buildings in which we lived, worked or spent our childhood can cause us nostalgia and warm memories. It is interesting to note that even fictitious buildings from books or movies can evoke emotions and associations, as they become symbols of certain stories and characters.

The artistic perception of architecture is based on the emotional potential of this art. From appearance and forms to interior space and interaction with the environment, architecture has a strong influence on our emotions and our perception of the world. It can evoke feelings of admiration, awe, joy, comfort or even nostalgia in us. All this makes architecture an integral part of our culture and affects our emotional state.

Artistic perception is a phenomenon that has been exciting and inspiring people for centuries. It opens up to us the wonderful world of art, allowing us to dive into the depths of human emotions, thoughts and experiences. However, what mechanisms and laws operate our perception of works of art?

Firstly, one of the key mechanisms of artistic perception is an emotional reaction. The artist strives to evoke certain feelings in the viewer, be it joy, sadness, fear or delight. He uses a palette of colors, composition, chiaroscuro and other artistic techniques to convey his emotional experiences. As a result, the viewer empathizes with what is happening on the canvas or in the book, experiences with the characters and recognizes himself in their stories.

Secondly, the perception of works of art is closely related to imagination. When we look at a painting or read a book, our mind is filled with images and ideas created by an artist or writer. We enter a virtual world where everything is possible, and our imagination begins to work at full capacity. As a result, there is an interaction between the work and the perceiver, which allows us to form our own interpretation and meaning of the work of art.

The third important mechanism is the visual and verbal code. The visual code assumes the perception of a work of art through color, shape, line and space. The verbal code is related to the use of language and text in a work of fiction. They interact and complement each other, helping us to understand and interpret the work. Words and images create a complex mosaic image that excites our imagination and makes us think about the deep meaning of the work.

Architecture does not depict or reproduce real reality, but creates works that have something in common between them,

which has become a canon, a constant. Elements such as a wall, a support, a beam, a ceiling, an arch, a door, a window opening, a staircase, a vault, a dome have been used in architecture of different countries for thousands of years. A set of such elements and the basic principles of their combination and conjugation represent a kind of text, the language of architecture for architecture. Artistically meaningful architectural space conveys the basic semantic structures of public consciousness. So architectural semantics studies architectural language and its components from the point of view of expressing a specific meaning. It is then that it becomes clear that the problem of the artistic emotional language of architecture arises as a creative problem, and the perception of an architectural work as a process of co-creation.

However, in addition to mechanisms, there are also laws that guide artistic perception. One of such laws is the law of contrast. Contrasting elements in the work, be it colors, shapes or emotions, cause a stronger reaction in the viewer. They create dynamics and tension, attracting our attention and making the work more memorable.

Another law is the law of balance. The artist strives to create a harmonious combination of elements in the work so that it turns out to be visually balanced. The balance between the figure and the background, between light and shadow, between colors and lines creates a sense of harmony and satisfaction for the viewer.

And finally, the law of motion. An architect can use various techniques, such as dynamic composition, diagonal lines, or motion images, to convey a sense of movement or direction in the work. This gives the work energy and activates the viewer's perception. M.Ya. Ginsburg, who wrote the book «Rhythm in Architecture» in 1923, concludes that «the whole history of architecture is essentially a history of various manifestations of the purest dynamic laws of rhythm. Dynamics and its sharp force – aren't these the elements of modern artistic influence, aren't these the features most eagerly sought by the architect of today?».

4. Conclusions

I.V. Zholtovsky believed that «the whole force of influence, which consists in an artistic image, is precisely determined by the degree of dynamism. The law of differential development leads us to the law of the growth of the organism, the growth that overcame the force of gravity in the vertical direction and inertia in the horizontal».

Thus, the mechanisms and laws of artistic perception play an important role in how we perceive and interpret works of art. Emotional reaction, imagination, visual and verbal code help us to immerse ourselves in the world of art, and the laws of contrast, balance and movement provide visual appeal and harmony of works. Thanks to these mechanisms and laws, we can enjoy and understand art in all its beauty and depth.

Visual perception plays a leading role in the complex sensory comprehension of the architectural image. The perception of an architectural image is summed up on the basis of spatial, plastic and light-color characteristics and represents a complex fusion of artistic and functional aspects. The role of visual perception in architecture is not limited only to the appearance of the building, but also affects emotional and functional aspects. Emotional elements such as shape, color and light evoke a variety of emotional responses from view-

ers, making buildings not just functional structures, but art interacting with feelings and mood.

On the other hand, the functional aspect highlights the importance of adapting buildings to the needs of the population, integrating new technologies and creating sustainable and energy-efficient spaces. In combination with an artistic image, functional solutions emphasize the principle of universal design, providing an optimal combination of aesthetics and practicality.

Thus, the architectural image, rich in its artistic and functional aspects, has a profound impact on our perception of the world around us, forming not only the physical environment, but also the emotional and cultural aspects of our life.

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Сәулет өнеріндегі көркем кейіпі және оның құрылымы

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Андатпа. Мақалада архитектураны күрделі кеңістіктік-аппараттық жүйе ретінде қабылдау ерекшелігі қарастырылады. Сәулет өнеріндегі көркем образдың түсінігі мен ерекшеліктері қарастырылады. Жұмыстың мақсаты-архитектуралық жобалау процесіне әсер ететін факторлар жүйесіндегі бейнелі компоненттің маңыздылығын бағалау, сонымен қатар көркемдік Тұжырымдаманың әсер ету механизмін, оның сәулет өнеріндегі көрінісін қадағалау. Сәулет табиғаты бойынша екілік, яғни материалдық және рухани (бейнелі-көркемдік) принциптерді біріктіреді.

Негізгі сөздер: көркем кейіпі, көркем шындық, көркем тұжырымдама, шығармашылық процесс, эстетика.

Художественный образ в архитектуре и его структура

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Аннотация. В статье рассматривается специфика восприятия архитектуры, как сложной пространственно-информационной системы. Рассматриваются понятие и особенности художественного образа в архитектуре. Цель работы – оценить важность образной составляющей в системе факторов, оказывающих влияние на процесс архитектурного проектирования, а также проследить механизм воздействия художественной концепции, ее выражение в архитектурном произведении. Архитектура по природе своей бинарна, т.е. объединяет в себе материальное и духовное (образно-художественное) начала.

Ключевые слова: художественный образ, художественная реальность, художественная концепция, творческий процесс, эстетика.

Received: 27 February 2024

Accepted: 15 June 2024

Available online: 30 June 2024