

## ART HISTORY, ARCHITECTURE

---

Portnova I.

### **‘MACROCOSM’ IDEAS IN THE STYLE OF MODERN ARCHITECTURE: PROBLEMS, SOLUTIONS AND INNOVATIONS**

#### **Abstract**

The paper presents issues of style of modern architecture of the XX – early XXI centuries gravitating toward ideas of the big macroscopic spaces. Various artistic manifestations brightly reflecting the new tendencies of the era determinate its development. The architecture of postmodernism that provided various style alternatives began more gravitate towards reflecting the great ideas of the ‘macrocosm’ by the end of the 1980s and 1990s. As against the ancient monumental buildings that act as bearers of traditional functions, modern architecture presented a new philosophy of looking at the world, society and the era as a whole. Modern macroscopic complexes form a new sphere of life-sustaining activity by reflecting daily needs in a comfortable and ecologically significant environment.

**Keywords:** macrocosmic spaces, modern architecture, modernism, style, era, environment, techniques, traditional functions, constructivism.

#### **INTRODUCTION**

European architecture of the XX century is characterized by a wide variety of styles. After the modernism era, it received a fresh impetus, which firstly seemed to be unexpected. However, it was prepared by previous development. It is commonly known that modernism came as a real impetus for the discovery of new constructive and artistic solutions. Stylistic diversity began to be interpreted as an expression of the general consistent pattern for the development of a new era. What we call a stylistic rise was an expression of a deeper understanding of reality, a more serious analysis of modern era and history. What it involves is about some trends of ‘cosmism’ in modern European architecture. Currently, we cannot yet speak about a style picture established in visual arts and architecture, but their significant trends were

specified. Architectural trends of the XX – early XXI centuries, by establishing some sort of unity and forming a certain typological series on the basis of similarity, represent the general consistency for the development of modern architecture, which enlightens the social and aesthetic mechanisms in society inevitably associated with its key problems. Problems concerning solution of many life-sustaining activity issues by modern architecture and features of its style expression, as well as presentation of new forms in the modern world were such of them. This is a topical problem, which determines the significance of the article. Its novelty is that the issues of ‘cosmism’ in the style of modern architecture are not often analyzed. However, putting the question of a stylistic status of the new architecture extends the conventional view of historical styles updating the historical knowledge of architecture and opening new prospects for its development.

### MAIN PART AND RESULTS

Expression of the ‘cosmism’ style can be considered as consistent one that opens a new time of development. The purpose of the article is to reveal the main tendencies and features of its styles, which revealed itself in modern architecture by considering the necessary link of all architecture – utilitarian function, according to words of A.V. Ikonnikov – ‘public reasonability’ [1]. Domestic and foreign authors concerned this problem. Viccent Joseph Scully, Karel Teige, Eric Uhlfelder [2] when writing about the evolution process of architecture of the XX century emphasize such architecture style periods as Cubism and Constructivism. So, a fundamental study of the historian of Italian architecture Leonardo Benevolo [3] is devoted to the origins and development of modernism in architecture. The author speaks about the system of values in the historical era reasonably believing that with the change of thinking and relationships of the architect with society, new material and spiritual needs come to replace the old ones, and the artistic structure of the architectural image becomes quite another. It is necessary to have relationship with society in order to form a new architectural synthesis. Modern architecture was being born such a way. L. Corbusier is called by Mardges Bacon [4] to be an engine of European modernism, which began with the ‘second century of machine existing’. J.R. Mulryne, Krista de Jonge and Richard Morris [5] also believed that festivals, which became a kind of catalyst for new ideas, had an impact on creation of the modern European style in architecture. The ideas of ‘cosmism’, a traditional religious space, are well monitored in Marka A. Torgersona’s book *An Architecture of Immanence: Architecture for Worship and Ministry Today* [6]. The author speaks about the innovations of modern traditional space and how modern architecture influenced the construction of hieratical objects creating a new ‘image of the house’ associating with “divine transcendence” of old and new architecture. Timothy Parker, Monica Penick and Vladimir Kulic [7] wrote about the complexity of this process of reconciliation of innovative

ideas of modernist architects with established traditions of the Roman Catholic Church. They noted that some institutions of civil society sometimes approved the forms and ideas of modern architecture to please their desires in order to be modern. Matias del Campo [8], Liane Lefaivre and Alexander Tzonis [9] wrote about the replacement of traditions with innovative solutions in architecture, for example, the application of complex cosmic atmospheres. Researchers tend to see a new philosophy of 'cosmism' in them, which consists of natural painterliness and functionality. The article focuses on the styles of such architecture representing a new time measurement.

Currently, the 'cosmism' ideas are reflected in the human's idea of the world using means of architecture. In ancient times, during the Middle Ages, they were expressed to a large extent by the means of church architecture, which was a universal example and the concentration of a great idea that includes human's whole conception of the world. In fact, architecture is a model of the world order that is perfect in its essence with its system of symbols. It was designed to reflect the mythological picture of the world in archaic cultures. The compositional and planned structure of the monuments of the past was quite stable; the appearance of buildings, its facade and interior parts were formed. Symbolism no longer play an essential role in architecture of the New Time, but a human's idea of the world continued lying at the root of the architectural image and determined its meaning and a style. Let's consider the concept of a modern architectural form gravitating to unexpected constructive solutions. Artists, architects and designers may be, in search of an answer to eternal secrets of being, turn their focus toward the mysterious wisdom of ancient cultures, which gave a remarkable example of monumental synthetic architecture, as if elevating it to a pedestal of the sublime.

A wave of a new epicism – some kind of style generality that is typical in modern European architecture – is identified by such trend. Previously unused structures and materials are formed in it with fresh style forms by weaving together and create a whole complex of expressive means. Certain compositional-style stereotypes become a thing of the past. The modern architect extends the horizons of perception. We can see designer's innovative decisions, which belongs to the future, on such examples as the LORD'S Media Center in London, officially known as the J.P. Morgan Media Centre (1999), the Frank Gehry EMP museum in Washington (2000), the Heydar Aliyev of Zakha Khadid Center in Baku (2012), the King Fahad Eckhard Gerber National Library in Saudi Arabia (2013) and others. According to John Zukowski's definition, buildings of the postmodernism era in compositional variations using the latest materials and techniques have 'cosmic aesthetics' [10] causing some alien associations in human. The author believes that the era of jet airplanes and satellites of the 1960s had a strong influence on the design of modern architecture, in which large parabolic surfaces and wide spaces covered with glass dominate and architectural metal forms are a part of the common artistic

conception. For example, a huge 192-meter-high steel arch called The Gateway Arch of Saint Louis designed by Eero Saarinen in 1965, Missouri, USA, simultaneously represents personalization of the pioneers' spirit and an abstract cosmic image [11]. Its form dating back to antiquity and widely used in buildings for public worship as an ideal and holistic construction found a natural application in the architecture of the New Time.

Understanding 'macrocosm' in architecture as a model of a holistic universe, its reasonability and necessity consistently led to the search for new opportunities because the reality itself was seen as multifaceted and multisided in the internal connections of all its facets and sides. Architecture was a complex 'temple' with its own arrangement, where lines, colors and planes have significant 'codes' and are perceived as a 'text', as a chain of meanings of various substances in which a thought is expressed. A.V. Ikonnikov also wrote about this believing that architecture is a system of symbols forming into a text that includes all necessary information (utilitarian and practical, sociological, etc.) [12]. Essentially, the idea of 'macrocosm' in architecture and visual art is one of the most ancient, eternal and universal problems. There is a strong and stable thread of a human's artistic cognition of the surrounding world and his place in it from ancient to modern buildings. Almost all artistic and architectural concepts were conceived and developed as a consequence of an irresistible desire to reveal the human existence secret.

An important tendency of the 'macrocosm' architecture expressed through the desire for everything epic includes the necessary requirement of modern architecture – the creation of a comfortable living space for a human living in a big city and affected by the technogenic environment. The new social reality inevitably had to create its own type of architectural space. A.I. Nekrasov [13] rightly compares the architecture with a human himself/herself in all the complexity of his/her social being. Artistic thinking, which in more full extension covers the integrity of the world, in issue concerning architectural space, also tends to search for forms of this integrity expression, with an idea of the space, some freedom of the Universe, in which it is easy to breathe, it is possible to move comfortably and it is visually pleasing. It's a purpose that polychrome architecture meets in the purity of color sounds, like the most living nature and the use of white color as a purity symbol. 'Eco-architecture' pursued a similar goal with its fluid forms interwoven with the organic earth itself and the picturesque silhouette of green plantations, as it's seen in the unusual decision of the school hall of the Austrian architect Günter Domenig in Graz (1977). The architecture looks like a biomorphic mobile structure, as if in visitors' eyes changing its contour. This is especially unusual for a school building that is far from any classical examples and canons. On the one hand, a tendency to traditionally large architectural scales designed to reflect the width of the idea of the modern world order was revealed, and on the other hand, more increasable gravitation towards the anthropomorphism of the surrounding

space, with its spirituality of living nature, akin to a human's blissful stay in the Garden of Eden, is notable. Architectural trends of the XX century cultivated ideas of rationalism, functionalism and pure utilitarianism having opened the way for design, which were also designed to reflect the great ideas of their time, were ultimately rethought in the face of global problems and modern changes. This important feature of modern architecture is typical to some extent. The beginning of the XXI informational century with its unprecedented rhythms of life revealed the need for historical and philosophical understanding of time, which in turn, served as an impetus to the formation of new style ideas.

### CONCLUSION

The foregoing allows us to draw a conclusion that different trends in modern architecture became closer and more active. In the general process of this rapprochement and interaction, we should consider the specifics of style diversity, which is so important for understanding the prospects for the modern architecture development as a whole. There can not be one big style defined by the 'era style', and the canonical basic concepts of its embodiment became a thing of the past. The 'macrocosm' architecture is nothing more than the unity of the multifaceted stylistic qualities in its general direction towards the world space development. This new space sometimes seems to be uncertain. Thus, the Japanese metabolism architect Fumihiko Maki presents the architecture of the modern world in the form of various boats chaotically floating in the open sea [14]. But for all that, the movement of architectural thought is called upon to acquisition of a complete stable form, which, in the process of searching and solving current issues, will demonstrate its artistic creed in reflecting the concept of the world in parallel to historical and cultural associations or refusing them.

### References:

- [1] Ikonnikov A.V. Organizacija prostranstva i hudozhestvennyj jazyk arhitektury //Sovetskoe iskusstvoznanie 1988. Moskva Sovetskij hudozhnik, s. 26.
- [2] Viccent Joseph Scully. Modern Architecture and Other Essays. Princeton University Press, 2003, 399 s, Karel Teige. Modern Architecture in Czechoslovakia and Other Writings, Getty Publications, 2000, 367 s, Eric Uhlfelder. The Origins of Modern Architecture: Selected Essays from "architectural Record, Courier Corporation, 1998, 299 s.
- [3] Leonardo Benevolo. History of Modern Architecture, т.2. MIT Press, 1977, 868 s.
- [4] Mardges Bacon. Le Corbusier in America: Travels in the Land of the Timid. MIT Press, 2001, 406 s.

- [5] J.R.Mulryne, Krista de Jonge, Richard Morris. Architectures of Festival in Early Modern Europe Fashioning and Re-Fashioning Urban and Courtly Space. Ashgate Publishing, Limited, 2014, 287s.
- [6] Mark A. Torgerson. An Architecture of Immanence: Architecture for Worship and Ministry Today. Wm. B. Eerdmans Publishing, 2007, 313 s.
- [7] Timothy Parker, Monica Penick, Vladimir Kulic. Architecture and the Making of Postwar Identities. Architecture and the Making of Postwar Identities. University of Texas Press, 2014, 304 s.
- [8] Matias del Campo. Evoking Through Design: Contemporary Moods in Architecture, John Wiley & Sons, 2017, 136 s.
- [9] Liane Lefaivre, Alexander Tzonis. The Emergence of Modern Architecture: A Documentary History from 1000 to 1810, Psychology Press, 2004, 533 s.
- [10]Dzhon Zukovski. Sovremennaja arhitektura v detaljah. M.:Magma, 2015, s.53.
- [11]Dzhon Zukovski. Sovremennaja arhitektura v detaljah. M.:Magma, 2015, s.62.
- [12]Ikonnikov A. V. Istorizm v arhitekture. / A. V. Ikonnikov – M.: Strojizdat. 1997, s.28.
- [13]Nekrasov A. I. Teorija arhitektury / A. I. Nekrasov – M.: Strojizdat. – 1994.
- [14]Andrej Chernihov, Elena Martynova, Anastasija Reznichenko. Vyzov vremen. Ekaterinburg: Fort Dialog, 2014, s.4.