

**SCTMG 2020****International Scientific Conference «Social and Cultural Transformations in the  
Context of Modern Globalism»****PRESERVING CULTURAL LANDSCAPE OF THE MODERN  
CITY: CHALLENGES AND PROSPECTS**

Zabrodina Galina Dmitrievna (a)\*, Kudriavtsev Vitalii Viktorovich (b),  
Zagoruiko Marina Vladimirovna (c), Aleksandrova Tatiana Vladimirovna (d),  
Petrushenkov Artem Alekseevich (e)

\*Corresponding author

- (a) Yuri Gagarin State Technical University of Saratov, Institute of Urban Planning, Architecture & Civil Engineering, 77, Politekhnichekaia Str., Saratov, 410054, Russia, galuna.vizavi@mail.ru  
(b) Yuri Gagarin State Technical University of Saratov, Institute of Urban Planning, Architecture & Civil Engineering, 77, Politekhnichekaia Str., Saratov, 410054, Russia, kwidas@mail.ru  
(c) Yuri Gagarin State Technical University of Saratov, Institute of Urban Planning, Architecture & Civil Engineering, 77, Politekhnichekaia Str., Saratov, 410054, Russia, mar.zagoruiko@yandex.ru  
(d) Yuri Gagarin State Technical University of Saratov, Institute of Urban Planning, Architecture & Civil Engineering, 77, Politekhnichekaia Str., Saratov, 410054, Russia, atvinfo@bk.ru  
(e) Yuri Gagarin State Technical University of Saratov, Institute of Urban Planning, Architecture & Civil Engineering, 77, Politekhnichekaia Str., Saratov, 410054, Russia, not.architekt@gmail.com

***Abstract***

The processes of globalization and digitalization are phenomena that open up unlimited opportunities for society in all life spheres, and, at the same time, change the cultural landscape, disrupting the process of self-identification not only of a person, but of society itself. Nevertheless, the space of postmodern period culture can be designated as "ordered chaos" or "chaotic space". It is a space in which an "order" of a qualitatively different nature is arise. In search of this order, culture "tried on" all the style stages and aesthetic ideals of the past throughout the past century, but did not find a consonance with itself. The new form of information translation conflicts with the anthropomorphic principle that resists merging into a single quantified "we". The deep processes of this conflict inevitably affect the city cultural portrait – the model of human being. This leads to the destruction of the traditional principles of its structural organization. The solution to the problem is to create a methodology for identifying and adapting the individual Place image with its own archetype of the city to the new conditions. The formation of the Place image is inextricably linked with the lifestyle model, the aesthetic ideal and the images system that models the cultural space axiosphere. In this model, the design and aesthetic principles of environment formation are rethought and the anthropomorphic principle that man needed as a biosocial being is preserved.

2357-1330 © 2020 Published by European Publisher.

**Keywords:** Cultural landscape, culturological portrait, archetypal basis, lifestyle, place image.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## 1. Introduction

The paradox of the modern cultural space is the grotesque connection of the incompatible, and the city in this case is no exception. His image combines the "heaviness" of the past and the illusion of the present, echoes of individuality and the stamp of leveling, commitment to tradition and value pluralism. And above all this, an information cloud indifferent to "inert" matter "floats", absorbing all meanings in its fog and blurring the boundaries between symbolic dominants. The absence of a pivotal motive in a polyphonic style space does not allow the disparate puzzles of eclectic space to form a harmonious and distinct picture. 30 years ago, it would have been possible to say in this situation that it is necessary to lead the subject-spatial environment to stylistic unity by using traditional design-aesthetic means based on the dominant aesthetic image of the cultural space. Now it is appropriate to talk about it, but with one difference. By the beginning of the 21st century, the concept of style in its former meaning (as a leading means of forming the environment) has lost its sense. Today, not style determines the visual image of the place and the way of life, but the lifestyle of a modern person forms both the style, and the subject-spatial environment, assigning the second roles to the laws of aesthetic forming (Figure 01).



**Figure 01.** "Cloud Nine" – airborne habitats designed by B. Fuller

## 2. Problem Statement

The lifestyle of a modern person is such that he is constantly searching for elusive information, forming the aesthetics of virtual reality. Both the person and the world around him turn into one whole hypertext. If the rapidly developing scientific and technological progress does not destroy any manifestation of the archetypal basis of the city cultural landscape, it completely dilutes its individuality. And although the environment, having a form of being a coarse matter, does not allow the mobile information space to quickly change its visual portrait. Nevertheless, each movement of information waves leaves a mark on it, distorting individual features. But, if we take this state of affairs for an inevitable granted (and this is the reality), then we should find a way to harmonize the system of "man-environment". We can find it in the lifestyle aesthetics, in an attempt to preserve the outer and inner world of man in the necessary balance that civilization rapidly destroys. This problem lies in the field of axiological space and requires the identification of the dominants of this space that can crystallize the disparate field of the environment aesthetic images and resist the total virtualization of the anthropomorphic world.

### 3. Research Questions

In the current urban environment, where the architectural styles of different eras coexist, it is quite difficult to "reconcile" them with a new type of artistic-figurative structure of urban objects. Unfortunately, "new architecture" in modern cities ruthlessly displaces historical memory. This destroys the archetypal core of the city, where temporary layers are compressed and visualized in the architectural space. It deprives the citizen of natural self-identification possibility, the right to know the history of the city's formation "personally", to feel the "spirit of time" not remotely, but directly. In addition, world experience confirms the greatest adaptability to social changes in the historical environment with its ability to include all social strata and offer different opportunities for self-identification. In this situation, the compromise can be a moderate regulation of design solutions of new buildings in accordance with the urban planning situation and architectural and design environment, by using the principle of environment theatricalization. But this will not solve the main problem of the conflict of the anthropomorphic principle and the inevitable universal virtualization of society. In the 21st century the ratio of the presence of cultural memory in real life and in virtual space is changing in favor of the latter (Tolkacheva, 2018).

The formation of a fundamentally different paradigm of society's thinking requires an appropriate approach to creating a human being environment. This requires the search for structure-forming principles that can reconcile the virtual and the real in the semiotic texts of the urban environment.

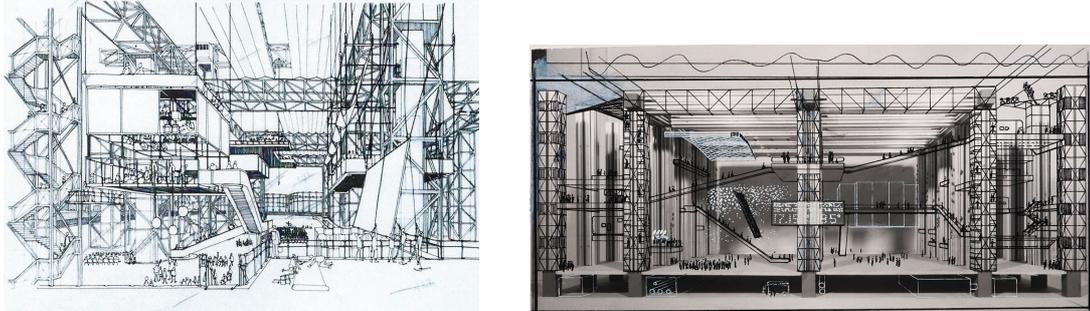
In many studies, symbols of the archetypal level – archetypes (Jung, 1991), prime symbols (Spengler, 1993), initial tectonics (Pelipenko & Iakovenko, 1998), spatial symbols (Chertov, 2019) are identified as dominants that can serve as a structure-forming basis for semiotic texts of cultural space. These directions are directly related to the subject of this study—the issue of the formation, preservation and integration of semiotic texts of the city cultural space, as filling the semiosphere with symbols of different level and character. In the context of the axiological approach, it is necessary to study this process within the boundaries of structure-forming images.

The works of many researchers are devoted to the search for the structure-forming basis of the modern urban space in the sphere of the environmental approach (in the use of lifestyle as the main vector of the "man-environment" system formation). Among them, the well-known American researcher of the urban image Kevin Lynch, who proposes to consider the space inhabited by man from the point of view of perceptual perception of key points, paths, boundaries and areas (Lynch, 1982; Popova, 2017). Salmin (1988) supplements this point of view on the perception of the city by revealing the key dominants of the visual field designating them as entry-exit points, angles, intersections, etc. Likhachev (1991) identifies "skyline" (outline against the sky) as the most important element in the perception of the urban landscape. Gutnov (1984) considers "frame" (architectural frame-plan) and "fabric" (architectural environment) to be the main structural elements of the city image. The aspect of the above studies is limited by the external manifestation of the semantic dominants of the city cultural landscape. The research of Pelipenko and Iakovenko (1998) is devoted to the study of the inner layer of semiotic texts, the manifestation of cultural meanings in the semiosphere with the help of universals (Prikhodovskaia, 2019).

The creative projects of many inventors of the last century are devoted to fantastic ideas. Thus, Buckminster Fuller developed the "general science of advanced design" in 1956 (figure 01), in which he

proposed the Cloud Nine airborne habitats project. It is possible to make it from geodetic spheres, and it can levitate due to heated air (Gerber, 2001).

Another example of an attempt to create a living, dynamic architecture is one that is accessible to people both inside and out, which allows a person to control his material environment (Nevliutov, 2018) (figure 02).



**Figure 02.** Project "The Fun Palace" – dynamic architecture of Cedric Price

Fully agreeing with the presented theoretical and practical research, it should be noted that these studies do not pay proper attention to the axiological approach. It makes it possible to look at the problem of harmonization of the "man-environment" system and preservation of the city cultural portrait through the eyes of a modern person from the point of view of its value paradigm. Each of the considered spheres is a sufficiently developed layer of science with internal construction logic and systematization principles. But it does not have a coherent "mechanism" for reaching the level of interaction with the common "gravitational field" of the 21st century culture's semiosphere. In addition, the method of visual modeling is not fully used as a tool in the study of the formation regularities of cultural space and its semiotic texts.

#### **4. Purpose of the Study**

In this regard, we propose to slightly change the focus, shifting it to the field of axiological approach, which allows identifying dominants of the modern city axiosphere in accordance with the values of the typical citizen. To achieve this goal, it is necessary to identify and systematize the basic axiological images (lifestyle, place image, aesthetic ideal) within the cultural space. In addition, in the context of the formation of the new type of society and communication methods, it is necessary to create encoding-decoding techniques for semiotic texts within the boundaries of the "visual-verbal" opposition at the information level of the digital society. The problem solving will allow synthesizing the results and modeling the concept of structural organization of the archetypal basis of the cultural landscape, the development of "generic algorithms" for analyzing and designing the semantic field of semiotic texts in urban space.

#### **5. Research Methods**

In accordance with the objective, the methodological research strategy is based on the structural-informational approach, including elements of modeling, formalization and semiotics. The development of the symbol correlation system in the initial tectonic matrix was carried out using patterns of structural

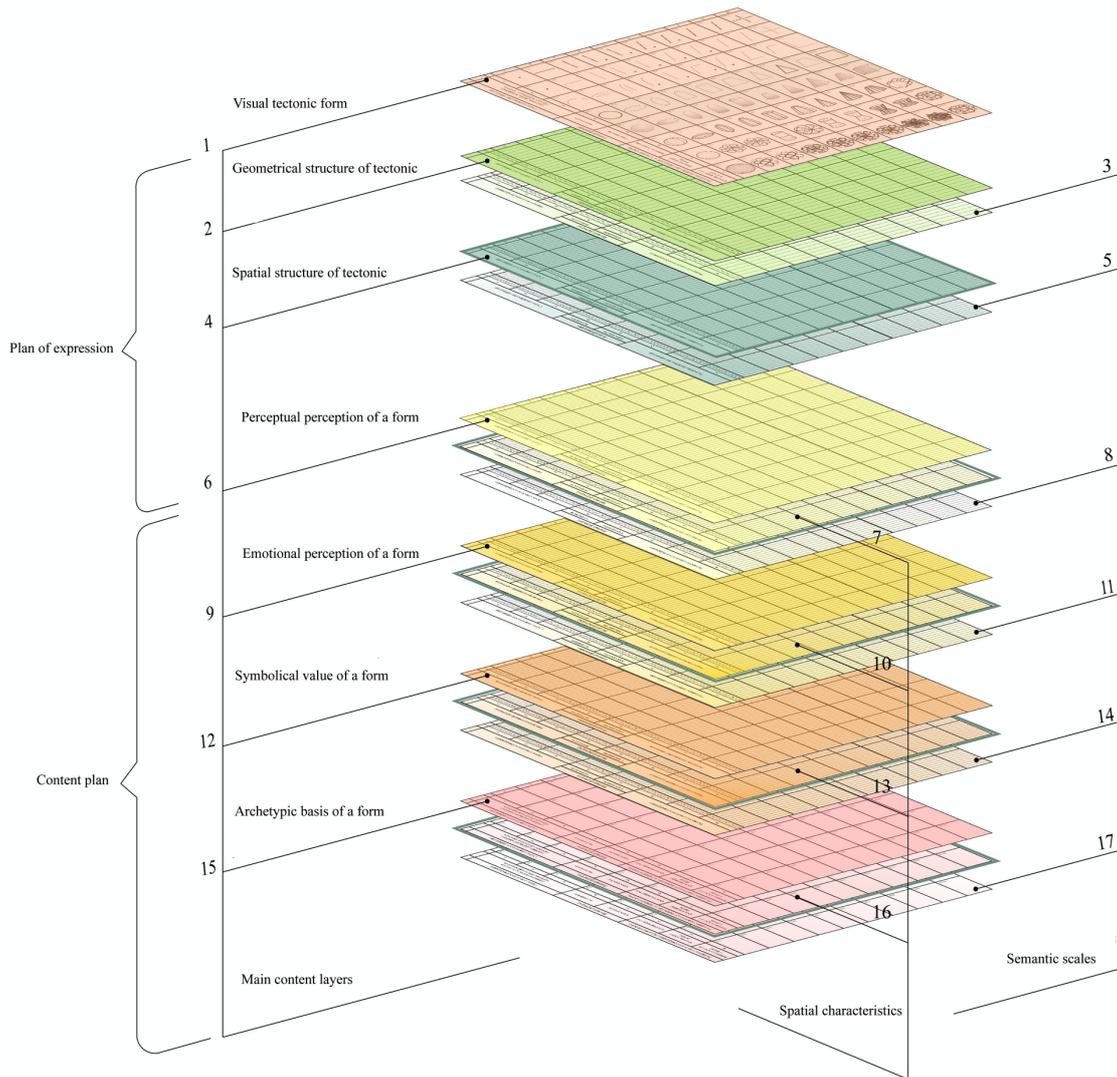
construction of geometric figures and applying methods of geometric surface converting in two-dimensional and three-dimensional space. The creation of syntactics and pragmatics of the proposed initial tectonic communication language was carried out using structural information methods. In general, the interdisciplinary nature of research is based on a combination of philosophical-cultural analysis methods and methods of natural and exact sciences.

## 6. Findings

Thus, within the framework of the axiological approach and on the basis of the cultural space stratification, we have revealed the presence of a structure-forming module in the axiosphere space. It is a cultural code and forms the mental field of semiotic texts (Zabrodina, 2017). "The axiological module" is a synergy universal model of basic images of axiological field of culture space (place image, lifestyle, aesthetic ideal of the era). It can serve as a means of "verification" or expert evaluation system of semiotic texts in any space-time coordinates. As part of the expert assessment of the axiosphere using the axiological module, we have developed lifestyle analysis methodology of the citizen in order to identify value criteria as a support in the search for reference points of the environment with different emotional charge. In this regard, we have identified the nature of lifestyle transformation in relation to changes in the aesthetic ideal and proposed a method of adjusting the place image in accordance with these changes (Zabrodina & Kulichenko, 2019).

This technique is based on the principle of lifestyle theatricalization in the urban environment and is aimed at using the reconciling principle of environmental design. In the arsenal of artistic and aesthetic means it is possible to identify the visual range of aesthetic preferences of different social groups on the basis of analysis of the established "axiological map" (analysis of aesthetic preferences of social groups). The method of axiological map analysis is a system of criteria for evaluating the value preferences of various socio-cultural groups within the boundaries of a typical "life scenario". It makes it possible to identify favorable and unfavorable local areas of stay, visualize a number of aesthetic preferences and develop a system of emotional flattening activities. These design and aesthetic objectives are aimed at preserving the structural-semantic core of semiotic texts of the urban environment.

The study of the current state of the issue, in addition to solving specific design problems to preserve the place image as a model of human being, has led to the necessity to develop a new approach to design. Thus, the structuring of the city axiological space and the identification of its dominants as the base images, and the analysis of the characteristics' changes of these images within the information space of the digital society to form a number of design and aesthetic objectives of modeling a new perspective on the design and thinking format of designers. In this aspect, on the basis of the axiological module and symbols systematization of the initial tectonics level, we have developed a glossary of initial tectonics as a design and aesthetic system for encoding-decoding semiotic texts of the cultural landscape (figure 03) (Zabrodina, 2017).



**Figure 03.** Glossary of initial tectonics

The development of the glossary of initial tectonics made it possible to move to the modeling of the structural-information system of urban space. In the hypothetical model "City of Tomorrow" we presented the environment of the modern person being – "digital nomad" in the form of a sign-information system "tectonic elements – continuous information field of the urban environment – structural image of the "City tree" – structural-information model "City of Tomorrow".

Human is a digital nomad within the boundaries of nonlinear thinking and the digital era turns into a quantified "we", into a digital generation that has developed physical and mental abilities, requiring the emergence of a different type of space. It requires a space that can be decrypted using system keys and a number of developable scenarios (Lima, 2013). Because of new ways of communication, society has acquired a new collective (role) behavior. The new paradigm of quantified "we" can map the human biome on the area, city, and country scale. The space of modern human being is a field of total inclusive awareness that has something in common with cosmic consciousness or the collective unconscious. Such a space can be presented in the form of a hypothetical model of the city of tomorrow "Magic city".

The general idea of this model is to create an information system in which the tectonic elements of the environment are based on deep archetypal meanings and specifics of anthropomorphic worldview, but are organized in the "continuous information field space" system. The tectonic elements forming this

space are the key codes, by which the meanings of the new information consciousness are encoded-decoded.

In the context of these studies, tectonic elements are language elements based on archetypal meanings and capable of forming the architectural space language and the cultural landscape in general within the boundaries of the opposition "verbal-visual".

The structural connections of the urban environment determine the logic of the interconnection's networks of tectonic elements, which are subject to endless metamorphoses and are inseparable from the person. The effectiveness of social and psychological adaptation in traditional ways is lost. Our physical survival largely depends on the connections that form and structure the perception and consciousness (knowledge) of the surrounding reality. Instant interaction, integrating time and space, makes us react to the world as a whole, as a field of continuous events. There is a field of total inclusive awareness that has something in common with cosmic consciousness or the collective unconscious. The metaphors that used to connect the city and the body have found a concrete embodiment. The artificial environment intertwined with organics and became a spatial expression of our cognitive system. As the network of electronic devices is compacted, artificial intelligence nodes are ubiquitous. The digital feedbacks are multiplying, the city is becoming a huge mind, and the biological brain is becoming an element of larger cognitive systems.

The structure of the city's continuous field of the information society is built on the same principle as the traditional model of the city, visualizing in its structure the "World Tree" image and embodying the world's universal concept.

Cosmogonic myths describe the formation of the world as the result of the sequential introduction of binary semantic oppositions (earth-sky, left-right, good-evil, mass-space, etc.), gradual series such as plants, animals, people, etc. Structuring the data stream in algorithmic design (0-1) is also carried out through the tree (figure 04).

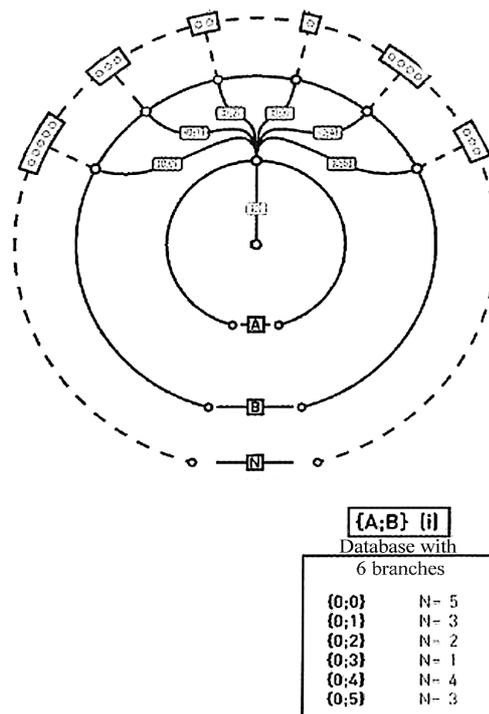


Figure 04. Algorithmic Design Tree

Thus, despite the fundamental change in the paradigm of human thinking at the beginning of the 21st century, the anthropomorphic principle remains a structure-forming factor in worldview and worldbuilding. Archetypal symbols are the semantic basis of the semiotic texts of the cultural landscape.

## 7. Conclusion

In conclusion, it should be noted that the development of the axiological module and glossary of initial tectonics, being the fundamental basis for modeling the "semiotic body" of the city cultural landscape, allowed identifying the ways of forming design methods for adding urban space as a "Home" for the "digital nomad". This view of the future city design, being a hypothetical model, is of interest as an impulse in rethinking the problems of the present and makes it possible today to take steps to reasonably use and preserve the cultural heritage. Also, it allows solving a number of specific tasks on modeling of comfortable urban space, translating the conflict of virtual and real into their synergy. The proposed approach is a chain of successive stages of deep research and solving complex design and esthetic problems. But the identification and preservation of portrait traits of the city archetype in the context of globalization, in our opinion, is one of the few ways of a systematic approach to the preservation of cultural heritage and its adaptation to the information space. The creation of such a space in the context of the emergence of a continuous field and the weakening of a person's attachments to a specific place requires architects to radically revise the fundamental concepts of urban planning, architecture and design.

In addition, the educational environment can play an important role in this process, where the presented direction can be used in the development of teaching methods for students of designers, architects, culturologists and sociologists in the development of their professional skills to create a harmonious environment and cultural landscape in general.

## References

- Chertov, L. F. (2019). *Iconic prism. Articles on general and spatial semiotics*. Retrieved on 20 August, 2019 from <https://books.google.ru/books/reader?id=vLaUCgAAQBAJ&num=9&hl=ru&printsec=frontcover&output=reader&pg=GBS.PT72/>
- Gerber, Y. A. (2001). *Wholeness: On Education, Buckminster Fuller, and Tao*. Washington: United States, Bookseller–ThriftBooks
- Gutnov, A. E. (1984). *Evolution of urban planning*. Moscow: Stroyizdat.
- Jung, C. G. (1991). *Archetype and symbol*. Moscow: Renaissance.
- Likhachev, D. S. (1991). *Book of Concerns: memories, articles, conversations*. Moscow: Novosty.
- Lima, M. (2013). *Visual Complexity: Mapping Patterns of Information*. New York: Princeton Architect. Press.
- Lynch, K. (1982). *The image of the city*. Moscow: Stroyizdat.
- Neвлиutov, M. (2018). *Project "The Fun Palace" – dynamic architecture of Cedric Price*. Retrieved from [http://architime.ru/specarch/cedric\\_price/fun\\_palace.htm#5.jpg](http://architime.ru/specarch/cedric_price/fun_palace.htm#5.jpg).
- Pelipenko, A. A., & Iakovenko, I. G. (1998). *Culture as a system*. Moscow: Lang. of the Russ. Culture.
- Popova, K. (2017). Ethnomethodological studies of visuality. *Sociol. Rev.*, 16(3), 212–232.
- Prikhodovskaia, E. A. (2019). Features of sign system as criterion of classification of art forms. *Tomsk State Univer. J. of Cultural Studies and Art History*, 34, 145–148.
- Salmin, L. U. (1988). *Environmental modeling and urban design / Dissertation of the candidate of Art Criticism*. Moscow: VNIITE.

- Spengler, O. (1993). *The Decline of the West*. Moscow: INFRA-M.
- Tolkacheva, V. A. (2018). The virtual world of the cultural memory: a fantasy or an objective reality? *Tomsk State Univer. J. of Cultural Studies and Art History*, 31, 120–127.
- Zabrodina, G. D. (2017). *Culture symbols visualization in system "man-environment": structural semiotic approach* (Doctoral dissertation thesis). Yuri Gagarin State Technical University of Saratov.
- Zabrodina, G. D., & Kulichenko, T. V. (2019). Communication space city: the image of “place” as form visualization of the model being. *Int. J. “Znanstvena misel”*, 2(32), 7–11.