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Designing visual environment of the cite

N V Meseneva¹, N P Milova²

¹ Associate Professor of the Department of Design and Technology, Institute of Service, Fashion and Design, Vladivostok State University of Economics and Service, Gogolya str., 41, Vladivostok 640014, Russia

² Associate Professor of the Department of Design and Technology, Institute of Service, Fashion and Design, Vladivostok State University of Economics and Service, Gogolya str., 41, Vladivostok 640014, Russia

E-mail: meseneva@mail.ru

Abstract. Nowadays, the urban environment of large cities is changing significantly with the development of urbanization processes. These changes create the need for new approaches to the organization of the visual environment of the city and identify challenges to mitigate the negative impact of the urban environment on human health. The environment of the city includes a number of components that affect the quality of life of citizens and have an emotional impact on a person. The task of architects is to create a comfortable, harmonious spatial environment of the city, including architecture and streets, parks, gardens, landscapes, color solutions, advertising and taking into account culture, ecology, climate and more.

1. Introduction

When organizing a modern visual environment of the city, it is necessary to create an environment that takes into account new requirements, technologies, and design a flexible environment that can be changed. For example, the city environment of the center of Vladivostok. It is necessary to preserve the historical components of the city's environment, to protect the beautiful panoramas of the city, to organize competent buildings along the slopes of the hills descending to the sea and at the same time, preserve the "port city image" associated with the existing historical traditions and views to the sea (the silhouettes of ships and the "Golden Bridge" through the Golden Horn Bay). The city should provide people with security and at the same time make them happy. It is necessary to correct existing city's picture and to change the existing low-quality solutions of the city environment.

2. Problem statement

The main tasks facing the design of the visual environment of the city are issues of preservation and restoration of quality visual characteristics. The importance of the problem lies in the need to systematically comprehend the processes of globalization, informatization, virtualization of the urban environment, the renewal of architectural and design theory in terms of its humanization, a more attentive attitude to human and social problems [1]. As Medvedev noted, the purpose of design is to improve people's quality of life and improve social and cultural relations between them by creating a harmonious environment in all spheres of people's livelihoods to meet the diversity of their material and spiritual needs [2] (figure 1).



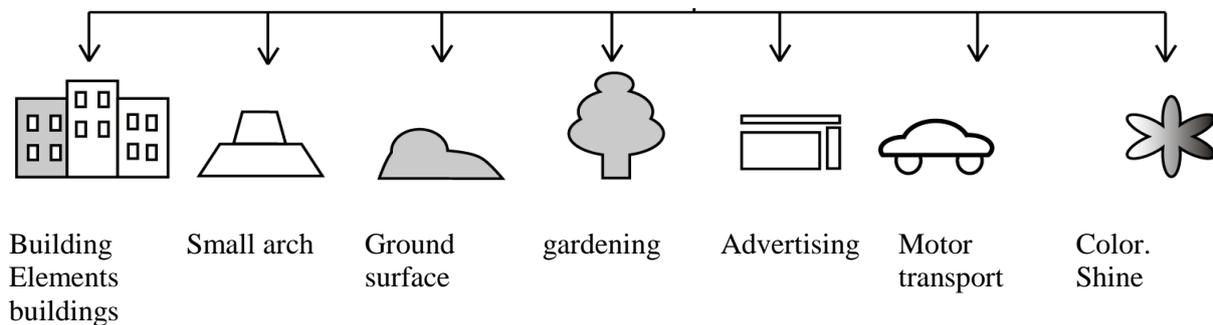


Figure 1. Components of the visual environment of the city [3]

The presented research is based on materials and documents on the organization of visual urban environment [4 - 10]; the importance of landscape design in the design of the habitat [11 - 16]; addressing issues of humanizing the urban environment [17, 18]; creation of a harmonious urban environment [19, 20].

3. The results of the discussion

The visual environment is taken on the example of the historical center of Vladivostok city, which is located on a beautiful landscape (on the slopes of the hills), descending to the Ussuriysky and Amursky Bay. The historic buildings of the city center reflect a culture, created from the mixture of different styles of the 19th and 20th centuries. The visual environment of the historical part of the city includes a wide variety of elements with a complex, harmonious silhouette of the architecture of buildings, thickening and rarefaction of visible elements of the facades, their various remoteness, variety of colors. The facades of the buildings of the historic center of the city are distinguished by a complex architectural decoration. When comparing the architecture of buildings of the 19th and 21st centuries, one can not but note their essential differences:

- the saturation with complex decorative elements of the facades of old buildings and almost complete absence of the decor of strict modern buildings;
- the structure of the elements of the facades of old buildings includes many different curved lines, in the structure of modern buildings, mainly direct aggressive lines are used, creating large elements of forms;
- in the dimensions of the planes: on the facades of old buildings there are many small and differently shaped planes, the facades of modern buildings consist of large or huge, identical aggressive planes;
- the silhouette of buildings: a simple silhouette in modern buildings and a complex, harmonious silhouette in old buildings;
- materials of the facades of new buildings - alucobond, glass and concrete, materials of old buildings - brick, plaster, decorative ceramic tile, painting;
- color solution - complex historical buildings and simple new buildings;
- in the historical center of the city closed architectural spaces are formed, and every closed space is read as a model of the world, carrying a sense of security;
- some historical buildings and the center of the city have a poor, dirty appearance and require restoration;
- some historical buildings have modern superstructures, attics.

The decoration of the facades of buildings, their complex solution - this is not "architectural excesses", about which not so long ago a lot was written in our literature. These are important functional and emotional components, which are the basis of the visual environment. Old buildings are visually more beautiful than modern buildings (Figure 2). The complex silhouette of the historical facades of buildings, the use of natural materials and the color solution create a harmonious environment of the city.

A greater aesthetic pleasure is obtained from the perception of objects and phenomena that are distinguished by harmony, completeness, proportionality, rhythmicity, i.e. first of all by the perfection of form [4]. Inclusion in the structure of the city of modern buildings large panels (glass), with a simple decor of the facade creates a homogeneous, aggressive, hostile visual area.



Figure 2. The center of Vladivostok

The rapid growth of the construction industry, the use of modern technologies, materials, and structures change the visual environment of the city and its connection with the natural environment is disrupted. The use of new materials leads to the creation of aggressive zones in the historical environment. New buildings often do not harmonize with the complex structure of the historic part of the city. To solve these problems, designers turn to the complexity of the structure of the facades of new buildings. Also, the homogeneous and "aggressive" areas in the form of large and monotonous surfaces of glass and concrete on the facades of buildings [5], have a negative effect on humans. It can be neutralized by incorporating into their composition natural components [6].

Image of the city. Currently, the architects are trying to organize an emotional, comfortable visual environment (the "image of the city"), associated with the established historical traditions, interesting to both the citizens and tourists. Artistic architectural images enter the world of human senses, architecture is included in life and in any important live event [7]. But architecture surrounds us constantly and its emotional impact should be moderate enough.

The use of spectacular forms, the "emotional approach" in architecture includes "hypertrophy of sensory expression", going at the expense of the cultural and historical meaning, the richness of architectural forms [7]. A new component of designing the city environment is Kraft-design in urban environment. Design kraft is a mix of design and craft. But examples of such a design are different from the works of artisans of the last two centuries. The handmadeness of these objects is emphasized, but they are made with the use of new technologies, materials [8].

It should also be taken into account that the emotional perception of the architectural environment includes not only the appearance of the building, but also its functional purpose. Visual assessment of the city environment occurs from different planes of space, a more normal position for the perception of the city is the level of human eyes [9]. But besides this, there is an opportunity to view the city from above: from the roof of a tall building or through a map and a plan. This perception gives an opportunity to look from the outside, allows a person to see the image of the city as a whole [10]. Moreover, since our city is on the hills, we see a panorama of the city, the sea, the streets, the roofs of buildings, their volume and color.

Color complements the architecture of buildings makes special importance to the urban environment, creates a visual emotionally saturated environment. Architects view the visual environment of the city as a single complex, take into account the relationship of the color solution of the old and new constructions. In the historical center of the city the color environment is in light beige, blue, light green, gray color scheme with inclusion of white, saturated burgundy and green. The color solution of the first floors of buildings is made with the domination of saturated shades of the

same colors. The color of visible roofs is saturated burgundy, green, blue. In general, the color scheme of the city creates a harmonious coloring. "Color symbolizes the reunion with nature and the revival that mankind will need so much", Leatrice Eisman, Pantone's CEO, says, adding that the shade of green foliage is a very life-affirming color [11].

The task of landscape design in the organization of a visual environment is to create an ecological balance between natural and anthropogenic components. Landscape design is one from the means of humanizing the urban environment, returning to nature. The landscape, like the architecture of the city, must be diverse, include different structures, decorative elements, a complex pattern, a harmonious color solution, and a well-groomed appearance. The use of natural materials in the city represents nature, creates an environment close to a person psychologically [12]. The simplest way to create a beautiful visual environment using landscape design is to include green zones in the urban environment. With the help of groups of trees, bushes, lawns, you can organize a multifunctional and visually integral environment. In addition to natural components in the urban environment, artificial ones are also used. These are ladders, retaining walls, small architectural forms, sculptures, benches, lanterns, paths, platforms. When selecting natural and artificial materials, it is necessary to take into account the functional and aesthetic requirements for them. Basic principles of landscape design in the organization of the aesthetic visual environment of the city:

- creation the separate zones for rest in the streets, which will be harmoniously included in the environment;
- ensuring the possibility of changing the environment by changing flowering and coloring of vegetation;
- restoration of untreated areas requiring repair;
- taking into account specific natural climatic factors affecting the environment by the seasons.

It is important to understand the significance of the concept of preserving landscapes, protecting the values associated with natural elements. Genius loci covers the most important components that are constantly in the center of attention of people, such as a sense of place and a sense of cohesion or cohesion of society, cultural identity and cultural diversity [13]. When organizing the landscape, it is necessary to take into account the existing problems of environmental pollution, for example, the state of the landscape, in which the constituent structures of the landscape are not in the same quantity or it is not in the place to form the necessary functioning of the landscape development.

When the inclusion of elements (objects, design installations) that "are unnatural for it" and "withdraw its system from a state of equilibrium", a normal state and purposeful development occurs in the landscape, it is said that the landscape architecture is polluted [14]. Today, the task of ecological reconstruction of existing cities is urgent, which envisages the creation of a favorable living environment for people (providing healthy and safe living conditions, harmoniously combining the social and engineering infrastructure created by man and the preserved nature) [15].

Universal design of the urban environment is a design convenient for all citizens. Important principles of it are: equality and flexibility in use for people with different physical capabilities, simple and intuitive design, easily perceived information, error tolerance, low physical effort [16]. Ultrafunctionalism - the direction of design, the desire to bring to the absolute the functional characteristics of an object, to eliminate problems arising in the process of using [17].

Now in the cities an information advertising environment is actively being created and it can create a tolerant environment in city space, but it can also create an aggressive environment. "The viewer perceives the spatial object holistically, as a certain emotionally aesthetic coherence of its components, and only then begins to consider the merits and demerits of these components" [18], these criteria are the basic principles of designing a harmonious urban environment.

- spreading commercial advertising (which occupies a significant part of the facade in the central part of the city) is a difficult problem;
- placement in the structure of the city of billboards, stretch marks, posters;
- placement of modern media structures on the facades of buildings in the central part of the city;

- distribution of non-professional graffiti, which is also a difficult problem;
- obsessive "flashing" advertising, adversely affecting health.

Architecture and media facades complement each other and are perceived as a whole, but do not always create a single composition. In general, it should be noted that the city center is oversaturated with information and consists of a chaotic combination of objects. In the process of perceiving information, a city dweller selects fragments important for him from this chaos, assigns meaning to them, organizes them, himself creates certain "pictures" of them. This creates subjectivity and individuality of the processes of perception of advertising and graphic images.

4. Conclusion

Comparing the main criteria for assessing the visual environment of the city center, such as architectural environment, image, color, landscape, advertising, it should be noted that the aggressive visual environment is still within acceptable limits in the historical part of Vladivostok. But there is a need to correct errors in the visual environment. This approach when creating new projects will help in solving the problems of the aesthetic, emotional visual environment of the city. When organizing the city environment, it is necessary to create a comfortable, harmonious, emotional environment, connected with the landscape, taking into account modern requirements, trends that can be changed. This study is based on materials for the formation of the visual environment of the city ; the importance of landscape design; solving the problems of videoecology of the urban environment ; creation of a harmonious urban environment. The beauty surrounding us is the key to solving many problems. As F. Dostoyevsky wrote, "beauty will save the world." To create beauty we should seek architects and other professionals responsible for the city's environment. The directions and trends considered in this article are not a complete list of issues that designers solve when organizing the urban environment [19, 20]. Recommendations for the design of a comfortable visual environment of the city:

1. It is necessary to preserve the historical components of the visual environment of the city center: architectural monuments, cultural objects, which are important elements of the city environment.
2. It is necessary to take into account and preserve the "image of the city", panoramas associated with the existing historical and national traditions of the city of the port, the city by the sea.
3. It is necessary to limit the number of storeys of the designed buildings in the city center;
4. It is necessary not to violate the picturesque, unique landscape of the city beautifully descending to the sea.
5. It is necessary to carry out complex designing of the existing color environment of the city. The color solution is one of the important components when creating an aesthetic visual environment.
6. To organize and correct the existing urbanized city environment by means of landscape design and gardening.
7. To restore the untrodden territory of the city and requiring facades of buildings to be repaired.
8. To form a harmonious, tolerant, comfortable visual urban environment by means of information components, advertising in the city space.

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