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Current Trends in Urban Design

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Abstract. With the development of urbanization processes, the urban environment is changing, the usual parameters of convenience of the urban environment are being transformed, the issues of integrity formation of the artistic image of the city become more relevant. These changes create the need for a study of modern approaches to the formation of the visual environment of the city. The task of architects is to design a comfortable, harmonious environment that takes into account new requirements and technologies. The modern environment of the city includes a number of components that affect the quality of life, have an emotional impact on citizens: the architecture of buildings and constructions, the landscape, the panorama of the city, historical traditions, culture, ecology, climate, and much more. Today, when organizing the urban environment, it is necessary to take into account current trends in the design of architecture, landscape, color and lighting solutions, advertising, decorative and monumental art, to organize a flexible, changeable urban environment.

1. Introduction

These Trends in the design of a holistic modern urban environment at a high artistic and technical level that meets the new functional, emotional requirements (taking into account the norms of ergonomics) are discussed in the article. When organizing the environment of the city, it is necessary to form a comfortable, harmonious, emotional, landscape-related environment that takes into account modern requirements, trends and could be changed.

The purpose of the design as a phenomenon of modern culture is to promote the improvement of the quality of life of people and the improvement of socio-cultural relations between them by creating a harmonious environment in all spheres of people's life to meet the diversity of their material and spiritual needs [1, p.37]. The scientific relevance of the problem is the need for a systematic understanding of the processes of globalization, informatization, virtualization of the urban environment, as well as updating the architectural and design theory from the point of view of its humanization and more attentive attitude to the problems of person and society [2]. The novelty of the research is in the study and evaluation of current trends in the design of urban environment.

2. Problem statement

Modern trends in the formation of the urban environment are considered on the example of the historical center of the city of Vladivostok and include architecture, small forms, landscape, color, advertising, monumental - decorative art and culture, ecology, climate and more.



Today it is important to preserve the historical components of the city's environment, to preserve the picturesque sea panoramas of the city, "the image of the port city", "city by the sea" associated with the existing historical traditions. The trends in the formation of the design of the object-spatial environment of the historical center of the city of Vladivostok on the example of the organization of pedestrian streets are considered (Figure 1).

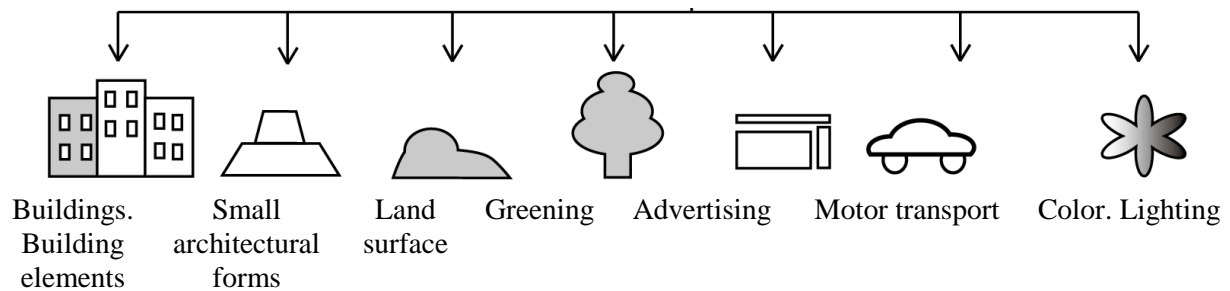


Figure 1. Components of the visual environment of the city [3].

3. The results of the discussion

Artistic architectural images enter the world of human experiences and feelings. Architecture is included in life, and any meeting with it is always an important live event and experience [4].

The design of the streets of the historic center of the city is associated with a variety of project activities: architecture, landscape, graphic, city-planning art.

The architecture of the historical center of the city of Vladivostok includes beautiful buildings with a complex, artistic solution, harmonious silhouette and color range. The facades of buildings in the historic center of the city are distinguished by aesthetically expressive decor and plastic. When comparing the architecture of historic and modern buildings, their main features should be noted:

- complicated elegant decorative solution of the facades of historic buildings and almost complete absence of decorative elements of the facades of modern buildings, in the structure of which direct aggressive lines is mainly used;
- on the facades of historic buildings: a maximum of small and unequal in shape and outline planes, the facades of modern buildings consist of large or huge, identical, aggressive planes mostly made from glass;
- a complex, harmonious, large-scale human solution of the facades of historic buildings and a simple non-scale silhouette of modern buildings;
- color solution is complex for historical buildings and simple for new buildings.

The complex silhouette of the historical facades of buildings, the use of natural materials, a beautiful color scheme creates a harmonious environment of the pedestrian streets of the city. Current trends in urban design emphasize and preserve the historical environment of the city center.

Today, the principles of architectural theatricalization of urban spaces, including pedestrian streets, are widely used in formation of the composition of the urban environment. The urban environment is organized as a theatrical performance, as an artistic performance. Citizens, tourists become spectators and participants of the performance. Means of organizing the design of the urban environment allow to control the movement of a pedestrian, direct the attention to interesting historical, artistic objects, create an overview of the panoramas on the viewing places.

The functional and compositional structure of an artistic theatrical performance of the street could be emphasized by creating compositional accents of the environment, color solution, shape and placement of small forms, and a landscaping solution.

Today, "without barriers" principle becomes necessary for the subject-spatial environment of the pedestrian streets of the historical center of the city and for accessibility of people with limited mobility. In accordance with the design standards, it is necessary to use special handrails, ramps, special street equipment per person with disabilities.

Today it is necessary to design easily erected, mobile, easily replaceable elements and structures of urban design, take into account the changing situation in the formation of the urban environment, reflecting the daily, seasonal, festive conditions that turn the street into an easily updated system. Such a new organization of urban design forms, due to its great flexibility, forms the connection between the historical components and the current state of the streets.



Figure 2. The pedestrian street of Admiral Fokin of the city of Vladivostok.



Figure 3. The Tsarevich Embankment of the city of Vladivostok.



Figure 4. Tiger cubs on the Sportivnaya Embankment of the city of Vladivostok

The principles of the artistic and stylistic organization of the architectural and spatial environment of pedestrian streets, the application of corporate styles (figure 2) play an important role in the organization of the urban environment.

The novelty of the research is in the application of corporate styles in the formation of pedestrian streets as means of enhancing the expressiveness, artistic and stylistic integrity of historical streets. The corporate style method creates a link between modernity and the past of the urban environment. The corporate style of the pedestrian street organizes a single color scheme, forms a system of visual communications, street furniture and equipment, creates stylistically unified artistic ensemble of the urban environment.

A pictogram method, a system of graphic signs, means of orientation in space, and visual communications of pedestrian streets appeared in the urban environment. The pictogram method is an artistic, stylistic method of visual ordering of the functional structure of the street. The system of visual communications is an important tool for organizing the structure of the street, within the framework of a single method of corporate style.

Improvement and landscape play an important role in the urban environment. When designing the landscape, the designer can visually change the streets, form the paths of movement, organize entrances to cafes and shops, create recreation areas, emphasize the arrangement of sculptural compositions and other forms in the street space (Figure 3). The landscape, as well as the architecture of the city, should be diverse and to include planes of different scale, structures, decorative elements, a complex pattern, a harmonious color scheme, and a well-maintained appearance. The best way to create a harmonious visual environment by means of landscape design is the inclusion of green areas in the urban environment: to organize a multifunctional and visually holistic environment (with the help of groups of trees, shrubs, lawns). The task of landscape design is to organize the ecological balance between natural and anthropogenic components. In the urban environment natural and artificial components are used. They include stairs, retaining walls, small architectural forms, sculptures, benches, lanterns, walkways, and platforms. When selecting natural and artificial materials, it is necessary to take into account the functional and artistic requirements for them. The basic principles of landscape design and organization of a harmonious visual environment of pedestrian streets are:

- the inclusion of various green areas and other natural elements in the space of the city to improve the aesthetics of the environment;
- creation of separate zones for recreation, harmoniously included in the environment of the streets;

- ensuring the possibility of changing the environment for changing flowering and color of vegetation;

- taking into account specific natural climatic factors affecting the environment for the seasons.

Today, the task of ecological reconstruction of established cities is urgent. It is necessary to create a habitat-friendly environment in the cities (providing healthy and safe living conditions, harmoniously combining the social and engineering infrastructure created by man and the saved nature) [5].

In the pedestrian streets, along with traditional monuments appeared decorative forms and sculptures, designed for perception from short distances (Figure 4). Small architectural forms are structures and devices that have simple but independent functions that complement the architecture of city buildings, structures, parks, squares and streets and are elements of their improvement [6]. The appearance of outdoor furniture is a new direction in the design of pedestrian streets. Designers design streets in terms of comfort.

The actual principle of organizing the subject-spatial environment is the active use of color in the design of the urban environment. Color gives a special emotionally rich meaning to the urban environment. Today, the complex color solution of the streets, the details of their elaboration put pedestrian streets in terms of color organization to the level of the solution of interior spaces. The architects consider the visual environment of the city as a single complex, taking into account the connection of the color scheme of the old and the new buildings. In the historic center of the city, the color environment is harmoniously resolved in light beige, blue, light green, gray colors with the inclusion of white, rich burgundy, green.

Today, functional and well-maintained pedestrian streets create a modern phenomenon - the day and night life of the city. And the designers are set new tasks, consisting in the design of a dual system of environment destination: the organization of nighttime and daytime color and light environments, with a variety of artistic images coloristic decision.

Based on the research, the following trends in the design of the environment of the historical center of the city are determined in accordance with the goals and objectives:

- preservation and restoration of the historical architecture of pedestrian streets;
- organization of the pedestrian street environment as a theatrical performance;
- the use of modern methods of improvement design and landscape environment;
- application of the corporate style method in the design of pedestrian streets;
- formation of a single style of outdoor furniture and equipment;
- creation of a system of visual communications of the urban environment;
- design of urban sculpture, small forms;
- the use of color and light in the design of day and night urban environment.

These trends in design form pedestrian streets according to the modern level of comfort, taking into account the functional and artistic problems associated with the quality of the urban environment. Modern pedestrian street is a new phenomenon in urban culture, where traditional and new forms of social and cultural contacts of citizens are developing. On the basis of the study, modern peculiarities of the organization of a pedestrian street were established. They are based on a synthesis of various types of project activity: architecture, city-planning, landscape, graphic art.

Willingness to update the world, focusing on the most modern forms of activity and communication are characteristic features of the sociocultural activity of the residents of a large city, affecting the development of the daily life in the surrounding urban environment. It significantly changes the design functions of the urban environment and update the problem of the quality of life of citizens [7].

Comparing the main criteria for assessing the historical environment of the city, such as architecture, image, color, landscape, decorative, graphic art, it should be noted that in the historical part of the city of Vladivostok aggressive visual environment is within acceptable limits. But there is a need to correct errors in the visual environment. When organizing the urban environment, it is necessary to form a comfortable, harmonious, emotional, landscape-related (with modern requirements and trends) easily changeable environment. Such an approach (when creating new

projects) will help in solving the tasks of organizing the aesthetic, emotional visual environment of the city.

This study is based on materials on the design of the visual environment of the city [4 - 10]; the importance of landscape design [11 - 15]; solving the problems of urban video ecology [16 - 18]; creating a harmonious environment of the city [19, 20].

The directions and trends considered in the article are not a complete list of issues for designers, organizing an urban environment [19].

Recommendations for designing a comfortable visual environment of the city [20].

1. It is necessary to preserve the components of the historical environment of the city center: monuments of architecture, cultural objects that are important elements of the environment of the city.

2. It is necessary to preserve the "image of the city", picturesque panoramas associated with the established historical and cultural traditions of the city-port.

3. It is necessary to preserve and emphasize the landscape of the city in a picturesque amphitheater descending to the sea.

4. It is necessary to carry out complex city design with special colors for the day and nighttime.

5. To restore the neglected territory of the city and the facades of buildings requiring repair.

6. To form a harmonious, tolerant, comfortable visual urban environment of the city, taking into account the climatic conditions, sanitary and microclimatic requirements.

7. Create an environment that takes into account modern requirements and trends that can be changed.

References

- [1] Medvedev V Yu 2009 *The essence of design: the theoretical foundations of design: Tutorial 3rd ed., corrected and with addition* (St. Petersburg: SPGUTD) 110 p
- [2] Maslovskaya O V Ignatov G E 2015 Current trends in the creation and transformation of urban areas *The territory of new opportunities Bulletin of the Vladivostok State University of Economics and Service* **1(28)** pp 91-95
- [3] Meseneva N V, Milova N P 2017 Assessment of the visual environment of the city of Vladivostok *Journal Fundamental Research* **6** pp 64-68
- [4] Zabelshansky G B, Minervin G B, Rappaport A G Somov G Yu 1985 *The architecture and the emotional world of a person* (M.: Stroiizdat) 208 p
- [5] Potaev G A 2013 *Architectural and landscape design: theory and practice: tutorial* (Moscow: FORUM; INFRA-M. CyberLeninka)
- [6] Svidersky V M 1953 *Small architectural forms: Fences, lanterns, vases, benches* for total ed A M Kasyanov Kiev: Publishing House of the Academy of Architecture of the Ukrainian SSR 216 p
- [7] Ptitsina L M 2012 *Problems of urban design in modern cultural science: abstract of dis. PhD. cultural studies: 24.00.01 Chelyabinsk* 24 p
- [8] Filin V A 1997 *Video ecology What is good for the eye and what is bad for the eye* (M.: MC Video Ecology) 319 p
- [9] Nefedov V A 2002 *Landscape design and environmental sustainability* (St. Petersburg) 295 p
- [10] Logunova E N 2012 Features of the formation of the visual image of a large city (on the example of Krasnoyarsk) *Youth and Science: A collection of materials of the VIII Russian Scientific and Technical Conference of Students Postgraduates and Young Scientists dedicated to the 155th Anniversary of the Birth of Tsiolkovsky K E* (Krasnoyarsk: Siberian Federal University) Access mode: <http://conf.sfu-kras.ru/sites/mn2012/section02>
- [11] Kharkov O V, Kopyova A V, Savin S A 2006 Some aspects of optimizing the intracity environment by means of landscape design: *Modern problems of regional development: materials of 1st Interregional Scientific Conference Birobidzhan* (Khabarovsk: FEB RAS) pp 208–210
- [12] Serto M 2005 Around the city on foot *Communita* **2** pp 80 - 87

- [13] Smolitskaya T A, Korol T O, Golubeva, E I 2012 *Urban cultural landscape: traditions and modern development trends* (Moscow: LIBROCO) 272 p
- [14] Vershinin V V 2005 dis. Dr. of economical sciences (M.: GUS) p 359
- [15] Dictionaries and encyclopedias on the Academic <http://dic.academic.ru/>
- [16] Universal design 2017 <http://bezpregrad.com/universal-design.html>
- [17] SENZ 2017 <https://www.senz.com/en/>
- [18] Meseneva N V 2016 On the issue of using small architectural forms in the design of the urban environment *The journal High-Tech Technologies* **8(2)** pp 256-260
- [19] Kozyreva E I 2005 Modern facade: architecture + design *Journal of design and construction* **1(25)** pp 25-27
- [20] Rattle Nancy, Yocom Ken 2011 Basics Landscape Architecture 02: Ecological Design AVA Publishing (UK) Ltd p 178