

Using The Basic Principles Of Landscape Design To Improve Environmental Quality In The Ecological City

Kamalova Dilnoza Zaynidinovna¹, Mullodjanova Shahzoda²

¹PhD (arch), Associate Professor of "Theory and History of Architecture"

²Master in the specialty "Landscape architecture"

Samarkand State Institute of Architecture and Civil Engineering

+99893 7272963

dilichka_k@mailru

Abstract: *Parks and gardens are an essential link in the human relationship system with a natural environment. The city of the future, the foundations of which are laid now, should not be opposed to the natural environment, but organically merge with it. The boundaries themselves between the city and his surroundings lose their rigidity and unambiguousness, the interpenetration of development and open green spaces becomes gradually one of the most important principles of the development of cities and settlement systems.*

Keywords: Ecological city, natural landscape, vegetation, functional resources.

I. INTRODUCTION

The largest cities include large forest arrays, extensive reservoirs, parks in size in hundreds of hectares. They need to be preserved, and where necessary, and recreate all the wealth of the natural landscape. A resident of the city to satisfy his desire for nature, it is not necessary to leave the city's limits, it is important to provide opportunities for recreation in a natural setting on the lap of nature near the housing, places of work and study. However, the conditions for the development of cities, their landscape characteristics, as well as the needs of various groups of urban population in places and types of rest are extremely diverse. They are not the same in the settlement systems located in certain natural and climatic conditions. The main goal of landscape design is the creation of a spatial environment favorable for a person who has all the necessary functional, aesthetic and environmental properties. In order to reasonably improve the habitat of a person, affecting one or another component of the landscape (soil, vegetation, water, air, relief, geological basis), it is necessary to imagine in advance and it is possible to imagine more precisely, in which direction will change and all of his components [1]. Under the term "landscape" we mean a naturally territorial complex, limited by natural borders and characterized by a certain external appearance; The locality with the same type of geological structure, relief, climate and a specific combination of hydrogeological conditions, soils and biocenoses.

II. METHODS

Biocenosis is a combination of plants of animals and microorganisms inhabiting a certain area of sushi or a water branch. Biocenoses are an integral part of the biogeocenosis - a complex of the living and non-living components of the ground surface area with homogeneous natural conditions, all components of which are interconnected by the exchange of substances and energy. The concept of biocenoses and biogeocenoses underlies the ecology - science on the patterns of relations between organisms and their habitat. Natural landscapes are commonly divided into smaller natural and territorial complexes. The anthropogenic landscape is characterized by the fact that in its formation, the decisive role was played by the economic activity of a person, for example, the creation of agricultural land, urban development. The most important variety of anthropogenic landscape is a cultural landscape, that is, the one that is designed purposefully and is characterized by the functional and aesthetic properties favorable for humans. An important role is played by the idea of the interrelated unity of the main natural and anthropogenic landscape components. Only it can provide an environmental environment for the population favorable. Due to the fact that the landscape of the city's landscape is physically heterogeneous and is determined by natural territorial memberships, turns, one allocation of functional landscape units. It is not enough to characterize the structure of the urban landscape with all the completeness [2]. In each city, depending on the terrain, the presence of water bodies and watercourses, the nature of the soil and vegetation cover can be allocated several local landscape areas and subsections (for example, in the city of Samarkand – Hisrau village etc.). The nature and degree of conversion of the natural landscape is the presence of a multi-storey or low-rise manor building, the density of the road, outdoor network, the inclusion in the built-up array of the city of large open spaces of the type of parks, forest parks, water bodies, hills or their absence - all these characteristics are predetermined by one or another type of urban landscape and its spatial structure.

III. RESULTS

The density of the built-up array of the city of large open spaces of the type of parks, forest parks, water bodies, hills or their absence - all these characteristics are predetermined by one or another type of urban landscape and its spatial structure (Figure 1). Being is associated, of course, with the original natural basis, climatic and other natural conditions, the city landscape at the same time is the product of targeted activities, the result of man-made intervention. It can also be considered as a work of

urban-planning and architectural landscape art based on the harmonic unity of wildlife, engineering creativity, architecture. The urban landscape should satisfy the public, cultural, functional consumer requirements of the population, to comply with its biological needs.

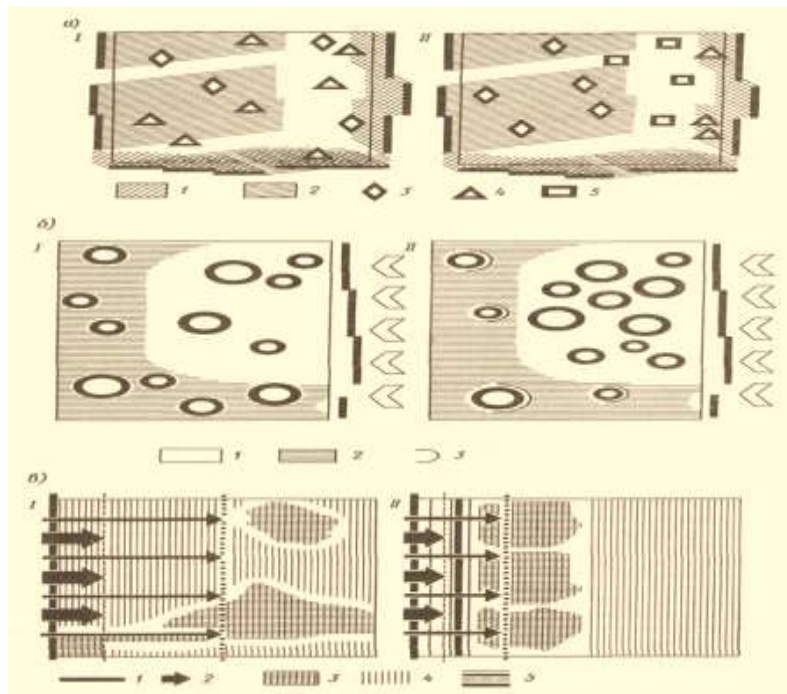


Figure 1. Examples of the effects of artificial elements of the urban landscape on the microclimatic and sanitary and hygienic characteristics of landscaped areas: A - Accounting for the shadowing effect of multi-storey buildings: I - shading conditions are ignored; II - differentiated placement of objects depending on the period of their preferential use; 1 - Morning shading; 2 - evening shading; 3 - "Morning" objects; 4 - "Evening" objects; 5 - objects operated all day; used the windproof effect of multi-storey buildings; I is the uniform distribution of open areas for recreation; II - focusing sites for relaxing within the windproof shadow from adjacent buildings; 1 - territories in the wind shadow of buildings; 2 - non-wind protected areas; 3 - windproof screens; in - accounting for the impact of adjacent transport highways: I - ignoring negative sanitary and hygienic factors; II - zoning, taking into account negative factors; 1 - transport highway; 2 - the distribution of gas and noise; 3 - active forms of rest; 4 - Quiet rest; 5 - protective zone.

Landscapes surrounding cities are classified according to the prevailing type of use on agricultural, forest, meadow, "technogenic". Suitable territories are currently almost completely mastered, are characterized by one or another ratio of natural and artificial components and can be considered as landscape design objects. Among them, in the foreground - the place of mass recreation of the population.

IV. DISCUSSION

Recreation landscape is a natural landscape designed and transformed for recreational activities. Thus, on the basis of the forest massif, a forest park is formed, a comfortable seating area with roads, a reservoir, etc. Stability of the natural complex - its ability to resist recreational loads to a certain limit, followed by loss of the ability of it to self-restoration. In the conditions of rapid growth of cities, urban agglomerations, the economic development of inter-axis suburban territories, various forms of nature conservation are of particular importance. In this regard, we can talk about the existence of protected landscapes. These include: actually reserves, national parks, individual monuments of nature and attractions of landscapes, as well as recreational landscapes of limited economic use. However, the presence of various protected landscapes does not mean that the remaining landscapes are not protected [3]. Ecology scientists and urban planners come to the conclusion that all landscapes should be protected, only the ratio of the environmental and natural human activity in them changes.

V. CONCLUSION

It is possible with a sufficient reason to assume that the development of the landscape architecture goes along two main directions. The first is associated with the mastering of the environmental method of design when creating large parks and forest parks, where the complex of the initial natural conditions is mainly maintained, where the necessary artificial components are only complemented by them. The second direction is the formation of an artificial landscape in those gardens and parks, where urban surroundings, large recreational loads or specific forms of recreation, sports, entertainment do not allow the composition of the

composition on the forms of natural landscape. This second path is widely used primarily with the reclamation of disturbed lands, in sports parks and hydroparks, in gardens and squares, "degraded" building and transport highways, during the construction of gardens on the roofs, etc. (Figure 2). However, it is impossible to lose sight of that, on the one hand, even the most "landscape" park is a product of human activity, and on the other - that the basis of any fleet or garden solved in the "regular" plan remains certain elements of wildlife, although and in the converted form.

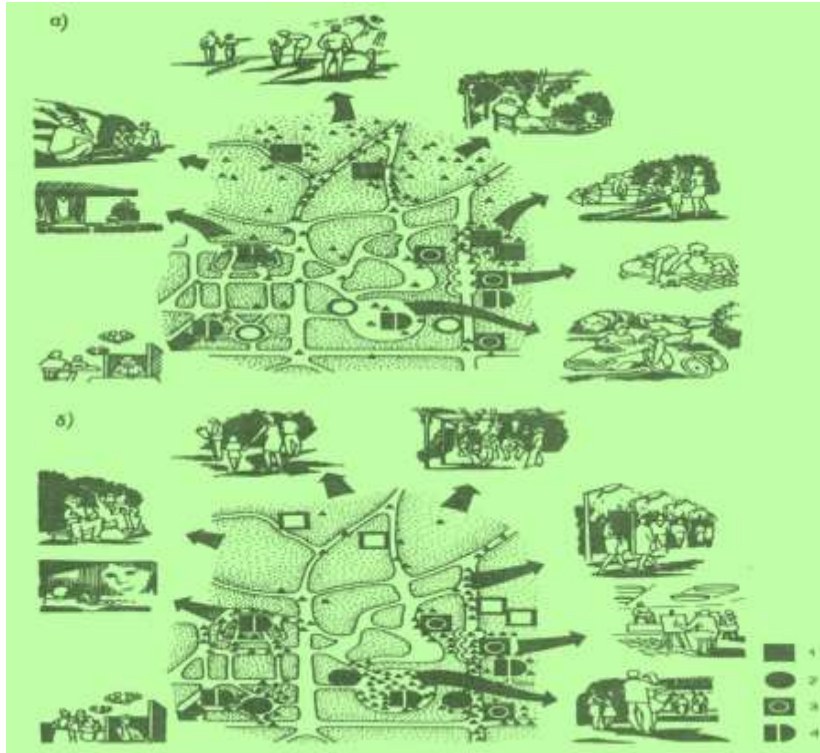


Figure 2. Transformation of the functional zoning of the territory and objects of servicing visitors to the day and evening hours of work Park: A - Central area of park in daytime clock. It is necessary to compact placement of objects that organize the "evening" zone of the park territory; 1 - Objects operating only in day 2 - Objects operating only in the evening, 3 - Objects working in the day and evening in one mode; 4 - objects changing operation mode.

VI. REFERENCES

1. Coline Ellard. Habitat. As architecture affects our behavior and well-being. Moscow: Alpina Publisher, 2016.
2. Kamalova D. Z., Mullodjanova sh. Studying the formation and principles of a comprehensive solution to the environmental reconstruction of the cities of Uzbekistan. "Theory and Practice of Modern Science" No. 5 (59), International Scientific Journal, Saratov (May) 2020.
3. Zabelina E.V. Search for new forms in landscape architecture. Moscow: "Architecture" 2005.