



Design Principles of Modern Specialized Parks, Taking into Account the Psychological Perception of Green Spaces

Lobar Ulmasovna Rasul-Zade

PhD of architecture, Associate Professor,
Tashkent Institute of Architecture and Civil Engineering,
Tashkent, Uzbekistan

Gulchehra Ziyaeva

Master's Degree Student,
Tashkent Institute of Architecture and Civil Engineering,
Tashkent, Uzbekistan

ABSTRACT

The article deals with the optimization of the urban environment by means of landscape design. This problem can be solved through the use of various natural resources, one of which is plants. Plants play an important role in creating a favorable microclimate, creating a unified composition of any space, whether it is an urban landscape, public parks or specialized parks, as well as interiors.

Keywords:

wellness landscape, therapeutic gardens, green frame, treatment facilities, hospital gardens, trails of health.

Introduction

The formation of a full-fledged human living environment is the main goal of landscape architecture and design, which includes the tasks of creating a harmonious, sustainable, close to natural urban environment, in which the influence of adverse factors associated with urbanization is minimized.

A significant reserve in improving the urban environment is the resources of nature, and today one of the important tasks of landscape design is to find solutions for the use of various methods of including nature components in the structure of architectural objects. Their competent assessment and choice of the nature of use turn into one of the factors in the formation of a sustainable urban environment, increasing the diversity of urban spaces due to their integration into the natural environment [1]. To solve these problems, interconnected natural components are used: relief, soils, water areas, plants.

Relevant Literature

A significant contribution to the history and theory of landscape art in the twentieth century was made by prominent scientists: O. V. Bogovaya, A. P. Vergunov, V. A. Gorokhov, T. B. Dubyago, Z. A. Nikolaevskaya, Yu. Kurbatov, L. B. Lunts, D. O. Symonds, et al. For example, D. O. Symonds clearly outlined the conditions necessary for the organic inclusion of architectural forms in the natural landscape, and Yu. I. Kurbatov classified the totality of visual characteristics of landscapes and substantiated the system of connections between architectural forms and visual characteristics of nature, conducted a comprehensive analysis of the system - natural landscape and architectural form. The works in which the compositions of individual palace and park complexes are studied and the characteristics of stylistic phenomena in garden and park architecture are given include the works of A. A. Galichenko, D. A. Kuchariants and A. G. Raskin, G. Zuilen, D. Hunt, D. Brown,

etc.

Among the recently published works, attention is drawn to the studies of such authors as A. V. Sycheva and O. B. Sokolskaya, devoted to the formation of a modern park landscape as a multi-level natural and anthropogenic object of architectural creativity. Of great importance are the studies of T. P. Kazhdan, N. F. Gulyanitsky, N. V. Murashova, L. P. Myslina, M. V. Nashchokina, etc.,

Research results

The urban environment is the main "natural background" for the inhabitants of the city [2]. The urban environment is largely artificial and gives rise to a number of factors that adversely affect the physical and mental health of a person, reducing his ability to work and quality of life. The need to reduce the impact of negative factors, to create an environment favorable for human habitation requires the development of special approaches to the design of intracity space.

Today, a modern person is faced with a huge number of stressful situations, multitasking and bad ecology, from which he can feel exhausted both physically and mentally.

The most important task facing specialists in the field of landscape architecture is to determine the priorities for the development of cities, among which should be: safety, sustainable development, health, comfort, beauty.

Today we celebrate the reverse processes. The most characteristic negative aspects of this problem include:

- reduction of green areas in the city as a

whole, compaction of residential yards with the elimination of plantings and recreation areas, the elimination and decrease in the quality of maintenance of parks, gardens, squares, forest parks;

- deterioration of the state of the environment as a result of a decrease in the number and deterioration of the quality of green spaces, the absence of a mechanism in which specialists can influence the proper spending or distribution of financial budgetary funds allocated for urban greening;

- Numerous social conflicts over the transfer of landscaped areas of common use to other forms of land use, the destruction of massifs and individual trees, shrubs, lawns in connection with complex quarterly development;

- Difficulties in the accessibility of the population to landscaped areas of common use, including an increase in transport costs and travel time;

- lack of planned work on the renewal of green spaces, new projects for the reconstruction of landscape architecture, clear requirements for the quality and quantity of planting material for landscaping in the current year and for the next few years.

And, despite the words of the head of state Sh.M. Mirziyaev: "I have one secret that I have been planning for a long time, it's time to tell about it. Now many people have a question - why is this park so far from the city? The fact is that now the work on the construction of New Tashkent will go here, in the open. And we will turn our current city of Tashkent into a green zone," The above problems, unfortunately, take place [3].



Figure 1. Concrete ghetto of new buildings in Moscow



Figure 2. Dense buildings in Tashkent

Over the past 10 years, faceless 17-25-story boxes continue to grow like fly agaric after rain, both on the outskirts of cities and in the centers.

Concrete boxes with yards-wells, in which windows overlook similar monster houses standing 10 meters away - the only thing that exists in these non-districts. Social infrastructure like schools, kindergartens, playgrounds and clinics is underdeveloped here. Green areas with parks, squares and even trees are completely absent, but all yards are utterly filled with cars.

Based on the foregoing, a person needs the existence of such a space in which he can relax in comfortable conditions, spend his leisure time, recuperate or play sports. The creation of public spaces is an important aspect in the organization of the urban environment, because it directly affects the quality of life of the population. But in order for such spaces to be as effective as possible, they must be multifunctional and comfortable for all categories of the population: children, youth, adults, pensioners and people with disabilities.

There are many methodologies for evaluating public spaces that help determine if a public space is the efficient, usable, and enjoyable space described above, and what needs to be done to increase the quality rating. But, before discussing the effectiveness of various assessment methods, it is necessary to disassemble the terminology of public space.

Public spaces are holistically perceived concrete fragments of the architecturally developed urban space intended for various functional processes of human life [4].

An ideal public space is available to every member of the urban community. Examples of public spaces are, first of all, city parks and squares, forest parks, squares, boulevards, embankments, and, perhaps, one of the relevant types of public space are specialized parks.

How important this is can be judged by the problems designers face when designing multifunctional parks. Namely: modern multifunctional parks are often considered as specific cultural institutions in the open air, which leads, with limited sizes, to overloading their territories with construction objects for various purposes. The functional profile of the park and its architectural and landscape appearance should be determined individually, in accordance with the diverse local conditions, the size of the park and the nature of the formation of the entire citywide system of recreation areas.

The influence of function is most evident in specialized parks and gardens. As a matter of fact, each of them is multifunctional in its own way (for example, a resort park - health-improving and landscape-walking, etc.). However, the leading function, occupying a dominant position in the program of the park, gives it a pronounced specific character.

As more and more new types of recreation, sports, intellectual activities in the natural environment, entertainment develop, new types of parks and gardens appear with their own specific appearance. This creates the prerequisites for previously unknown compositional techniques. But the originality of the park, as an object of composition, is

primarily reflected in the fact that the function affects the composition, as a rule, not unambiguously, not one-sidedly, but in a complex interaction with the natural fundamental principle.

In this regard, let us consider a number of examples of the impact of a specialized function, focusing on such types of parks and gardens, which have become widespread in recent years in world practice.

For example, the main task of children's parks is to organize active recreation for children in the natural environment, promote their physical development, satisfy their desire for adventure, creative pursuits, and experimentation.

In the landscape of the children's park, it is desirable to reflect the greatest possible variety of natural conditions - both "forest", and "field", and "mountains" should find their place in it, reservoirs, streams are obligatory. They house the appropriate playground equipment, huts in the forest, boats and dams on the water, etc. Children get acquainted with many types of flora here for the first time - bright flowers, fruit and ornamental trees, flowering shrubs. More than anywhere else, labyrinths, green tunnels, "halls", surprise fountains and other traditional garden fun are appropriate here. However, in general, fences, tightness and pretentiousness in plantings and the path network should be avoided - open spaces with a stable lawn should prevail.

Sports parks are complexes of sports, physical culture and cultural and educational facilities located among green spaces, which include places for short-term recreation. The architectural and spatial composition is determined here primarily by the conditions for holding competitions and training. Sites, structures, driveways and alleys occupy a much larger part of the territory here than in other types of parks. Their landscaping must meet a number of special requirements - in relation to wind protection, noise protection, uniform sunlight, creating a calm monochrome background, creating a grass cover that is resistant to trampling, etc.

The compact arrangement of sports grounds complicates the task of their acoustic

and visual isolation. This makes it necessary to resort to the organization of high green "walls", earth embankments, to use or create differences in the levels of adjacent sites. The appearance of the sports park is primarily made up of bright green lawns, a clear pattern of running tracks, smooth outlines of stands, geometric contours of swimming pools, etc.

Memorial parks are founded in honor of outstanding historical events memorable for the people and stand out sharply from all other specialized parks with their monumental solemn character. They require a specific approach, the creation of a zone with a special psychological "climate", which prepares the visitor for the perception of the main memorial, gives him the opportunity to concentrate, to distract himself from extraneous impressions.

The leading feature of the external appearance of such parks is the extensive use of monumental facilities, a clear layout with a strictly thought-out traffic schedule, and a predominantly regular interpretation of vegetation. Elements of improvement should help to reveal the intention of the spatial composition, connect individual buildings into a single complex, and emphasize its scale.

The assortment of plants for memorial parks includes highly ornamental trees and shrubs. When it is necessary to emphasize the solemnity of the memorial, columnar forms of plants are used, weeping forms enhance the mood of grief. Color also matters: for example, purple-leaved plants are used to create a solemn and mourning mood. Some trees are traditionally associated with certain symbolic meanings.

The peculiarity of botanical gardens is a complex combination of diverse functions (research work on the study of the resources of domestic and world flora, horticulture and green building, cultural and educational activities, and, finally, the recreation of the urban population). The main element of the botanical garden is the zone of botanical expositions, which usually occupies about 50 ... 70% of the total area. In this zone, plants are located according to certain botanical and decorative features.

Many botanical gardens, performing their

scientific functions, simultaneously serve as landscape and walking parks and become the most valuable natural components of the architectural and artistic appearance. In such gardens, plants are collected either in a systematic manner, or according to their economic value, or according to decorative and other features.

In connection with the development of the entertainment industry, amusement parks are becoming more widespread. The stress experienced by a person at work can be reduced in places of rest not only by communicating with the natural environment, but also by special entertainment devices that allow you to quickly switch your attention from the usual work or household environment, psychologically discharge, experience positive emotions. The author of the world's largest amusement park, the famous film director-animator Walt Disney, sought not only to maximize the variety of themes of individual zones, their technical support, but also to ensure that each zone had a specific landscape solution. At the same time, most of the area (11 thousand hectares) is occupied by protected areas.

Therapeutic and recreational parks, as well as the gardens of sanatoriums, rest houses, hospitals and resorts are considered as open-air clinics. The main task of such parks is to create the most favorable psycho-emotional, hygienic and microclimatic environment for the sick and vacationers. A feature of this type of park is that, along with the obligatory preservation of the general natural background for recreation, it is necessary to provide for the possibility of carrying out all the necessary medical and recreational procedures, physical education classes with varying degrees of stress on the body, and also create a favorable environment for free daily communication of vacationers.

One of the varieties of exhibition parks is represented by ethnographic, historical and cultural expositions. They demonstrate works of folk architecture, applied arts, examples of the traditional way of life. In fact, this is an open-air museum, its exhibits are perceived against a landscape background and interact

closely with it. The success of the organization of this type of park depends entirely on the extent to which the expositions correspond to local natural conditions - topography, vegetation, etc...

Zoological parks are among the most complex in terms of their functional and planning organization. Recently, zoos organized according to the ecological principle prevail, animals are shown in accordance with the conditions of their habitat, the "taiga zone", "desert zone", "forest-steppe", "mountain" zone, etc. are distinguished. This approach makes it possible to show the natural behavior of animals, but requires special efforts to recreate the complex and diverse landscape structure in the park, which is possible only if it is sufficiently large.

In addition to the above functional parks, the so-called pharmaceutical gardens have recently become very popular. In a large and noisy city of concrete and steel, there is a desire to hide from the bustle of the city. Communication and communication with nature, like nothing else, saves from this problem. There are various ways to solve it.

For example, in Hong Kong, urban farming became popular already in the 2000s [5]. Chinese "Gardens in the Sky" by Osbert Lam is not only a garden on the roof of a skyscraper at a height of one and a half hundred meters, but also a large-scale experiment. Residents not only find the opportunity to engage in agriculture in urban environments, but also have the opportunity to obtain environmentally friendly products. At the same time, on the farm of Mr. Lam, frequent guests are agricultural students. Teachers lead them among the stalls and give lectures [6].

In major cities around the world, residents are setting up community gardens and orchards. This is the land where the townspeople grow flowers, vegetables and other plants. For example, in New Orleans, collective gardens were organized en masse to restore life after the floods.

To develop such interest among citizens in these objects, you can start small - with the organization of small, low-maintenance pharmaceutical gardens in parks, squares, and

wastelands. The apothecary garden in garden design has experienced a surge of interest in recent years. Such an object can perform not only a utilitarian function, but also a recreational and aesthetic one - serve as a quiet corner for relaxation and walks, a space for various master classes in gardening, needlework and other calm types of creativity.

An equally interesting solution in terms of recovery is the so-called "Health Paths", the organization of which can be on the territory of any of the above specialized parks. To improve the health of children in the summer using



natural, natural, healing factors, it is recommended to use the "health path" - a footpath with areas of various natural materials (gravel, sand, large stones, wood shavings, etc.) [7].

There are nerve points on the feet that are responsible for the general state of human health. To maintain the normal functioning of all organs, they must be stimulated. Particular attention should be paid to such an impact at preschool age, since the body is actively formed and develops in children [8].



Figure 4. Section of the barefoot trail: a - rope road; b - gravel path

All these areas of landscape design allow not only to improve the microclimate, but also to get emotional pleasure. Any garden has therapeutic properties. A well-designed garden space can activate our vital senses - sight, smell, hearing, touch, taste - and thus have a beneficial effect on the psycho-emotional state, and therefore on health [9].

Creating a sensory garden allows you to turn to feelings through communication with nature, to evoke involuntary associations. But it is not always possible to create a garden or just visit it. The way out of the situation can be a mini-garden on the window, which will delight

at any time of the year.

The miniature garden is a fairly new trend, perhaps based on the art of bonsai and Japanese rock gardens. Creating a miniature sensory garden is a topical issue. Recently, there has been an increase in allergic diseases, their severity is aggravated. In this regard, there is a decrease in the amount of landscaping in public centers, medical, educational institutions, etc. The sensory garden can help in solving this problem, because to create it, not only plants are used, but also inert materials.



Figure 3. Composition of modules

A person receives information from the outside world through the five main senses: eyes, ears, tongue, nose, skin (touch, tactile sensations). Nature, the surrounding landscape, the garden inevitably evoke emotions. The perception of the human senses is activated when he contemplates nature, rests in the garden [10].

Conclusion

Today, wellness landscapes are natural, modified or specially designed landscapes based on a proven impact on meeting the physical, psychological and social needs of people using landscapes for wellness purposes. It is noted that even a short contemplation of the landscape is sufficient to relieve tension, equalize blood pressure, relax muscles and normalize mental and cardiac activity. The health-improving impact of the landscape is based on the principle of its orderliness and the ability to restore the lost physical and psycho-emotional stability [11]. Modern landscape architecture does not refute the presence of this impact, but on the contrary, it recommends initially laying the formation of the landscape, taking into account the principles of landscape design, medicine and psychology. To implement the tasks of creating a comfortable urban environment, the creation of health-improving landscapes at various territorial levels (the inclusion of therapeutic landscapes in the system of natural landscapes, public spaces, healthcare facilities, etc.) requires a systematic and professional approach to the formation of an integrated multi-stage green infrastructure of the city, in which therapeutic landscapes should be given priority.

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