

POSSIBILITIES OF APPLYING THE PRINCIPLE OF LINEAR RECREATION FOR THE CITIES OF UZBEKISTAN.

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Abstract. The article touches on the problems of air pollution and changes in the climatic characteristics of Uzbekistan. As well as ways to solve the problem through the introduction of environmentally friendly recreational areas. The definition of the name "Linear Park" is given. The linear principles of organizing urban landscaping, ways of their implementation into the planning structure of the city and their positive impact on the greening of the region are considered.

Keywords: linear parks, green corridors, urbanization, recreation, coastal zones, embankments, ecology.

INTRODUCTION.

One of the most important problems of the past 2023 for the preservation of the ecosystem of Uzbekistan was the issue of air pollution and a decrease in the amount of water resources in the country.

Changes in the climatic characteristics of a region depend on many factors, ranging from global warming to the internal construction of buildings and structures.

For example, the planning structure of the city of Tashkent is undergoing large-scale changes, especially the displacement of green and recreational spaces, which are being replaced by new residential building formats. At the same time, overheating is one of the most acute problems within the climatic background of Uzbekistan. And everyone who has ever experienced the summer heat of Central Asia knows the value of water and shade under the trees [1].

We observe how the high rate of urbanization of modern life has provided certain positive opportunities for the population, but at the same time led to the deterioration of the environment [1]. This problem affects not only the cities of Uzbekistan. By studying the world experience of city design, we can trace how similar to what was happening in our region was relevant in other large cities of the world more than 20 years ago. Except that they are switching to a green economy and actively increasing their green resources over the same 20 years, and we are further depleting them.

In this article we consider one of the most successful concepts for solving the problem in cities with a minimum number of territories suitable for creating green, recreational resources and improving the water basin.

RESEARCH MATERIALS AND METHODS

Studying world experience, it can be seen that in the mid-twentieth century – the first half of the twentieth- first century, due to the densification of buildings and the displacement of natural elements from the fabric of cities, environmental formations of an urban planning scale began to be introduced. The development of open public spaces in the structure of a modern large city is moving in the direction of their “accretion”. This leads to the formation of a multifunctional green frame that connects linear fragments of urban development into integral natural-urban systems, mainly of a pedestrian recreational and leisure nature. These systems offer a new approach to organizing the urban environment, form the ecological framework of the city and are called “linear park”.

Linear recreation is a principle based on the creation of green and open spaces along any axis or line of the city, as well as waterways, lands, wastelands, and territories that previously had a different functional orientation that meander and overcome various urban landscapes .

The increasing popularity of linear parks has been observed since the 1960s. It is due to their functionality and the deterioration of the infrastructure of the industrialization period, which in turn created new opportunities for the design of

linear parks. Over the past decade, they have attracted even more significant attention from urban planners. The lack of available space for the formation of large parks in conditions of high population density has provided an opportunity for the revitalization of border spaces that use the remaining areas along waterways, coastlines, coastal areas, abandoned railway lines, etc.

Urbanized spaces of this nature have an emerging type of linear environmental objects, and include parks, embankments and sports routes, and are becoming increasingly in demand. Due to their multifunctionality, they play a special role, have a specific structure and are one of the ways to rehabilitate the urban environment.

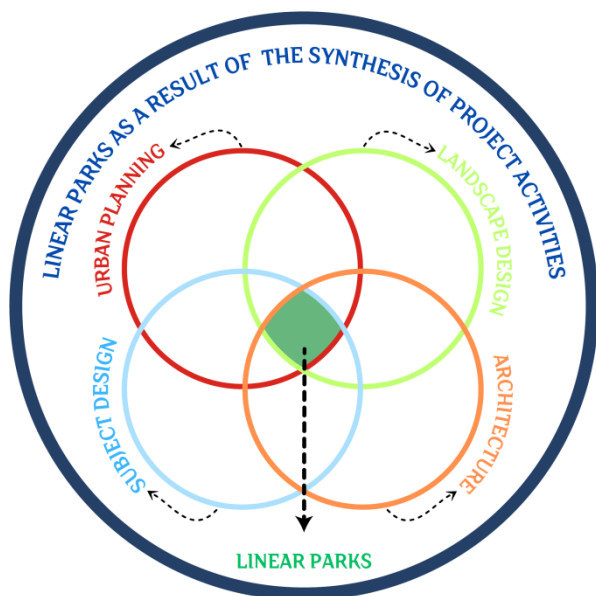
In contrast to recreation, which is geographically concentrated in one territory and has conventional geometric blocks (squares, boulevards, etc.) that are in contact with a predetermined population density. The linear form of recreation, as a new structure of open spaces , makes it possible to distribute the same area, but taking into account its integration, connection with other territorial zones and providing access to a larger number of people throughout the city, region or local territory.

Barcelona, Bogota, Boston, Buenos Aires, Jerusalem, Medellin , New York, Palmyra, Paris, Rosenheim , Stockholm, Toronto and Uppsala, and a number of other cities have integrated green corridors into their strategic master plans as quick and cost-effective ways to create green spaces. zones

Symonds once noted , “urban spaces such as oases can transform the city into a completely new landscape that truly becomes an attractive, refreshing environment” [2,3].

From an ecological perspective, linear parks are seen as biological corridors that can support urban biodiversity, enhancing connectivity between large parks or nature reserves.

This type of recreation is at the intersection of such areas of spatial and planning design activities as urban planning, landscape design of the urban environment, object design and architecture.[4]



Rice . 1. – Scheme of synthesis of project activities in relation to a linear park [4]

In the context of urban planning, a linear structure has a large territorial scale and performs a number of significant functions:

- **The city-forming function** is a priority from the point of view of science and theory of urban planning. It includes a number of aspects aimed at creating a harmonious and coherent urban space, forming ensembles and ensuring the integrity of the urban environment. The ecological framework

of a city, also known as the ecosystem or natural infrastructure, must be preserved, developed and integrated into urban planning. Large-scale coordination of various elements of the urban environment implies spatial planning and organization of urban space at different levels, from local to regional.

- **The function is to meet the needs of society** in the context of creating new types of public urban spaces that are capable of providing diverse and relevant cultural recreation from the point of view of modern ideas, aimed at all age and social strata. Linear parks are characterized by such properties as democracy, multifunctionality, environmental friendliness and respect for nature and people.

- **The function of testing innovative methods** : environmental protection (waste-free, recycling , energy efficient), software (involving citizens in the creation of the natural backbone of the park) and formative technologies (land forms, vertical gardens, and so on).

•The fourth important function is to **explore and test new imaginative aesthetic potentials** of the synergy of two environments - urban and natural. As part of this task, linear parks should be considered as a solution to two key problems: ecological rehabilitation of the environment and the creation of public communicative spaces with a new aesthetic focus. Linear parks should be formed on the basis of a synthesis of the dynamic interaction of the principles of ecological environmentalism and landscape design. Ecological environmentalism is focused on preserving and improving the environment, while landscape design deals with the organization and design of space, the formation of its aesthetics. In this context, linear parks represent a unique opportunity to test new approaches to the integration of urban and natural environments, combining environmental priorities with aesthetic ones. This will create public spaces that both serve the purposes of environmental rehabilitation and are centers of social activity, offering new forms of leisure and recreation. [5]

An extensive structure of green public space that is at once a public recreational area, a pedestrian route, and a center of attraction has led to the tremendous success of New York's High Line Park . Having made a splash in urban planning, being a new generation area, it influenced the emergence of a number of similar public spaces around the world, including the development and renovation of coastal recreation. (Cheonggyecheon Linear Park in Seoul. “ Lines of Life ” in Singapore, Manzanares Promenade in Madrid-Rio Park, Seattle, Washington Waterfront Seattle Olympic Park). A wide variety of recreational functions, attractiveness , interrelation with the urban fabric, attracting tourists, publicity, the possibility of combining attractions, shows individuality and becomes the territorial brand of many cities.

Territorial Identity and city branding entered a phase of active development at the end of the 20th – beginning of the 21st century in Europe and America, as well as in Asia and Australia. The starting point for this phenomenon as an established discipline can be considered the beginning of the use of the terms “ place branding ” and “ national branding » Simon Anholt , in 2002 [6,7].

When developing a brand book for linear territories, specialists in the field of urban planning direct their attention primarily to: improving the reputation and image of the region; creating positive associations and images among various audiences (local population, tourists, etc.) ; increasing the number of jobs for local residents; increasing competitiveness among other cities; expanding the area of its economic development, attracting the attention of new investors, tourists and entrepreneurs.

This method provides a comprehensive formation along with others, such as the method of deep -spatial compositional connection of territories and the method of scenario-functional zoning. Scenarios involve creating routes with mise-en-scenes, transitions and environmental markers. [6]

TNOC Researchers A. Fagi, K.Z. Vidal , F. Gusteler and R. Lopez believe that when creating a linear park project, through a well-organized and effective planning process, it is very important to take into account the perceptions and attitudes of visitors, exploring the relationship between public activities and public space. In creating the linear park project, through a well-organized and efficient planning process, It is important to consider the perceptions and attitudes of visitors when exploring the relationship between public activities and public space. [8]

In 2016, researchers assessed and collated data on six linear parks in Argentina and Colombia. Based on the results of the analysis, three different types of linear parks were identified, which were classified as connective, aerobic and coastal. [9]

It was found that these three types of parks differ in the range and quality of services offered, as well as in the perception of the local population. A classification of the studied areas was carried out taking into account such factors as accessibility, adjacent land use (level of complexity of the urban environment), connectivity, vegetation cover, presence of paved surfaces, infrastructure and ways of using these areas by the population for active and passive recreation.

Linear parks - connectors are used as transit corridors for the movement of the population. They are characterized by natural conditions conducive to walking and are located between commercial and service areas and other green areas. They were

rated by respondents as the most favorable from an environmental point of view, but the least favorable in terms of social interaction.

Aerobic linear parks: They play a dominant role in daily recreation because they provide the greatest overall physical benefit, as evidenced by the rates of active recreation (running, cycling, roller skating, skateboarding, etc.) being the highest in parks of this type. This type of park doesn't just beautify the area; it has a beneficial effect on the health and well-being of residents.

Linear parks on the embankment : Capable of incorporating an aerobic type of linear recreation in terms of the amount of active recreation, and partly a connecting type, since they are used not so much for commuting to work, but for contemplating the landscape. They also have great potential as places for communication and communication, hosting events, attracting tourists and developing the economic component of the territory. The possibility of significant development of scenario-functional zoning and an increase in the number of types of activities in parks of this type is closely related to the availability of water (fishing, contact with the water surface, meditation, etc.). Architects, designers, planners, psychologists and ecologists who study environmental behavior regularly cite the presence of water as one of the most significant and attractive visual components of a natural or artificial landscape.

An example of the successful implementation of the principles of creating a comfortable linear recreational area is the city of Copenhagen (Denmark). Here, bicycle paths are an integral part of the city's infrastructure, and the safety of pedestrians and cyclists is considered a priority for traffic. This allows city residents to actively use bicycles for transportation and recreation. In addition, Copenhagen has many parks and embankments where residents can enjoy nature and spend free time.

Another unique linear recreation infrastructure in the metropolis is the Royal National Park in London. The park was created in 2011 and has become the real “green heart” of the city. It is one of the largest parks in Europe and offers city residents many opportunities for active recreation and relaxation. The park contains

walking and cycling paths, a lake, flower gardens, as well as areas for picnics and sporting events. The main water area of the city is the Thames River, which runs through the park and creates additional opportunities for recreation on the water. The territory successfully combines unique natural elements and stylish urban design, offering citizens a variety of unique and visually attractive places.

THE RESULT

The importance of taking into account the needs of citizens in creating a linear recreational zone is confirmed by research. For example, a study conducted in the United States found that more than 86% of residents prefer to live near parks and other recreational areas. It was also noted that public spaces, including linear recreational areas, help improve the physical and psychological health of the population, reduce stress levels and increase overall life satisfaction.

CONCLUSION

Based on research and many years of experience, we can conclude that designing environmentally sustainable linear recreation in megacities is a complex, demanding task and an important aspect of urban planning. To introduce this experience into the planning fabric of the cities of Uzbekistan, it is necessary to take into account climatic characteristics, preferences of citizens, a variety of opportunities for recreation and physical activity, integration of existing infrastructure and consideration of the environmental features of the area. All these are the basic principles of creating a comfortable linear recreational area. Examples of the successful implementation of these principles in developing cities such as Copenhagen, London, USA, Seoul, etc., confirm their effectiveness. Only through harmonious interaction with the environment can we create unique and attractive recreational spaces that contribute to the physical and psychological well-being of residents of megacities.

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