FEATURES OF THE ARCHITECTURE LANDSCAPE ARRANGEMENT
AND OBJECTIVES OF THE DEVELOPMENT OF RECREATION
SYSTEM IN LVIV SUBURBAN

CECHY ORGANIZACJI ARCHITEKTONICZNEJ I KRAJOBRAZOWEJ
ORAZ CELE ROZWOJU SYSTEMU PODMIEJSKICH TERENÓW
MIASTA LWÓW

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ABSTRACT
The architectural and landscape organization of the recreational system of the suburban zone of Lviv is analyzed. The proposals on its improvement are made on the base of the complex analysis of the current state.

Key words: natural-landscape conditions, resettlement system, architectural-landscape organization.

STRESZCZENIE
Analizowana jest architektoniczna i krajobrazowa organizacja systemu rekreacyjnego podmiejskiego obszaru Lwowa. Propozycje dotyczące jej ulepszeń oparte są na kompleksowej analizie obecnego stanu.

Słowa kluczowe: warunki przyrodniczo-krajobrazowe, system przesiedleń, organizacja architektoniczno-krajobrazowa.
1. PROBLEM RESOLUTION

In recent years, the problem of recreation has become especially relevant for the inhabitants of large cities. The value of recreation is especially enhanced due to the negative effects of scientific and technological progress, deterioration of the natural environment and urbanization.

Ukraine develops its tourism and recreation industry. Suburban zones of the large cities, as a place of temporary stay of tourists and a place of short-term rest of inhabitants of the city, are relevant for research. Changes of approaches to their architectural and landscape purposes, including the transformation of the recreational system of suburban zones of large cities are required in the new socio-economic conditions.

This function of the suburban zone is due to the fact that it allows to restore the physical strength of a person. And this, in its turn, leads to the increase of the role of the suburban zone, which becomes the necessary natural center, creates the favorable microclimate for its full of functioning of (its suburban zone), as a cultural and recreational center. However, the rational use of recreational and tourist resources of the suburban zone is impossible without their detailed analysis and development of practical recommendations for optimizing the development of appropriate recreational zones.

The theoretical foundations of the territorial organization of the recreational zones, places for recreation and living, problems of urban development were explored in the works by T. Panchenko, I. Rodichkin, M. Dyomin, M. Habrel, V. Shulyka, V. Yatsenko, R. Stotska, Yu.Vedenin, L Zorin, V. Preobrazhenskiy, N. Nedashkivska, T. Skutar, H. Filvarov and others.

The purpose of the article is to reveal the features of accommodation and architectural and landscape organization of recreational facilities in the suburbs of the large city.

For the achievement of this goal, it is necessary to resolve the following tasks:

1. to carry out the characteristics and analysis of Lviv and the suburban zone, to reveal and analyze the features of the location of recreational facilities in this zone;
2. to explore the features of the architectural and landscape organization of recreational facilities;
3. the main tasks of the development of recreational objects of the suburban zone.

The object of the research is: recreational complexes that are located in the suburban zone of Lviv. 81 objects were identified on the territory. For the detailed analysis there were selected 12 complexes. Three main characteristics were taken into account under their selection: the traffic intensity of holidaymakers, the size of the zones and the character of the building.

The processes occurring in many zones are the subject of the exploration: economic, spatial-landscape, cultural and socio-demographic, and which lead to the allocation of a specific urban-recreational space and reservations for the features of the architectural and planning organization of recreational objects in the suburban zone of Lviv.

2. CHARACTERISTICS AND ANALYSIS OF LVIV AND ITS SUBURBAN ZONE.

THE FEATURES OF THE LOCATION OF RECREATIONAL OBJECTS IN THE SUBURBAN ZONE (NATURAL AND LANDSCAPE CONDITIONS, RESETTLEMENTS, TRANSPORT INFRASTRUCTURE)

In recent years, the problem of organizing active recreation has become especially relevant for inhabitants of large cities. In my opinion, the very recreational development of the suburban zone of large cities is a sufficient alternative to a much more expensive outdoor
recreation. However, the rational use of recreational resources of the suburban zone is impossible without its detailed analysis.

Consideration of recreational objects and territories of the suburban zone of the city as a system requires the identification and analysis of the elements, connections and relationships that exist between them.

The recreational system is a set of interacting structures and elements, aimed at ensuring the recreational needs of the society. The components of the recreational system are complex structures owing [1] the following properties: stability, dynamism, self-management. The development and placement of recreational systems are closely related to the existing system of resettlement of the resident population.

The recreational system of the suburban zone is created by:

- natural-landscape conditions (forests, rivers, lakes, ponds);
- existing historical and cultural, archaeological and architectural monuments;
- composed system of resettlement;
- existing transport network;
- existing recreational objects and recreational infrastructure.

I dwell on their detailed analysis.

- natural-landscape conditions (forests, rivers, lakes, ponds);

In the suburban zone Yavoriv (33.7%), Zhovka (25.2%) and Pustomyty (17.4%) districts have the most of forests. A significant area of these forests has recreational and health importance. In particular, in the state enterprise "Lvivske", which covers mostly Pustomyty district, the total area of recreational and health forests has 12,300 ha. Their structure is represented by a green zone of cities and forests and parks territories.

Water resources used for bathing are represented by equipped ponds in the suburbs of Lviv (Vynnyky, Bryukhovychy), in Pustomyty district (Basivka, Davydovychy, Lisnevychy villages), in Horodok district (Rodatychi village), in Yavoriv district (Vereshchitsia village). The equipped ponds are actively used in the suburbs of Stare selo (Pustomyty district) and in Strilky (Peremyshlyansky district), technical ponds in Zhovkivskiy district - Zashkiv village, Pustomyty district - Navariya village, as well as inundated quarries in Yasnyska village (Yavoriv district) and Zadorozhne village (Mykolaiv district). On the availability of the present water objects can be divided into public, with controlled access and strictly regulated access [2]. The most suitable for swimming ponds are the part of holiday complexes or are leased or owned by private enterprises. Popular for amateur fishing are lakes and ponds in Yavoriv (Vereshchitsa, Maidan), Zhovkivskiy district (Zashkiv, Hamlivka), Horodok district (Davydovychy) and Pustomytyskyi district (Navaria).

- available historical, cultural, archaeological and architectural monuments;

They increase the recreational activity of the suburban zone, especially for cognitive types of recreation, the presence of objects and zones of the natural reserve fund. The largest concentration is in Zhovkivskiy district - (20515.6 hectares) reserves "Hryada", Zavadivskiy, Regional landscape park "Ravske Roztochia", Yavoriv - (8,731 ha) the reserve "Roztochia", Yavoriv National Park, as well as a number of facilities available in Pustomyty - (3121, 97 hectares) reserves "Lvivskiy", "Chortovi skaly", Horodok - (1206 hectares), the reserve "Lyubinsky", Peremyshlyanskiy - 934.55 ha, Mykolaiv - 588.95 ha, Zolochyv - 309.95 ha.
A system of resettlement is a set of urban and rural settlements of various sizes and economic purposes, united by territorial-production relations in the branch of labor application, services, recreation with a common transport and engineering infrastructure. Territorial systems of resettlement were composed historically.
The relationship between resettlement and recreation systems are differed in structure. The recreational system of the suburban zone of Lviv is characterized by a parallel-connected location of recreational settlements. Perhaps as a parallel location of large recreation and urbanization zones, and the alternation of smaller recreational and urbanized areas as part of individual group of resettlement systems [4].

Fig. 1b. Recreation zones in the suburban area of Lviv. Source: drawing by author
This type of location of urbanized and recreational systems is necessary to reduce transportation costs associated with travelling and rest of the population.
Urbanization processes affect the types of recreational systems:

- **urbanized** are located in large centers of group resettlement and they provide daily recreation;
- **recreational-urbanized** are located in the zone of influence of a large city of the group of resettlement system, providing a weekly short-term and long-term outdoor recreation;
- **unurbanized** are located outside the zone of active influence of cities and resettlement systems, ensuring the realization of long-term outdoor recreation.

Gradual urbanization of recreational settlements (typical for I and II zones of the suburban recreational system of Lviv) is associated with the need for a comfortable rest, can cause a violation of the ecological balance.

For the third zone (peripheral), a distinctive location of recreation is characterized, which is explained by their remoteness from urbanized systems.

Such location requires the improvement of services for holidaymakers due to the remoteness of the supply bases and maintenance.

The modern trend is the combination of recreational and urbanized systems, when occur their structural interpenetration and spatial communication.

**existing transport network:**

The transport infrastructure is of particular importance, with which the recreational development of the territory practically begins. Without a developed transport and a balanced network of roads, the spatial interaction of recreational and urbanized systems is impossible. The transport accessibility of recreation increases the degree of integrity system of the "city" - recreation. The transport network should ensure a good connection with the main points of passenger and cargo creation traffic, in this connection the rational location of railway stations and car stations become actual.

The transport system should ensure the availability of various functional zones, the delivery of a resident population from the place of residence to places of rest.

**existing recreational objects and recreational infrastructure.**

In the first zone of the suburban recreational zone of the city of Lviv, recreational objects are located unevenly. They are mainly concentrated around the suburban settlements: Vynnyky and Briukhovychy. These territories are the most popular places of recreation for residents of the regional center. The south-western part of the suburban zone is the best secured with recreational objects. [5]. At the same time, the insufficient number of recreational objects in the north-eastern direction from the city of Lviv attracts the attention. Analyzing the location of recreational objects relative to the routes of communication, we can conclude their transport position in the western part of the suburban zone is more advantageous compared with its eastern one.

The second zone is recreationally active, the basic mass of recreational activity participants is concentrated in its limits. This territory is with an average level of urbanization, with average indicators of population density, with imperfect infrastructure of the territory.

The third zone is the peripheral, the zone of extinction of the influence of the nucleus and more local anomalies. This is mainly the territory of agro-industrial production and rural development, with low population density, insufficient level of development of industrial and socio-cultural infrastructure, but a fairly wooded area and a well-developed network of water resources. Such features of the peripheral zone let develop it as a recreational zone.
3. RESEARCH FEATURES OF THE ARCHITECTURAL AND LANDSCAPE ORGANIZATION OF RECREATIONAL OBJECTS

<table>
<thead>
<tr>
<th>Location</th>
<th>Object type</th>
<th>Diagram of the location of the complex (object) in the structure of the area</th>
<th>Functional zone zoning of the complex</th>
<th>Photorealization</th>
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Fig. 2. Classification of recreational facilities in the suburban area of Lviv. Source: drawing by author
**Fig. 2. Classification of recreational facilities in the suburban area of Lviv. Source: drawing by author**

<table>
<thead>
<tr>
<th>Main data</th>
<th>Functions</th>
<th>Services given by the institution</th>
<th>Seasoning of O slight</th>
<th>Nature's condition</th>
<th>Characteristic of city's urban situation (natural environment)</th>
<th>Functionality and planning structure of the territory</th>
<th>Architecture and landscape criteria of the territory</th>
<th>Composition and esthetic organization of the territory</th>
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<td>Demolished - Physical arrangement</td>
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<td><strong>Area</strong></td>
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The main building of the complex is the office building, which consists of four floors. The building has a modern architectural style. The area is surrounded by streets and the building is located at the corner of two streets. The building has a modern architectural style. The area is surrounded by streets and the building is located at the corner of two streets.
### Fig. 2. Classification of recreational facilities in the suburban area of Lviv. Source: drawing by author
Fig. 2. (continued). Classification of recreational facilities in the suburban area of Lviv. Source: drawing by author.
The presence of natural and architectural landscapes which have aesthetic and recreational value influence the planning organization of recreational objects.

The architectural and landscape organization of recreational objects in three zones of a suburban recreational system differ with their interconnection with the surrounding landscape. The nature of the natural landscape influences the choice of methods of interrelation with architecture:

a) the entrance of the architecture of the recreational object into the landscape or the repetition of the relief;
b) contrasting the architecture of a recreational landscape or relief object, with the dominant being either a landscape or an object;
c) the subordination of the architecture to the landscape as a harmonious fusion with the landscape or relief.

Architectural compositional links between the premises, ensuring the performance of basic functions, determine the main types of architectural and landscape organization of recreational objects:

- centralized composition with location of the main functions in a single volume at one or at different levels;
- block composition, when the main functions are located [1] in different space-spatial blocks;
- podium composition, when the public part of the building developed by horizontal, is the base for the residential part of the building developed on the vertical.

The podium composition for the recreational objects of increased comfort occupying a significant territory with numerous entrances and the free space was the most widespread.

4. THE MAIN TASKS OF DEVELOPMENT OF RECREATIONAL OBJECTS OF THE SUBURBAN ZONE

To form the main objectives of the development of the recreational zone, it is necessary to assess the availability of its recreational resources.

Determination of the coefficient of state of the recreational-active zone was carried out according to the formula (the analysis was carried out by a 10-point scale):

$$k_z = RS \sum f_n,$$

where $k_z$ is the coefficient of the state of the recreational zone; $f_1$ is the socio-economic coefficient, depending on the degree of human impact in natural complexes, on the number of possible impacts associated with economic activity; $f_2$ is the coefficient of recreational attractiveness, which depends on the landscaping of the territory, the possibility to use it for recreation, the popularity of the place of rest; $f_3$ is the ecological coefficient, which includes the characteristics of the comfort of the recreant and the animal world, whose representatives inhabit this recreational formation; $R$ is the assessment of the state of recreational tourism infrastructure; $S$ is the assessment of the level of social and economic development of the territory.

The main tasks of the development of the suburban recreational system are:

- to develop general plans for the construction of recreational centers, to ensure the rational use of natural recreational resources;
- to carry out the recreational area by recreational capacity in accordance with the norms of anthropogenic load on the landscape;
- to improve the quality and introduce new types of recreational services;
– to carry out reconstruction of existing and construction of new highways to recreational centers, which would approach the international standards in terms of quality;
– to raise the level of infrastructure and service network in recreational centers on a qualitatively higher level;
– to create favorable conditions for the attraction of domestic and foreign investments in the development of the recreational sphere;
– to carry out the reconstruction and modernization of sanatorium and resort recreation and tourism establishments;
– to ensure the popularization of recreational institutions of the suburban zone on the national and world market of recreational services;
– to intensify the international cooperation in the field of recreation.

Therefore, in order to increase the recreational potential of the region, in our opinion, the rational use of the recreational suburban zone and its prospective development is important.

5. CONCLUSIONS

1. Insufficient development of recreational infrastructure, in particular cases, its absence is characteristic for the recreational system of the suburban zones. In general, it lags behind the indicators of the developed European countries, where almost the entire territory is involved in the recreational process.

2. For the effective development of the recreational zone, it is necessary to assess the availability of its recreational resources, which is determined by the coefficient of the state of the recreational-active zone and includes:
   – the socio-economic coefficient, depending on the degree of human impact in natural complexes, on the number of possible impacts associated with economic activity;
   – the coefficient of recreational attractiveness, which depends on the landscaping of the territory, the possibility to use it for recreation, the popularity of the place of rest;
   – the ecological coefficient, which includes the characteristics of the comfort of the recreant and the animal world, whose representatives inhabit this recreational formation;
   – the assessment of the state of recreational tourism infrastructure;
   – the assessment of the level of social and economic development of the territory.

3. Of the purpose to provide a place of suburban recreation zone in the aggregate of recreational zones, the author made a study of classification approaches. The conducted analysis allowed to generalize the characteristics proposed by scientists for the classification of recreational zones, and showed the feasibility of introducing the following features of classification:
   – the location of the recreational zone - the location relative to other recreational zones and countries;
   – the dominant type of activity describes the orientation of the recreational object for rest (mainly tourist activity) or health and recreation (mainly sanatorium and resort activities);
   – kind of recreation reflects the recreational specialization recreational zone;
   – the prevailing natural resource - the prevailing categories of natural recreational resources located on the territory of the recreational facility;
   – Thus, the author clarifies the classification of recreational zones and determines the place of the suburban recreational zone in its system.
4. Features of accommodation of the recreation objects in the suburban zone are:
   – their attachment to the transport network;
   – the network of the transport infrastructure is fixed in the development of the suburban zone that forms a stable and time-varying spatial basis of the planning organization of suburban zones;
   – architectural-composite connections between premises which provide the fulfillment of the main functions, determine the main types of architectural and landscape organization of recreational objects;
   – the architecture of recreational objects is indistinct and in most recreational objects does not correspond to their stylistic solution and does not form a general architectural ensemble.

BIBLIOGRAPHY


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