# The concept of a system of comfortable public spaces in the city of Kursk

Andrey Pozdnyakov<sup>1,\*</sup> and Tatyana Tsurik<sup>1</sup> Southwest State University, Kursk, Russia

**Abstract.** The article deals with the problem of the improvement of public spaces in large cities on the example of Kursk. The author suggests using the existing infrastructure of the city to create a comfortable environment and increase its recreational opportunities for local residents and tourists. The study is aimed at creating a system of comfortable public spaces using the ecological, historical and cultural resources of the city, where the parks and squares of Kursk play a key role. The practical use of this concept contributes to the improvement of the city's image and the development of a comfortable urban environment.

### 1 Introduction

Modern green public spaces, including parks and squares, were formed and created on the territory of Russia, mainly in the Soviet period, which explains their public nature, and at the same time, the disadvantages inherent in many objects that are in state ownership. Among the advantages of domestic parks the following should be noted: the possibility of rest within the city limits, the availability of recreational opportunities for all citizens, including their involvement in cultural life and sports; holding city holidays and events. The disadvantages of urban green areas include an undeveloped material and technical base, the absence of a memorable image of the environment, a low level of functional and technical arrangement of fragments of the urban landscape [1]. Despite the shortcomings, city parks and squares are still a popular and affordable holiday destination for all segments of the population. The international practice of urban planning proves the need for technological renewal and the introduction of new types of shaping in the design of public spaces, their importance for creating a high-quality urban environment [2], it is also important to rethink natural materials in parks, its ecological meaning and aesthetic potential [3]. The studies of K. Lynch [4], J. Jacobs [5], V. Rybchinsky [6], C. Landry [7], and foreign urban planning work experience with public spaces "Placemaking", which unites specialists and all interested citizens, are devoted to the understanding of the relationship between the level of development of the urban environment and the quality of life and the social well-being of citizens [8,9].

Nowadays in Russian Federation the process of the regions becoming identical continues, which is accompanied by revealing natural and cultural components, representing the uniqueness of the territory.

© The Authors, published by EDP Sciences. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (http://creativecommons.org/licenses/by/4.0/).

<sup>\*</sup> Corresponding author: dekanov@bk.ru

This approach is considered perspective for shaping public spaces, designed for rest and education of the citizens and for solution of the issue of regional cultural policy, as the cultural diversity united with natural ecosystems can be interesting for the development of urban environment, sphere of developing tourism and shaping urban territories [10, 11].

Recreational resources of Kursk are big enough not only because of picturesque landscapes of the Central Russian stripe. Apart from natural resources, historical and cultural and architect monuments, connected with the historical past of the city and the contribution of countrymen into the development of the global and native culture, represent a great recreational value. This land is associated with the names of Feodosy Pechersky, saint Seraphim Sarovsky; historians I.I.Holikov and N.M.Druzhinin; poets A.A.Phet and N.N.Aseev; writers E.I.Nosov, A.P.Gaidar; painters E.E.Lancere, A.A.Deineca; actor M.S.Szhepkin; composers A.P.Borodin and G.V.Sviridov; sculptor V.M.Klykov, scientist V.V.Alehin, meteorologist V.N.Obolensky.

One of the main problems of organization and functioning of the recreational potential of Kursk is the low level of improvement of the accomplishment of public zones of the city and the lack of awareness of citizens and visitors of the city about the possibilities of urban rest. Recreational public space including city parks must not only meet the biological human needs, but also provide the conditions for people's upbringing and cultural development.

The problem of improvement and provision of full-fledged rest for the townspeople has been solved in megalopolises, where funding for such solutions is provided. In many large and largest cities of Russia, the task of filling public green areas with various types of human and cultural activity is still urgent, which makes it necessary to create and develop territories that meet these urban planning tasks [12]. Examples of world-renowned landscaped urban spaces indicate that their creation is preceded by a deep analysis of the territory and its potential, long and careful work of designers, architects, urban planners. In order for the implemented project to become a popular place for spending leisure time for citizens and tourists, the task is to satisfy various cultural needs of the population, to match the new public spaces with the interests and preferences of various social groups.

We set the task of studying the potential urban parks and possibilities of improvement it's use for submitting high-grade rest for people, using existing infrastructure and ecological resources of Kursk.

### 2 Problems of public space improvement

In Kursk, especially in the central part of the city, green implantations are limited by well-maintained squares around public buildings. The area of green implantations of common use (parks, squares, boulevards) is 221 hectares and 5,8 m2/person, which has a lack of even distribution, continuity and structural value, while it should be 10 m2/person for urban parks. Small Kursk rivers such as Tuskar and Kur are structural elements of the ecological structure, though nowadays they are not being used in creating the landscape of the city, because their canal are polluted and the river banks are difficult to get to. The creation of green veins along rivers is one of the main purposes of accomplishment of Kursk. Architectural and landscape park organization in floodplains of rivers near Kursk will increase the attractiveness of near-the-river territories, solve the problem of accomplishing normative indicators, create commercial attraction of the property in created areas. The use of modern eco-oriented forms in park areas on uncomfortable for building territories of logs and ravines will give the citizens the possibility to use park building for the creation of comfortable urban area.

A survey of central residents revealed the basic needs in the use of public green spaces. The majority of interviewed noted the desire to increase their functionality with the aim of

using these spaces for organizing joint regional holidays, master classes for children and adults, sports events, creating exhibition areas, creating excursion routes, focused on educational and ecological direction.

From our point of view, the choice of scenarios for the development of an urban area should be carried out from the standpoint of ensuring the growth of territorial capital [13] and using the method of participatory design [14]. This method allows reaching a consensus in deciding on the use of public spaces, taking into account the opinions of residents of the territory, local communities, investors and representatives of city authorities.

The traffic distribution was the significant factor that required account in the process of organizing pedestrian routes around the city. In our opinion, there are three main traffic flows of people: local citizens, tourists with a general cultural orientation of interests and pilgrim tourists oriented towards visiting religious monuments and participating in events in this field (Fig. 1).

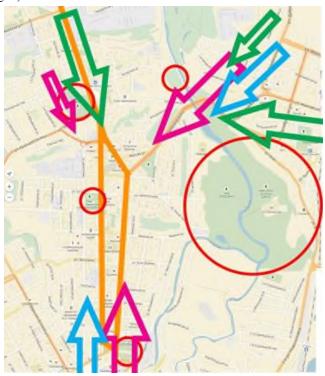


Fig. 1. Traffic flow (green – tourists, red - local citizens, blue - pilgrim tourists).

The proposed use of recreational public areas is quite diverse: organization of exhibition area, holding workshops and master classes, military-patriotic upbringing, local history education, ecological and biological education, artistic creativity in its various manifestations, sports and health and cultural and recreational activity. Each of the parks and squares involved can become an object of attraction for tourists and citizens with different interests and social status [15].

Currently the projects of ecological (pedestrian and bicycle) movement around the center of the city, performing cultural and educational functions, have been implemented in Russia. For example, the routes "Red ad green lines" offer pedestrian excursions in the central part of the city Perm. Their long-term use proves the effectiveness of installation information stands, pointers (including graphic marking on asphalt along the route),

description of the sights for independent pedestrian movement. In the Urals millionaire city there are two routes with a similar navigation, allowing you to get an emotional presentation about key historical, architectural and cultural objects of the city for a short period of time (about two hours). A similar project, but using bicycles, kick scooters, Segways, roller-skates and other eco-friendly transport, named "Zero ring in Moscow", also gives an opportunity for tourists to familiarize with the main sights of the capital by themselves.

## 3 Principles creating a concept for a system of well-maintained public spaces

We suggest the creation of a concept of a system of comfortable public spaces in the city Kursk with the aim of providing high-grade rest to the local citizens and tourists, using the existing infrastructure and the resources of the city, considering it's historical, cultural features and the characteristics of the natural environment.

The main idea is to create a unified system of the recreational spaces in the central part of the city based on the five city parks of various sizes: May-day Park, the park of heroes of the Civil War, park "Boeva dacha", memorial park (Nikitskoe cemetery) and Children's Ecological and Biological Center's park (Fig. 2)

The choice of these public spaces is primarily due to the concentration in the central part of Kursk of the most important cultural and historical sites associated with events and personalities. The surviving historic buildings are a significant component of the urban environment in terms of its aesthetics and uniqueness. Monuments referring to the events of the past or famous fellow countrymen have a significant impact on the formation of the image of the city. Thus, cultural objects united by the system of recreational spaces will influence the perception of the city and determine its image.



Fig. 2. Parks and squares in the Central part of Kursk.

Each of these parks has a unique function and can provide various types of recreational activity with the possibility of exploitation in any season. For capacity building of these parks, taking into account the peculiarities and diversity of recreational activity types, three routes were developed: pilgrimage, citywide and historical and cultural. These routes are focused on needs coming from consumers of recreational services (citizens and tourists) and opportunities for parks (squares, gardening, architectural and planning solutions of the park environment, infrastructure development).

So, pilgrim route is laid taking into account the localization of temples in the central part of the city. It involves three parks along the route (May Day Park, the park of heroes of the Civil War, memorial park (Nikitskoe cementery) with ability to stop for rest in café and public catering establishments.

Citywide route is also intended for one-day visiting and suggests the realization of the route by water transport along the river Tuskar, flowing through the city in the park "Boeva dacha" and the territory, adjoining Children's Ecological and Biological Center's park.

The tourist route unites five parks, surrounded by historical and cultural museum objects, concentrated in the centre of the city. Wherein maximum recreational load falls on the park of heroes of the Civil War in the immediate vicinity of the Deineka gallery. Different types of activity may be ensured in the park, with a presentation of art installations and organizing master classes. Each of the park areas may be equipped, offering types of rest and recreational accompanying according to the declared theme.



Fig. 3. The concept of eco-Park.

For ease of movement and optimal use of pedestrian routes, it is proposed to develop city navigation: graphic markings on the asphalt, information stands, signs, tables, creation of nodal points of routes, with the involvement of volunteer students from the universities of Kursk as guides. This also involves the improvement of the territories (pedestrian streets and zones) involved in the route. The use of navigation lights and markings for the use of routes in the dark can be ensured by the use of environmentally friendly energy sources solar panels and vertical wind generators.

In parallel with the development of the concept of creating a system of comfortable public spaces, we have developed the concept of an eco-park, which can be implemented on the territory of one of the city parks planned for reconstruction (Fig. 3). This can be the focus of environmental activities. Reducing the operating costs of maintaining the park can be carried out through the use of biological water purification methods and the use of storm water for irrigation of green spaces. The inclusion of this object in the system of recreational spaces will increase the target audience of the park, which will become attractive for family recreation of citizens and visiting tourists.

### 4 Conclusions

Thus, the proposed concept can increase the attractiveness of public green spaces and serve as a basis for developing a strategy for urban development, taking into account the preservation of cultural heritage, and performing recreational and tourist functions. Its implementation is promising for the formation of investment attractiveness and optimization of the use of public green areas in the urban landscape.

Authors thank the Rector of the Southwest State University, Doctor of Technical Sciences Yemelyanov S.G.

#### References

- 1. V.A. Nefedov, Landshaftnyj dizajn i ustojchivost' sredy (2002)
- 2. N.V. Danilina, *Nomadic urbanism" sovremennyj podhod k planirovaniyu gorodskih obshchestvennyh territorij*, Ekologiya urbanizirovannyh territorij **2,** 91-95 (2018)
- 3. L. Budd, Territorial Competition and Globalization: Scylla and Charybdis of European Cities, Urban Studies **35**, 663-685 (1998)
- 4. K. Linch, Obraz goroda (M.: Strojizdat, 1982)
- 5. Dzh. Dzhekobs, Smert' i zhizn' bol'shih amerikanskih gorodov (Moskva : Novoe izdvo, 2011)
- 6. V. Rybchinskij, Gorodskoj konstruktor: idei i goroda (Moskva: In-t media, arhitektury i dizajna "Strelka", 2015)
- 7. Ch. Lendri, Iskusstvo sozdavat' goroda : kachestvo zhizni i gorodskaya sreda (Moskva : Art-menedzher, 2008)
- 8. Placemaking Guide. Project for Public Spaces (2017)
- 9. How to Turn a Place Around. Project for Public Spaces (2000)
- 10. T. Polyakova, T. Tsurik, *Urban environment quality and its impact on socio-economic development*, Economic Annals -XXI **11-12**, 155-164 (2019)
- 11. T.N. Polyakova, T.O. Tsurik, *Sociokul'turnye aspekty reabilitacii promyshlennyh territorij v gorodskoj srede*, Izvestiya Yugo-Zapadnogo gosudarstvennogo universiteta **9**, 3 (32), 226-235 (2019)
- 12. T.Yu. Bystrova, *Landshaftnaya arhitektura kak fenomen gorodskoj kul'tury XXI veka i faktor ee sozdaniya*, Chelovek v mire kul'tury **1** (2016) https://cyberleninka.ru/article/n/landshaftnaya-arhitektura-kak-fenomen-gorodskoy-kultury-xxi-veka-i-faktor-ee-sozdaniya
- 13. I. Vladimír, J. Hanušin, M. Madajová, *The role of territorial capital in the regional development*, Territorial capital concepts, indicators & policy, Warsaw regional

- forum 2013, Book of Abstracts, Warsaw, 2013 https://www.igipz.pan.pl/tl\_files/igipz/ZPZ/GP/book\_abstract.pdf
- 14. G. Sanoff, Souchastvuyushchee proektirovanie, Praktiki obshchestvennogo uchastiya v formirovanii sredy bol'shih i malyh gorodov (Vologda: Proektnaya gruppa 8, 2015)
- 15. A.L. Pozdnyakov, E.V. Pozdnyakova, M.M. Zvjagintseva, O.Yu. Barsova, *System analysis as the general methodological basis of town-planning designing*, ARPN Journal of Applied Engineering Science **16(1)**, 79-82 (2018) DOI: 10.5937/jaes16-16500