Modern Problems of Historical Parks Recreational Potential Comprehensive Assessment

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Abstract. Among the main tasks of the effective management of a historical park there should be not only efforts aimed at preserving the park, but also the formation of its all-season attractiveness to the public and the development of special recreational programs. Each park has a certain recreational potential. The concept of "Potential" is "sources, opportunities, funds, reserves that can be used to solve any task, achieve a certain goal" (BSE). In addition, the recreational potential of the territory consists of such indicators as the maximum recreational capacity of the territory and the possible maximum recreational load. However, currently, the definition of recreational potential is mainly reduced to assessing the stability of vegetation and maintaining their attractiveness without taking into account the entire set of indicators, such as the timing of the recreation season, target categories of visitors, types of recreation by the level of organization, as well as recreational infrastructure. It is necessary to expand the concept of "Recreational potential", which will allow to form effectively the recreational attractiveness of historical parks within the framework of the tasks of preserving the cultural heritage.

1. Introduction

Recently, the concept of so-called ecosystem services has become increasingly popular in the world scientific community. Among other things, scientists around the world consider cultural ecosystem services to be also ecosystem services. This concept involves all the benefits that a person gets from interacting with nature, including those in a form of organized recreation [1]. Thus, it is becoming more and more relevant to address the issues of accounting, assessment and formation of the market for recreational services provided. It is becoming important not only to search for the methods of ecosystem preserving, but also to study the possibilities of providing high quality recreation [2].

2. Methods and Materials

The main condition for adapting historical parks to modern use is to preserve the features of objects of historical and cultural value. Each Park, as an established ecosystem, is a three-dimensional art complex which has a unique potential for organizing public recreation and requires individual solutions. Lack of criteria for evaluating factors that determine recreational potential does not always allow to choose the right adaptation strategy for historical landscape architecture objects. The purpose of this research is to understand and analyze the problems of integrated assessment of historical parks recreational potential. The research was conducted using methods of inductive experience.
generalization of Saint Petersburg historical parks adaptations based on comparative analysis according to the main criteria – recreational attractiveness and preservation of planning special features. The article presents the main statements of the study.

3. Results and Discussion
The main goal of a recreation system of large cities is to improve the health of the population, i.e., to recover and develop the physical and mental strength of a person. In other words, the green oases of large urban conglomerates are charged with the responsibility for organizing such a recreation, which provides the possibility for not only for rest, but also grow "spiritually" by means of interacting with nature [2, 3]. In the case of historical parks, "spiritual" growth also occurs due to the perception of the history of a city, region, or country.

Traditionally, the park is considered as a recreational structure with comfortable conditions for recreation - from contemplative to active. The historical park in the structure of old cities green spaces is a complex system that has to adapt both to the increasing density of surrounding areas and the increase in recreation visits, as well as to the greatly changed demands of visitors over the past decades and new requirements for the quality of recreational services.

In this regard, among the main tasks of effective management of historical parks for the provision of ecosystem services should be not only efforts aimed at preserving the park, but also the formation of its all-season attractiveness to the public.

Visitors' demand for active family recreation constantly leads to expansion and adjustment of the existing range of recreational activities, which often do not correspond with the functional and planning concept of the historical park, which determines its recreational potential [4]. This is especially clearly demonstrated by the experience of private parks use after the revolution of 1917 in Russia – the way how during the Soviet period historical parks were adapted to the needs of the Soviet society. At this particular time most historical parks were adapted for the recreational needs of the population. The Parks were turned into “Parks of culture” with facilities for mass activities such as rides, stadiums, outdoor theaters and dance floors (figure 1). Recreation centers were set up on the ground of palaces and estates.

After the Second World War restorations were carried out to repair the damage. However, high foot traffic destroyed the historical layout, a surge in recreational use harmed trees - new and old (figure 2). At the end of the twentieth century most of the entertainment facilities were removed. Nevertheless, the public need for outdoor activities remained (figure 3).
Figure 2. Peterhof. Lower park. Visitors go beyond the lanes.

Figure 3. Pavlovsky Park. Winter holidays – skiing.

So, the problem with integrating historical parks into modern city life is determined by two conflicting objectives: the conservation and continued viability of historic landscape on the one hand, and the visitors’ increasing social demands to expand recreational functions of a green space on the other. Identifying the priorities is the first task. Local residents consider historical sites as spaces for various outdoor activities before they appreciate their historic value [4, 5].

The recreational potential of the green space includes such indicators as the maximum recreational capacity of the territory and the possible maximum recreational load. However, currently, the definition of recreational potential is mainly reduced to assessing the stability of vegetation and maintaining their attractiveness without taking into account the entire set of indicators, such as the duration of the recreation season, target categories of visitors, types of recreation by the degree of its organization, as well as recreational infrastructure [6-8]. Maintaining the attractiveness of vegetation, in turn, is limited to a system of prohibitions on certain types of recreational activities. At the same time, bans are presented to visitors in an ultimatum form without any alternative.

It creates a situation when the management of the historical park is aimed to increase the amount of visitors and attracting interurban and international tourists, while prohibits many traditional types of recreation, thereby reducing the number of visitors from the surrounding areas, for whom recreation in this historical park is the only available option.

An analysis of the demand for various types of recreation showed that the main forms of recreation for the overwhelming majority of park visitors are: visiting thematic exhibitions and festivals, meeting friends, organizing picnics, admiring the beauty of nature in an untouched landscape [9]. The kinds of parks use are defined by the needs of the visitors themselves, which includes four social groups – holiday-makers, children, tourists and researchers. All of them may come to the park in groups (tourists) or individually. Each visitor has his own interests. It is important to clearly define zoning and leisure activities for users of recreational resources in the first place - individual and family visitors. It is better to have appropriate facilities and a certain level of amenities, adjusting the level of the visitors’ influence on the most valuable historical landscape. Children love to be active. It is difficult for them to be just “observers” in the museum park space. On the other hand, the playground equipment must be integrated into the historical atmosphere. The problem is that this equipment is required to be certified. For instance, you can see the playground in the Summer Garden after restoration. The sandbox was styled as a historic fountain. In our opinion, this was done well. Tourists and researchers are primarily audience of information. However, the specifics of the information is fundamentally different for each of them. For tourists it is necessary to build excursion routes. A group of researchers who are familiar with the general history or have detailed knowledge of highly specialized issues may include amateurs and professionals in the field of local history, architecture, landscape architecture, botany, dendrology, art and others.
The structure of the recreational activities is not the same for each site and is determined by several factors such as the value of the park, its location, the type of planning, functional zoning and visiting time.

The value of these sites largely determines the demand for the functionality of the green space. A large area allows for capacious and a greater variety of activities. Small size of parks and gardens significantly narrows the range of activities. In terms of lay-out organization - formal sites are less adaptable to free recreation and visitors perceive it as a museum space.

Location of historical parks - in the city or in the country, can form an idea of the kind of potential activity. Spaces located outside the city are often perceived by the population as a place of active recreation with unorganized activities, which is not always possible and does not provide for regulations to use the territory. The result is a conflict between the needs of visitors in recreational activities, and the administration will to preserve the site in its’ proper condition.

Temporary exhibitions, events and festivals keep interest in historic parks and make them more attractive to patrons. One of the most famous festivals is the Fountain Festival in Peterhof. Celebration attracts a large number of visitors (about 10 000 at once). One of the problems is to distribute spectators on the territory of the park. It is hard to see the performance from some points, so some of the people climb shaped trees in the alleys. A huge crowd goes through a parterre and bosquets after the performance. This event is loved by locals and tourists, but it is necessary to adapt it to formal park of Peterhof [5].

When the historical park is the only available place of recreation, it becomes the topical task for the park management to develop special recreational programs making it possible to avoid the human-caused degradation of plantings and at the same time provide high quality recreation according to social requirements.

Individual recreational programs or scenarios development for historical parks should start with working out the criteria for the level of permissibility of a particular type of recreation. To define these criteria following steps are required:

- analyze the possibility of changing the original function of the historical park, which is based on the analysis of the specific features of the historical park, its size, stylistic and compositional concept, also various permissible types of recreation are considered. An example of the change in the function of the park is numerous estate parks, where mass recreation is almost impossible, and this determines the further choice of the recreational scenario.

- analyze the demand for various types of recreational services. To do this, it is necessary to identify the possible target groups of visitors and consider the planning features of the park in order to determine various types of seasonal use. Thus, a vivid example of providing a variety of recreational services designed for seasonal visits can be the Kirov Central Park (Elagin island) – the use of ponds for boating in summer or for skiing in winter;

- analyze the possible costs of maintaining the park’s vegetation and planning structure while increasing the number of visitors, as well as evaluate the resulting economic effect. In other words, to compare the cost of changing the quality of park reconstructions (including widening roads and paths, installing lighting, equipping the territory with toilets, etc.) with the possible economic effect of increasing the number of visitors. An example of increasing the resilience of green spaces to recreational impact after widening roads during the restoration of the Ekaterininsky Park [10] (figure 4).

The calculation of the recreational potential of the historical park taking into account all the above criteria, can only be carried out in the case of regulated recreation. Recreation regulation should be aimed at the creation of specialized functional areas such as children's play areas, picnic areas, bike lanes and access areas for visitors with dogs (in addition to "museum" areas), rather than at the creating prohibition system.

Traditional bans on picnics, dog walking, cycling and picking mushrooms and berries lead to a decrease in the attractiveness of parks for a significant number of potential visitors. On the contrary,
the presence of specialized functional zones on the territory of historical parks in the city system increases the number of visitors.

Figure 4. Ekaterininsky Park. Increasing the road width for passing tourist excursion groups.

Obligatory conditions for the existence of such functional zones on the territory of historical parks must be:

- providing access to a large number of visitors;
- planning the functional zones in such a way as to exclude violations of the historical layout of the park as well as changes of the historical park composition;
- mandatory visiting rules that define the rules and regulations of visitors' behavior. This regulation should be aimed at ensuring the safety of all categories of visitors, as well as at preserving the historical sites and features of the park;
- all new functional zones on historical territories must be provided with equipment that allows implementing the prescribed regulations. For example, for playgrounds, the equipment must be certified and the appearance of this equipment must correspond to the historical features of the park; bike lanes must be designated routes that do not violate the historical layout and do not interfere with the main flow of visitors.

The existence of pedestrian or transport transit through the historical park also leads to making adjustments to the system of regulations. The planning of a new functional zoning of the historical park should be carried out with the mandatory consideration of these transits and each individual case should be carried out individually (figure 5).

Figure 5. Recreational potential calculation.
The definition of the concept of "Potential" given by the Great Soviet Encyclopedia includes "sources, opportunities, means, reserves that can be used to solve any problem, to achieve a certain goal." [11]. In this case, the main goal is to provide various types of recreation with the mandatory condition of preserving the features of the historical park.

4. Conclusion
The above-mentioned approaches for assessing the recreational potential will allow to form the recreational attractiveness of historical parks effectively within the framework of the tasks of preserving the cultural heritage.

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