

EVALUATION OF LOCAL AND SUPRALOCAL ROLES OF PARKS IN THE URBAN SPATIAL SETTING: A CASE STUDY OF CENTRAL PARK IN OLSZTYN

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Summary

Green areas, increasingly often designed among buildings, play an important role in any agglomeration. Parks can perform various functions. Most often, they serve as greenery, which seems to be in an acute shortage in urbanised areas. In addition, parks inscribe themselves into transportation networks, including footpaths, bikeways and streets. They can be used as venues for cultural or artistic events, but also as recreational and educational areas. The influence of adopted solutions can have a broader or narrower scope. When making a decision to implement a particular solution, it is advisable to analyse various aspects of a planned investment project. This paper presents an approach to the evaluation of the role of parks in urban settings.

Keywords

parks • spatial planning • urban greenery

1. Introduction

Each town or city is a spatial setting, where living conditions depend largely on the organisation of the urban space [Czekaj and Wódz 1991]. This space comprises developed areas with buildings serving different functions, roads and streets, green areas and other areas, e.g. garden allotments or service areas of industrial plants [Byrne and Sipe 2010]. The urban space is populated by a community of people, who take advantage of its elements. Quite often, developing urban agglomerations cause damage to the natural environment and reduce the total coverage of natural greenery [Borys 2008]. Meanwhile, there is growing social awareness of the need to protect nature and people realise that there are mutual relationships between the urban and natural environments. Hence, urban development plans and strategies always include urban green areas. There are different forms of urban greeneries, including parks, which often act as a town's 'green lungs', and serve recreational, leisure, ecological and aesthetic functions [Haq SMA 2011]. Moreover, parks enhance the attractiveness of adjacent areas and improve the quality and comfort of life for the whole community [Kmicic 2012].

Pursuant to the current legal regulations, green areas are such assemblages of plants as parks, green squares, plants and trees in squares and along streets, green barriers as well as garden allotments, which play recreational and aesthetic functions [Ustawa...1980]. On the other hand, these areas have a special role in satisfying needs of residents and improving the quality of life, defined in the Study of the Conditions and Directions of *Spatial* Management of a given town or commune [Ustawa... 2003]. What arises from the binding legal acts is that green areas are an important element in the structure of every town. Urban residents expect that green areas will provide them with opportunities for leisure, pursuit of sports and close contact with nature. They also notice a health promoting role of urban green areas, mostly obviating the negative aspects of living in an urbanised area [Maas 2009].

2. The aim and scope of the study

The aim of the study has been to analyse the importance of parks as multi-functional areas, using Central Park in Olsztyn as an example, to define the role and meaning of greeneries in the urbanistic setting of a town, and to identify their functions. The research methodology is based on an analysis of urban planning documents, the Integrated Programme for the Spatial Development of the Town Centre in Olsztyn and the Central Park Project. Evaluation methods have been proposed to assess a planned investment project, based on a SWOT analysis and multi-criteria analytical methods.

3. Park in the spatial setting of a town

In the classification of urban green areas, parks are assigned a special role [Konijnendijk and all 2005]. A park is the oldest form of greenery designed and created by man [Chojecka 2013]. Parks should be attractive to all town residents, regardless their age and social status [Kowalewska 2011]. For some, a park is an area for walks and other forms of recreation, for others it is a place for being close to nature. Parks should also serve cognitive and general development functions. Every park should be incorporated into the town's transportation system and be naturally connected with footpaths, pavements, bikeways, streets, etc.

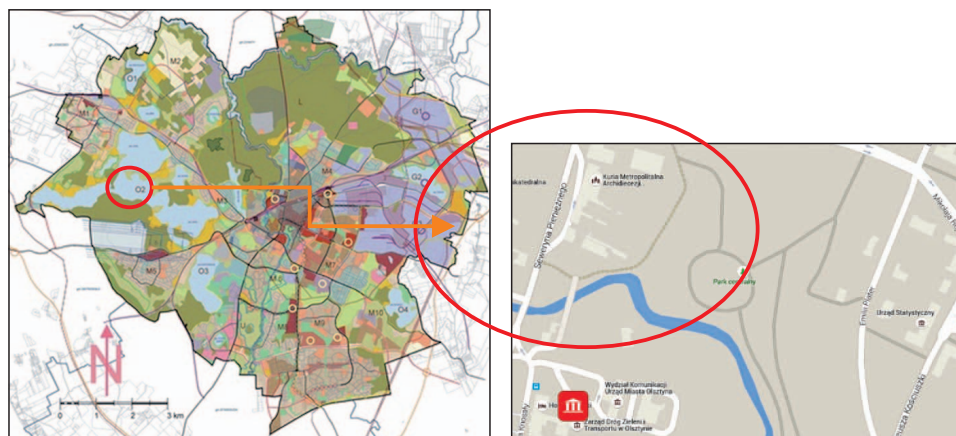
A park in an urban setting is also a public space. By being inscribed in spatial management plans and the urbanistic structure, a park is a convenient form for personal interactions, it should satisfy the expectations of users, and therefore is supposed to offer different leisure time activities forms [Kmicic 2012]. Because of the social character of parks, it is recommended to hold in them various events, not only sports but also cultural ones. The role of a park in the context presented above will be analysed using Central Park in Olsztyn as an example.

4. Central Park in Olsztyn

Creation and development of a network of urban parks is a component of the Integrated Programme for the Spatial Development of the Town Centre in Olsztyn, devel-

oped by the Department of the Urban Development in the City Council of Olsztyn [Zintegrowany Program...]. This document identifies the goals, which are expected to translate into directions in the development of the town centre and will be included in local spatial management plans. The overall strategic goal of this programme is to improve the attractiveness of the town centre. Several strategic aims will lead to the achievement of this target, including urban greenery, which has a considerable impact on the appeal of inner city areas. To a large extent, the programme was developed in response to the needs expressed by the residents of the city centre. Among the most important issues voiced by the local community was the problem of access to an attractive public space, the lack of an area which would serve recreational purposes, an incoherent system of bikeways and the lack of attractive walking and cycling trails, the need to take better care of green areas in the town centre and the absence of attractive social infrastructure. An analysis of the previously presented definitions of parks leads to the conclusion that a construction of a carefully thought and well-designed park in the town centre can satisfy some of the above expectations. A decision was therefore taken to create a system of green areas which in the future would stretch along the Łyna River and the Old Town. The first step was to create Central Park [Park Centarlny...].

Central Park occupies an area of nearly 13 ha, and it located in the heart of Olsztyn (Figure 1) [Studium Uwarunkowań...]. This investment project envisaged the construction of a fountain, an open-air roofed venue with a semicircular raised stage and a small amphitheatre, cycling and walking paths, gazebos with seats, sports facilities including an open-air gym, playgrounds for children and footbridges over the Łyna (Figure 2), connecting both banks of the river. Attention was given to ensure attractive greenery and lights, interesting entrance and exit areas including steps and access ramps for the disabled. The park was officially opened last year [Zintegrowany Program...].



Source: www.olsztyn.eu/gospodarka/planowanie-przestrzenne and www.google.pl/maps)

Fig. 1. Location of Central Park in Olsztyn



Photo by E. Szafranko

Fig. 2. Footbridge in Central Park in Olsztyn



Photo by E. Szafranko

Fig. 3. Central Park in Olsztyn – “Breakfast on the grass”

Using the infrastructure in the park, seen as a public space, many events have been held there since the opening. They have attracted many town residents. Examples are: Breakfast on Grass (Figure 3), Children's Day on Grass, Read in a Gazebo, a series of art workshops for the elderly as part of the project called Flowers, Twigs and Brambles, A Guitar Concert in Central Park, Tea Party with Art in Central Part or the Streetart Event on the Łyna River. The park has also been the finishing site for many sports events, e.g. The Scorpena Diving Club Swim in the Łyna River.

The above are just some of the events which have taken place in Central Park since last year. As we can see, they appeal to different groups of residents, and everyone has been able to find something of interest. The organisation of such events ensures that the tasks assigned to public spaces are achievable.

5. Analysis of planned park investment projects, using Central Park in Olsztyn as an example, analytical methods

When planning such specific investment projects as the creation or development of an urban park, an investor must carefully analyse the feasibility of the plan, which comprises questions regarding the possibilities of building structural components, using naturally formed conditions and responding to the social demand. This approach will enable the investor to create a park that will best satisfy the expectations of the local community and will help to achieve the set goals. Frequently, the starting point is to perform an overview of weak and strong sides. An example of such an analysis for the development project described here is contained in Table 1.

Table 1. A SWOT analysis for Central Park in Olsztyn

Strengths	Weaknesses
Location of Central Park Attractive landscape (the Łyna River valley) Renovation of nearby Podzamcze Park, and the planned connection of both parks Connection with a system of bikeways	Dominance of motor traffic Lack of cycling paths in the town centre Unkempt condition of the investment site (dilapidated buildings, trees) The unregulated river channel
Opportunities	Threads
Motor traffic directed to the town's ringroad Use both banks of the river, Construction of footbridges Good access via a connection to the system of bikeways Opportunities to organise various events	Delays in the construction of the ringroad Depopulation of the town centre (residents moving to the town's outskirts) Unwillingness of residents to participate in the events held in the park Vandalism to the park infrastructure

Source: author's study

The above analysis suggests that the investment project can be threatened by factors beyond the investor's control (e.g. delays in the construction of the ringroad) as well as

ones which are predictable so that their negative impact on the investment project can be minimised (e.g. vandalism to infrastructure). Some of the factors mentioned are local (location, investment site, damage to infrastructure) and other are supralocal in character (construction of the town's ringroad, connection to the town's transportation system). The preliminary analysis already reveals various relationships between the investment and the whole urban agglomeration, as well as the influence of local and supralocal circumstances on the future development. By conducting such an analysis it is possible to make right decisions at the stage of planning the shape of a park.

This is not the only possible approach to analysing a planned investment project. For example, multi-criteria analytical methods are well known and broadly used in the investor's practice. Multi-criteria methods are based the identification of criteria for an assessment of a planned development project, and are particularly useful when dealing with several variant solutions of a design and plan. They allow the user to choose an optimal solution. They are also helpful when making an evaluation of the extent to which expectations raised by the planned development will be met. A model group of criteria and subcriteria useful in an assessment of the development described in this paper is comprised in Table 2.

Table 2. Assessment criteria applicable to Central Park in Olsztyn

Technical criteria	Planning criteria	Social criteria	Nature and location specific criteria
<ol style="list-style-type: none"> 1. Soil and ground conditions 2. Existing infrastructure 3. The need to build accessory constructions 4. Existing infrastructure 	<ol style="list-style-type: none"> 1. Ready-made plans and solutions can be used. 2. Change in land use necessary 	<ol style="list-style-type: none"> 1. Satisfying social expectations 2. Opportunities to hold cultural events 3. Opportunities to hold sport events 4. Opportunities to hold events of a general character 	<ol style="list-style-type: none"> 1. Existing water bodies 2. Diverse land relief 3. Interesting natural features and objects 4. Cycling paths can be constructed

Source: author's study

When performing a multi-criteria analysis, it is also necessary to determine to what extent the analysed plan satisfies given criteria. For this purpose there was determined the 5-point rating scale where: 5 – maximum fulfilment of a given criterion, 0 – complete lack of it. Table 3 shows the scores for the discussed project.

Score of 78% is a high rating. In addition to the final evaluation, a breakdown containing the criteria and sub-criteria of the assessment gives an opportunity to make you aware of the importance of the individual factors determining the final assessment.

The analysis completed for our case example proves that the strongest point of the planned investment project lies in the group of social criteria, including opportunities to hold sports events attended by numerous participants, and the planned location of the park.

Table 3. Assessment of the implemented variant of the project: Central Park in Olsztyn

No.	Criteria	Score
1	Technical criteria	14
	1.1. Soil and ground conditions	4
	1.2. Existing infrastructure	3
	1.3. The need to build accessory constructions	4
	1.4. Transportation system	3
2	Planning criteria	5
	2.1. Ready-made solutions are adaptable	2
	2.2. Land use category must be changed	3
3	Social criteria	18
	3.1. Satisfying social expectations	4
	3.2. Opportunities to hold cultural events	4
	3.3. Opportunities to hold sports events	5
	3.4. Opportunities to hold events of a general character	5
4	Nature and location specific criteria	18
	4.1. Existing water bodies	5
	4.2. Diverse land relief	5
	4.3. Interesting natural features and objects	4
	4.4. Cycling paths can be constructed	4
	Total	55/70

Source: author's study

Another step in our analysis could consist of an evaluation of the impact produced by the analysed project on the spatial and social system of the town. Table 4 presents a specification of such impacts.

Table 4. Evaluation of the role of Central Park in Olsztyn in the urban system

No.	Impact/activity connected with Central Park in Olsztyn	Importance	
		Local	Supralocal
1	Access to the transport system by building a system of footpaths and bikeways		x
2	Creating of a 'green corridor' through the town centre	x	x
3	Improved attractiveness of the public space in the town centre	x	
4	Improved quality of greeneries in the town centre	x	
5	Organisation of cultural and educational events in Central Park	x	x
6	Organisation of finals of larger sports events		x
7	Areas along the Łyna River are tidied up	x	
8	Improved quality of the natural environment	x	
9	Opportunities to pursue physical training activities	x	x
10	Opportunities to disseminate broadly understood culture and arts	x	x

6. Conclusions

Taking care of urban green areas is one of the principal tasks to be performed in a daily practice of urban planners and town authorities. By creating parks, it is possible to improve significantly the living comfort of town dwellers, and green areas can be put to a variety of uses. Central Park in Olsztyn, taken as an example, proves that many town residents welcome various open-air events and are ready to participate in them. Such events as Breakfast on Grass or concerts held in the park attract residents, also those living in more distant neighbourhoods, producing a large impact on the town's life. Of importance here is an improved public transport system and a convenient access to the park via a system of bikeways connecting to the rest of the town. At the moment, it can be claimed that Central Park in Olsztyn has a life of its own, plays functions of a public space and its popularity keeps growing.

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