

# QUALITY AND UTILIZATION POTENTIAL OF URBAN PARKS: CASE STUDY TAŠMAJDAN PARK, BELGRADE, SERBIA

## KVALITETA I UPOTREBNI POTENCIJAL GRADSKIH PARKOVA: STUDIJA SLUČAJA TAŠMAJDANSKI PARK U BEOGRADU, SRBIJA

Nevenka GALEČIĆ\*<sup>1</sup>, Jelena TOMIĆEVIĆ-DUBLJEVIĆ<sup>2</sup>, Mirjana OCOKOLJIĆ<sup>3</sup>, Dragan VUJIČIĆ<sup>4</sup>, Dejan SKOČAJIĆ<sup>5</sup>

### Summary

In order to develop a sustainable urban environment, the modern approach to landscape design emphasizes the importance of environmental quality which promotes health and amenity and in which all members of a community can equally meet their needs. An important prerequisite for the design of high-quality parks in landscape design is respecting the needs and expectations of users. The quality of an urban area is the intensity with which open areas are used for the purposes of different activities and it is referred to as the utilization potential of an area. As a result of the extensive research of literature, the quality criteria for city parks are defined as: accessibility, activity / diversity of facilities and equipment, amenity and sociability. This study aims to determine the importance of the proposed quality criteria which are effective in assessing city parks as places for a successful design. The utilization potential is evaluated by using the quality criteria in the case of urban park Tašmajdan in Belgrade. The method of a structured survey was conducted on the sample of 300 randomly selected users. The research results show that the four tested criteria are very important for assessing the utilization potential of a park. Also, the obtained results are important for establishing the principles and recommendations that can be implemented in the process of landscape design, aimed at improving the quality of parks to meet the needs of its users for certain types of activities and achieve the appropriate use of parks.

**KEY WORDS:** landscape design, urban parks, quality criteria, Tašmajdan Park, Belgrade

### INTRODUCTION

#### UVOD

As open areas and parts of a system of green areas in urban environments, urban parks are an important element of the entire structure of a city (Biddulph, 1999; Ter, 2011; Lukić, 2013). How parks are used is conditioned by the develop-

ment of living standards, the busy lifestyle and recreational needs of the urban population (Tisma & Jokovi, 2007; Atmis et al., 2012). According to Tisma & Jokovi (2007), „sports“ and „games“ are the key words to describe the parks between 1920 and 1950, „nature“ and „environmental science“ in the 1970s of the twentieth century, while in

<sup>1</sup>\* Mr. sc. Nevenka Galečić, nevenka.galecic@sfb.bg.ac.rs

<sup>2</sup> Dr. sc. Jelena Tomićević-Dubljević, jelena.tomicevic@sfb.bg.ac.rs

<sup>3</sup> Dr. sc. Mirjana Ocokoljić, mirjana.ocokoljic@sfb.bg.ac.rs

<sup>4</sup> Mr. sc. Dragan Vujičić, dragan.vujicic@sfb.bg.ac.rs

<sup>5</sup> Mr. sc. Dejan Skočajić, Department of Landscape Architecture and Horticulture, Faculty of Forestry, University of Belgrade, Kneza Viseslava no.1, Belgrade, Serbia, dejan.skocajic@sfb.bg.ac.rs

the last decade (Francis, 2003; Carmona et al., 2003; Ter, 2011 and others) the term „park quality“ stands out in the context of the relationship between the man and space.

Based on the concept of park design that was applied by the end of the 20th century, parks are designed to provide active and passive use through various forms of leisure activities (walking, sitting, running, children playing, volleyball, etc.) but nowadays they do not meet all the requirements of contemporary users, thus requiring a more modern, or postmodern observation context. In fact, the current process of landscape design lacks an important prerequisite for the design of high-quality parks – respecting all needs and expectations of their users (Goličnik & Thompson, 2010). The need for different types of gatherings, communication and socializing with people represents increasingly pronounced motivation for visiting parks and other urban areas for the purposes of recreation (Živković, 2015). Social-based recreation refers to a form of recreation through activities that bring people together (Živković, 2015). It is also linked to the concept of human presence and interaction in public places. Recreational activities provide opportunities for establishing new contacts and generate forms of socializing and behavior which are often characterized by spontaneity and openness, which, in the domain of leisure time, contribute to the quality of life of modern man (Živković, 2015). Authors such as Kent & Madden (1998) emphasize the importance of social activities for the success of urban parks by stating: „If urban parks can evolve from their primary recreational roles into the new role of a catalyst for the development of the society, parks will be a necessary component in transforming and enhancing the quality of life within the city.“

The interdisciplinary and applied meaning of the research involving the use of open spaces is created by the inclusion of landscape designers and other professionals. According to Gropius (1961) a good design is both a scientific and artistic discipline since the scientific level analyzes human psyche and human interrelations while the artistic level deals with the coordination of human activities into a cultural synthesis. The observations and writings of social scientists, urban designers and landscape architects such as White (1980), Gehl (1987), Cooper Marcus & Francis (1990), Francis (2003) and others have shown definitively that use is requirement for good public landscapes.

In the context of the relationship between the man and space the most common objects of sociological research (Park et al., 1967; Harvey, 1990; Lefebvre, 1991) are: the impact of the environment on man; the effects of human activities on the environment; different needs of people whose fulfillment requires physical environment; awareness of the environment in terms of understanding the environment and the perception of space. The results of the study, based

on the analysis of these relationships, confirm that the reactions of people to their environment differ between the groups of people with different cultural, social and physical characteristics (Priego et al., 2008). The parallel consideration of open spaces, space users and the relationship between the man and space serves to determine the set of characteristics of space and the behaviour of people who, as a special concept of empirically established data can be integrated into the process of landscape design. The quality of an urban area is the intensity with which open areas are used for the purposes of different activities and it is referred to as the utilization potential of an area (Bazik, 1995).

According to the nonprofit planning, design and educational organization Project for Public Space (PPS, 2005) the following criteria for assessing the quality of parks stand out: space accessibility; suitability for different types of activities (diversity of facilities and equipment); amenity (depending on microclimatic conditions, space safety, etc.) and sociability (the possibility of engaging in social activities). Most researchers (Cooper Marcus & Francis, 1990; Francis, 2003; Ter, 2011 i dr.) agree with the above criteria.

This study aims to determine the importance of the quality criteria which are effective in assessing urban parks as places for successful designs. The utilization potential of a park is evaluated by using the quality criteria in the case of the city park Tašmajdan in Belgrade.

## DESCRIPTION OF STUDY AREA OPIS ISTRAŽIVANOG PODRUČJA

Data for the analysis of the users' views concerning accessibility, diversity of facilities and equipment in the area were collected in Tašmajdan Park which is located in central Belgrade (General Plan of Belgrade 2021.), on the territory of the municipality of Palilula (Figure 1). The area where Tašmajdan Park is situated today used to be a „maydan“ or quarry from which stone was collected for laying the first foundations of the city. It was also the locus of the tumultuous events that marked the long history of Belgrade (Milanović, 2006). In the period between 1826 and 1886 the site of the present-day park served as a cemetery. After the relocation of the cemetery, there was a tendency to reorganize the space, but the construction of the city park did not begin until 1950 and it ended in 1954 (Milanović, 2006). „The main project for the investment maintenance of Tašmajdan Park“ based on the conceptual framework of the Azerbaijani architect Eldar Guseynov was set up in 2010 while the last reconstruction of Tašmajdan Park was done in 2011.

Tašmajdan Park has a location related advantage since it is situated near the oldest city center and within the entity of „Old Belgrade“, which has the status of a protected natural environment of immovable property (Milanović, 2006). In



**Figure 1.** Location of Tašmajdan Park in Belgrade  
**Slika 1.** Položaj parka Tašmajdan u Beogradu

its vicinity are important cultural and educational facilities as well as numerous commercial facilities. Therefore, although it belongs to the municipality of Palilula, the users of Tašmajdan, as an urban park, are the residents of several city municipalities. The park area is 65393m<sup>2</sup>. Green area cover is 49365m<sup>2</sup>, while other areas of 16028m<sup>2</sup> include: walking trails, plateaus, stairs and three children playgrounds with playing props, water fountains, a chess pavillion, a jogging track and an area with exercise equipment.

## METHOD METODA RADA

The research involved the method of surveying the sample of 300 users. The survey was conducted according to the established protocol (Milić, 1978), randomly, during September, which is the month when the weather conditions favor outdoor activities. The survey of the users was conducted in the period from 10am to 8pm, during at least one working day and one day of the weekend. The respondents completed the survey of 42 questions in person and before a researcher, during the period of 10 minutes on average. The survey consisted of closed questions with defined answers, questions with multiple choice answers, questions with previously determined answers and the possibility of giving additional open-ended answers and open-ended questions. The respondents carried out their evaluation by using a 5-point Likert Scale for evaluation (1 – very poor, 2 – poor, 3 – acceptable, 4 – very good, 5 – excellent) (Table 2). The satisfaction of the respondents is expressed by an overall average grade, which is determined as the mean value of the average score obtained by evaluating the park based on the questions asked. The survey serves to determine

**Table 2.** Likert Scale for evaluation, according to Ter (2011)

**Tablica 2.** Likert skala vrednovanja (prema Ter, 2011)

Ocjena Item	Opis ocjene Item description	Raspon ocjena*/ Score range*
5	Odlično/ Excellent	4.21-5.00
4	Vrlo dobro/ Very good	3.41-4.20
3	Prihvatljivo/ Acceptable	2.61-3.40
2	Loše/ Poor	1.81-2.60
1	Veoma loše/Very poor	1.00-1.80

\* If the value is  $\leq 3.40$  the quality is bad; if the value is  $> 3.40$  the quality is good.

\* Ako je srednja vrijednost  $\leq 3.40$  ocjena je loša; a ako je srednja vrijednost  $> 3.40$  ocjena je dobra.

the structure of the users (based on gender, age group, level of education, financial situation, etc.), and their views about accessibility, suitability for different types of activities (diversity of facilities and equipment), the amenity of the area, opportunities for their engagement in social activities (Cooper Marcus & Francis, 1998; Carmona et al., 2003; Ter, 2011 et al.), regularity of the park maintenance, existence of conflict with other visitors to the park etc. The utilization potential of the studied park was evaluated in relation to the social aspect of the space use (PPS – Project for Public Space, 2005) by asking questions that explore the social structure of the respondents (individual or group visits to the park, their engagement in conversation with other users of the park etc.).

The data processing and analysis were done in Microsoft Office Excel 2007 and the statistical program SPSS (Statistical Package for Social Sciences) version 10.0 (SPSS, Chicago, IL.). The numerical variables used the parameters of the mean and standard deviations and categorical variables (gender, age group, level of education) frequencies and percentages. Multiple answers to questions regarding the motives of visits to the park were analyzed individually for each of these motives and all of them put together, compared to the number of the motives stated. The average value of the respondents' motivation to use the park was measured by the number of the motives stated, out of 5 registered motive categories, and is expressed in percentages.

## RESULTS AND DISCUSSION REZULTATI I DISKUSIJA

The overview of the results and comparative analysis were carried out on the basis of the attitudes the users (64% female and 36% male) took in the completed surveys. It was found that the greatest number of the respondents in Tašmajdan Park is between 20 and 54 years of age (72%), while the respondents who are 55 or over account for 16%. The structure of the respondents according to their current occupation indicates that most park visitors are employees (44%), pupils or students (29%), while the pensioners and the

unemployed are the least common (27%). The structure of the respondents by their level of education is as follows: 56% have higher education, 40% secondary education, and 4% of the users have primary education. In Tašmajdan Park 55% of the respondents come from a distance of 1.5 km, 22% from a distance of 1.5-5 km, and 23% of the respondents in the park come from a distance greater than 5 km. The respondents reach Tašmajdan Park on foot (56%), by using public transport (27%) or by car (16%). Walking is the most common motive for coming to the park (56%, which is identical to the percentage of those who come to the park on foot), followed by rest and relaxation (54%), play (41%), entertainment and socializing (37%), working out, jogging, cycling, rollerblading and skateboarding (36%). The respondents stated a number of different motives (1-5) for visiting the park. 32% of the respondents stated only one motive.

## ACCESSIBILITY OF THE PARK DOSTUPNOST PARKA

Easy access and high legibility are effective factors in deeming a park a highly-qualified park. Strong connectivity with pedestrian ways, bicycle and nearby public transportation routes, public transportation stations and parking lots; entrance and exit points that are easily seen and read from the outside of the park by first-time visitors; passenger ways and paths directing users to where they wish to go (PPS, 2005; Ter, 2011). Examining the mean questionnaire responses, it was concluded that the accessibility of the park Tašmajdan and legibility of the park was "excellent" with a value of  $\bar{x} = 4.40$  (Table 3).

The total average score for accessibility and legibility of Tašmajdan Park, as an open urban area, which was derived ba-

sed on the average scores obtained as the respondents' answers to the five questions asked, is 4.40 (Table 3).

The respondents' views about the accessibility and legibility of space confirmed that the respondents are extremely satisfied with the proximity of public transport stops and the possibility of visiting the park on foot (Table 4), and the average scores concerning the connection of spatial units in the park with trails and the possibility of moving along the trails in the desired direction are also outstanding. Only the visibility of entry and exit to the park are rated as very good (4.11).

The intensity of use was analyzed in relation to the use of the park during the year; week (weekdays and / or weekends) and in relation to the period of the day and the length of stay of the respondents in the park. The total average score was derived from the average answers of the respondents to the question of how often they visit the park in different seasons (spring, summer, autumn, winter). The score related to the visits to the park Tašmajdan on an annual level is poor (3.33) (Table 3). The respondents most frequently visit the park in the summer. Visits are less frequent in the fall than in the summer or spring; they are the rarest during the winter months (Table 5).

Most of the respondents visit the park both on weekdays and weekends (61%), 36% of them use the park at weekends, but only 3% on weekdays. Some authors (Aydin and Ter 2008; Ter, 2011) also state that the respondents most often use parks during the summer and spring seasons and that the respondents mostly visit the park on weekdays and at weekends.

At the level of the total sample of the respondents most of them (42%) use the park at different times during the day. Most (36%) of the respondents visits the park in the after-

**Table 3.** Statistical parameters of the respondents' attitudes

**Tablica 3.** Statistički parametri za stavove ispitanika

Parameter / Parametar	$\bar{x}$	S	Min.	Max.
Average motivation for visits to the park / Srednji broj razloga za posjetu parku	.45	.23	0	1
Accessibility and legibility of the area / Dostupnost i prepoznatljivost prostora	4.40	.60	3	5
Using the park on an annual basis / Korištenje parka na godišnjoj razini	3.33	.85	2	5
Total average score for the amenity of the area / Ukupna prosječna ocjena za ugodnost prostora	4.06	.62	2	5
Suitability of benches in the park for several people to sit and chat / Pogodnost klupa u parkovima za sjedenje i razgovor više ljudi	3.22	1.09	1	5

**Table 4.** Evaluation of the respondents' attitudes in relation to the questions serving to assess the availability and legibility of the area

**Tablica 4.** Procjena stavova ispitanika u odnosu na postavljena pitanja kojima se vrednuje dostupnost i prepoznatljivost prostora

Parameter / Parametar	$\bar{x}$	S	Min.	Max.
Survey questions / Pitanja iz upitnika				
Are the entries and exits of the park clearly visible? / Da li su ulazi i izlazi iz parka jasno vidljivi?	4.11	.97	1	5
Is the park easily accessible if you come on foot? / Da li je park lako dostupan ako dolazite pješice?	4.54	.79	2	5
Rate the proximity of public transport stops / Ocjenite blizinu stanica gradskog prijevoza:	4.57	.72	3	5
Do park trails allow you to move in the desired direction? / Da li Vam staze u parku omogućavaju kretanje u željenim pravcima?	4.42	.81	2	5
Are the parts of the park well connected with trails? / Da li su dijelovi parka dobro povezani stazama?	4.36	.76	2	5

**Table 5.** Statistical parameters for using the park in relation to seasons  
**Tablica 5.** Statistički parametri za korišćenje parka u odnosu na godišnje doba

Parameter / Parametar Seasons / Godišnje doba	$\bar{x}$	S	Min.	Max.
Spring/Proljeće	3.59	.88	2	5
Summer/Ljeto	3.76	.93	2	5
Autumn/Jesen	3.43	.95	1	5
Winter/Zima	2.54	1.17	1	5

noons, 15% of the respondents come to the park in the mornings while 7% of the respondents come in the evenings. More than half of the respondents spend 1-3 hours in the park (73%), 20% of the respondents linger for an hour, and 7% of the respondents stay for more than 3 hours.

## SUITABILITY FOR DIFFERENT TYPES OF ACTIVITIES

### POGODNOST ZA RAZLIČITE AKTIVNOSTI

Diversity of activities in urban parks and their usage proportion are among the factors affecting the quality of the place (Ter, 2011). Examining Tašmajdan park within this context, the questionnaire results show that walking and sitting on the park's benches are the most common activities of the respondents. 69% of the respondents go for a walk in Tašmajdan Park, 61% sit on the benches, 41% play with children on children's playgrounds, 37% exercise using available equipment, run, ride a bike, go rollerblading or skateboarding, play soccer or basketball; 12% play with their dogs, read, lie on the grass, play chess, play frisbee or

sunbathe. The comparative analysis of the number of different activities in the park, stated by the respondents, two activities stand out with 43%, three are not as common (25%) as well as one other activity (23%) and there are 4 activities which are least common (9%). On the basis of the respondents' attitudes towards the suitability of the park for different types of activities, 58% of the respondents are satisfied with the ability to use the park in the desired manner (Figure 2). The respondents who are dissatisfied with the facilities and equipment mostly point out the lack of facilities for teenagers and older users (an area designed for the purposes of organizing cultural and entertainment events for all age groups) and sports facilities. They also consider that due to a large number of users in areas with exercise equipment, there is a need to divide the space for physical exercise into the areas for different age groups. 12% of the respondents suggest installing more outdoor faucets and water fountains, 10% of the respondents believe that the park does not have enough playgrounds, benches in the shade (10%), fencing around the park (6%), tables (2%) and facilities for renting bikes and roller skates (3%).

## AMENITY UGODNOST

The total average score for the amenity is derived from the average scores obtained as answers to ten questions and amounts to 4.06 (Table 3). Compared to other questions that assess the amenity of the area, the lowest score (3.27) was given by the respondents answering the question of whether



**Figure 2.** Diverse activities located in the park (from the author's archive, 2014/2015)

**Slika 2.** Različite aktivnosti u parku (iz arhive autora, 2014/2015)

there is a sufficient number of benches in the shade within the park area. The average scores lower than the overall average score for the amenity of the area were given by the respondents assessing the convenience of the benches in the park. The analysis of the respondents' attitudes in relation to individual questions, which assess the amenity of the area, showed that the highest scores were given by the respondents when evaluating the convenience of walking trails (4.43) and the first impressions they get of the park (4.39).

The respondents' attitudes towards the amenity of the park are affected by their perception of vegetation, as the most important feature of the park. The respondents evaluated the existing vegetation in the park, and answered the question of whether, in their opinion, the park has plenty of trees, shrubs, flower gardens and grass areas.

Comfort and image reflect the sensorial values that are acquired by people after experiencing places. Factors such as a good first impression of the park, the use of appropriate materials, activity areas' complying with the standards the presence of sufficient and ergonomic seating, use of water, shelter against bad weather, presence of park management etc. affect the quality of the park (PPS, 2005; Ter, 2011). Quality of one accessory element effective in making a place liveable is accepted to influence the quality of the whole related elements. Participants were asked their opinions of the quality of landscaping elements of the park and according to ten asked questions we have got total average score for the amenity of the area.

The respondents rated their satisfaction with the existing vegetation with a score of 4.04, but in relation to the question of whether the park has plenty of trees, shrubs, flower gardens and grass areas 36% of the respondents believe that the park needs more trees. 24% of the respondents believe that the park does not have enough shrubs, and 14% of them are of the opinion that there are not enough flower gardens.

The research of different types of activities and needs of the park visitors also includes taking into consideration the conflicts that arise when the visitors' needs are not met or when groups of visitors use the same space but in different ways. Some conflicts are common and unavoidable in public areas, but many can be reduced or eliminated by appropriate design and management (Francis, 2003; Carmona et al., 2003).

With regard to user activities in Tašmajdan Park, which are conditioned by their different needs and interests, the existence of conflict with other visitors to the park affects the attitude of the respondents towards the amenity of the area. The percentage of the respondents who had a conflict with other users of the park is 9. The conflict between the users who walk their pets and other users of the park was experienced by 6% of the respondents while 3% put an emphasis on the conflict between teenagers and other users of the park.

## SOCIABILITY DRUŠTVENOST

In order to agree that an urban park is of high quality, it is necessary to determine to what extent this park provides the opportunity for sociality for which it was designed. Therefore, in order to determine the role of the study area in socialization, the questionnaire investigated visitor group structure; it was found that 77% of participants always come to park with friends, while 35% stated that they come with their families.

Furthermore, we found that half of the respondents (51%) sometimes talk to other park users, 21% of the respondents often engage in conversations with other park users, while 28% of the respondents do not talk to other park users. The score (3.22), given by the respondents following the question of whether the park benches are positioned in a way which makes it possible for more people to sit and talk, in-

**Table 6.** Assessment of the respondents' attitudes in relation to questions serving to evaluate the amenity of the area

**Tablica 6.** Procjena stavova ispitanika u odnosu na postavljena pitanja kojima se vrednuje ugodnost prostora

Parameter / Parametar Survey questions / Pitanja iz upitnika	$\bar{x}$	S	Min.	Max.
What was your first impression of the park? / Kakav je bio Vaš prvi utisak o parku?	4.39	.84	1	5
To what extent are the trails in the park convenient for walking? / U kojoj mjeri su staze u parku ugodne za šetnju?	4.43	.69	2	5
Does the park have a sufficient seating capacity – number of benches? / Da li u parku ima dovoljno mjesta za sjedenje – klupa?	4.15	1.01	1	5
Are the benches in the park comfortable to sit on? / Da li su klupe u parku udobne za sjedenje?	3.81	1.12	1	5
Can you find an enjoyable place to sit within the park? / Da li u parku možete izabrati prijatno mjesto za sjedenje?	4.10	1.00	1	5
Is there a sufficient number of benches in the shade within the park area? / Da li u parku ima dovoljno klupa koje su u hladu?	3.27	1.23	1	5
Rate the vegetation (trees, bushes, flower gardens, grass areas) in the park. / Ocijenite vegetaciju (drveće, grmlje, cvjetnjake, travnjake) u parku.	4.04	.86	2	5
Do you feel safe in the park? / Da li se u parku osjećate sigurno?	4.30	.88	1	5
Is the park well-lit in the evenings? / Da li je park dovoljno osvijetljen u večernjim satima?	3.93	.89	2	5
Is the park regularly cleaned and maintained? / Da li se park redovito čisti i održava?	4.14	.95	1	5

dicates the respondents' dissatisfaction with the group use of the seating capacity (Table 3). In addition to questions with pre-determined or mixed answers, the respondents were given the opportunity to highlight what they like most about the park when giving open answers to the questions in the survey and state what they do not like. Most respondents (72%) indicate that they like the park because of its: existing facilities (playgrounds, sports facilities, exercise equipment, jogging tracks, the water fountain, etc.), diversity of facilities and spatial design of the park. When answering the question of what they like most about the park 32% of the respondents stated the number of visitors to the park, i.e. the presence of other people or socializing with other users of the park. 23% of the respondents in the park emphasize the fact that the park is not cleaned or maintained regularly. The respondents believe that the park lacks in the presence of municipal police, i.e. an organized, clearly identifiable service, dealing with the management and maintenance of the park. In response to the question of what they do not like about the park, there is evident dissatisfaction of the respondents caused by the inappropriate use of the park by certain categories of park users: irresponsible pet owners and teenagers who in the evenings damage children's playing props and other equipment. The park fully meets the needs of 24% of the respondents.

## CONCLUSION ZAKLJUČAK

Following the examination of the results and comparative analysis of the users' views based on the completed questionnaires the following conclusions can be drawn:

- As open areas and parts of green areas in urban environments, urban parks present structural elements of cities which provide natural conditions and therefore play an important role in improving the elements of free time as an important contributing factor to the quality of life of modern man. How to use parks is directly related to the development of living standards, the busy lifestyle and the needs of urban population.
- The location and accessibility of city parks are extremely important, which is confirmed by the respondents' satisfaction with the proximity of public transport stops and the possibility of reaching the park on foot. The interconnection of spatial units in the park with trails is also significant as well as the possibility of moving along the tracks in the desired direction which gives the visitors a sense of security thus increasing the utilization potential of the park.
- Based on the attitudes of the respondents about the diversity of facilities and the equipment installed for different types of activities, it was found that there is a lack of facilities for teenagers and older people, sports fields, playgrounds, facilities for renting bicycles and roller skates,

fencing around the park, outdoor faucets and water fountains, tables and benches in the shade. The study of different types of activities and the users' needs revealed certain conflicts due to failures in meeting the users' needs and different ways of using this space.

- The total average score for the amenity of the area is (4.06) which is rated as very good. However, the lowest score (3.27) was given by the respondents answering the question of whether there is a sufficient number of benches in the shade within the park area.
- In order to agree that an urban park is of high quality, it is necessary to determine to what extent this park provides the opportunity for sociality for which it was designed. In Tašmajdan park it was found that 77% of the participants always come to the park with friends while half of the respondents (51%) sometimes talk to other park users. The results confirm that the quality of urban parks is significantly affected by the management and maintenance. It is therefore necessary to introduce clearly identifiable services to deal with the management and maintenance of the park.

The results obtained are consistent with modern theoretical studies according to which recreational activities provide opportunities for socializing and behavior characterized by spontaneity and openness which contributes to the quality of life of modern man. Namely, the respondents score (3.22) regarding the possibilities of using the parks for sitting and chatting to other people, the established percentage of the respondents (37%) who come to the park to socialize; 73% of the respondents who spend 1-3 hours in the park and 32% of those who report that the frequency of users is what they like most about the park i.e. the presence of other people as well as socializing with other users, all confirm the importance of interdisciplinary research to improve the quality of everyday life.

The research results show that the four tested criteria: accessibility; suitability for different types of activities; amenity and sociability are very important for assessing the utilization potential of a park. The obtained results are important for establishing the principles and recommendations that can be implemented in the process of landscape design, aimed at improving the quality of parks to meet the needs of users for certain types of activities and enable the adequate use of parks.

## REFERENCES LITERATURA

- Atmis E., Batuhan Günsen H., Yücedag C., Lise W., 2012: Status, Use and Management of Urban Forests in Turkey. *South-east Eur for* 3 (2): 69-78.
- Aydın, D., Ter, Ü., 2008: Outdoor Space Quality: Case Study of a University Campus Plaza. *Archnet-IJAR. Inter. J. Archit. Res.*,1(2&3): 189-203.

- Bazik, D., 1995: Ponuda gradske scene – potencijali mikro-prosatora grada, „Arhitektonika“ – arhitektonske sveske br. 16,1-86, Arhitektonski fakultet, Beograd.
- Biddulph, M., 1999: Bringing Vitality to a Campus Environment. *Urban Design Int.*, 4(3&4): 153-166.
- Carmona, M., Heath, T., Taner, O., Tiesdell, S., 2003: Public Places – Urban spaces: Dimension of Urban Design, 1-312, Elsevier, Oxford.
- Cooper Marcus, C., Francis, C., 1990: People Places – Design Guidelines for Urban Open Spaces, 1-295, Van Nostrand Reinhold, New York.
- Francis, M., 2003: Urban Open Space – Designing for Users Needs, 1-85, Island Press, New York.
- Gehl, J., 1987: Life Between Buildings – Using Public Place, 1-201, Van Nostrand Reinhold, New York.
- Generalni plan Beograda 2021. „Službeni list grada Beograda“ br. 27/2003, 25/2005, 34/2007, Beograd.
- Goličnik, B., Thompson, W.C., 2010: Emerging relationships between design and use of urban parks spaces, *Landscape and Urban Planning* 94, 38-53.
- Gropius, W., 1961: Sinteza u arhitekturi, 1-162, Tehnička knjiga, Zagreb.
- Harvey, D., 1990: The Condition of Postmodernity, 1-378, Blackwell Publishing, Oxford UK.
- Kent, F., Madden, K., 1998: Urban parks Online. Creating Great Urban Parks. (<http://www.pps.org/reference/creating-great-urban-parks>, accessed by February 2015)
- Lefebvre, H., 1991: Production of Space, 1-454, Blackwell Publishing, Oxford UK.
- Lukić N., 2013: Urban Forests and Greening in the Republic of Serbia – Legal and Institutional Aspects. *South-east Eur for 4* (1): 51-55.
- Milanović, H., 2006: Zelenilo Beograda, 1-239, JKP „Zelenilo-Beograd“, Beograd.
- Milić, V., 1978: Sociološki metod, 1-767, Nolit, Beograd.
- Park, R.E., Burges, E.W., McKenzie, R.D., 1967: The City: Suggestions for Investigation of Human Behavior in the Urban Environment, 1-250, The University of Chicago Press, Chicago and London.
- PPS – Project for Public Space, 2005: How to Turn a Place Around: A Handbook for Creating Successful Public Space, 1-13, PPS, New York.
- Priego, C., Breuste, J. H., Rojas, J., 2008: Perception and Value of Nature in Urban Landscapes: a Comparative Analysis of Cities in Germany, Chile and Spain, *Landscape on line* 7: 1 -22.
- Ter, U., 2011: Quality criteria of urban parks: The case of Alaadin Hill (Konya-Turkey), *African Journal of Agricultural Research* Vol. 6(23): 5367-5376.
- Tisma, A., Jokovi, M., 2007: The new Dutch parks: relation between form and use, *Jola- Journal of landscape architecture – autumn* 07: 48-59.
- Whyte, H.W., 1980: The Social Life of Small Urban Spaces, 1-125, Conservation Foundation, Washington D.C.
- Živković, J., 2015: Koncept integrisane rekreacije i mogućnosti primene u uslovima gradova Srbije, 1-293, Doktorska disertacija, Univerzitet u Beogradu, Arhitektonski fakultet.

## SAŽETAK

Gradski parkovi kao otvoreni prostori i dijelovi sustava zelenih površina urbanih sredina važan su element cjelokupne strukture grada. Načini njihovog korištenja uvjetovani su razvojem životnog standarda, načinom života i različitim potrebama urbane populacije.

Prema konceptu projektiranja parkova koji je primjenjivan do kraja 20. Stoljeća, parkovi su oblikovani tako da omogućavaju aktivno i pasivno korištenje kroz različite oblike rekreacije (šetnja, sjedenje, trčanje, igra djece i druge aktivnosti), no oni u današnje vrijeme ne zadovoljavaju sve zahtjeve suvremenih korisnika te zahtijevaju suvremeniji, odnosno postmoderni kontekst promatranja. Naime, u dosadašnjem procesu pejzažnog oblikovanja nedostaje važan preduvjet za projektiranje kvalitetnih parkova, a to je uvažavanje potreba i očekivanja korisnika. Budući da se temom parkova bave različite discipline, od tehničkih do humanističkih, kao rezultat interdisciplinarnog pregleda literature, u smislu korisnika prostora, izdvojeni su kriteriji za procjenu kvalitete parkova: pristupačnost prostora; pogodnost za različite vrste aktivnosti (raznovrsnost sadržaja i opremljenost); ugodnost boravka (u zavisnosti od mikroklimatskih uvjeta – mogućnosti zasjene, sigurnost prostora itd.) i društvenost (mogućnost ostvarivanja socijalnih aktivnosti). Ciljevi su: (1) utvrditi značaj odabranih kriterija kvalitete u procjeni uspješnosti projektiranja gradskih parkova; i (2) ocijeniti upotrební potencijal gradskog parka Tašmajdan u Beogradu korištenjem odabranih kriterija kvalitete.

U istraživanju je korištena metoda anketiranja na uzorku od 300 korisnika. Anketiranje je provedeno prema utvrđenom protokolu metodom slučajnog uzorka, tokom rujna kao mjeseca u kojem vremenski uvjeti pogoduju odvijanju aktivnosti na otvorenom prostoru.

Na temelju anketnog upitnika utvrđena je struktura ispitanika (spol, dob, stupanj obrazovanja, ekonomske mogućnosti i dr.) i njihovi stavovi o predmetu istraživanja: pristupačnosti, pogodnosti za različite vrste aktivnosti (raznovrsnost sadržaja i opremljenost parka), ugodnost prostora i mogućnosti ostvarivanja socijalnih aktivnosti, održavanja parka, postojanje sukoba sa drugim korisnicima parka i dr. U odnosu na socijalni način korištenja prostora vrednovan je upotrební potencijal istraživanog parka postavljanjem pitanja, kako bi se



ustanovilo koliko se park uspješno koristi (pojedinačna ili grupna posjeta parku, razgovor sa drugim korisnicima parka itd.).

Obrada i analiza podataka izvršena je Microsoft Office Excel 2007 i statističkim programom SPSS (Statistical Package for Social Sciences) version 10.0 (SPSS, Chicago, IL.). Pregledom i interpretacijom rezultata izvedeni su zaključci:

- Položaj i pristupačnost gradskog parka ispitanici su ocijenili srednjom ocjenom od 4.54, što ukazuje na njihovo zadovoljstvo blizinom stanica gradskog prijevoza i mogućnošću dolaska u park pješice. Povezanost prostornih cjelina u parku stazama i mogućnost kretanja stazama u željenom pravcu koje kod korisnika stvaraju sigurnost, također su ocijenjene visokom srednjom ocjenom (4.36). Dobra pristupačnost i unutarnja povezanost, uz osjećaj sigurnosti povećavaju uporabni potencijal parka.
- Na temelju stavova ispitanika o raznovrsnosti sadržaja i opremljenosti prostora za različite vrste aktivnosti prepoznat je nedostatak sadržaja posebno namijenjenih mlađim dobnim skupinama (tinejdžeri), ali i i starijoj populaciji (sportski tereni, dječija igrališta, stolovi i klupe u hladu). Također nedostaje uslužni prostor za iznajmljivanje bicikala i rola, kao i ograda oko parka. Istraživanjem različitih vrsta aktivnosti i potreba korisnika evidentirani su i sukobi različitih grupa korisnika istog prostora.
- Ukupna ugodnost prostora Tašmajdanskog parka je ocijenjena kao vrlo dobra (4.06). Međutim, ispitanici daju najnižu ocenu za udobnost klupa u parku i neodostatak prostora za sjedenje koji su u hladu.
- Kako 77 % ipitanika posjećuje park s prijateljima i 51 % ispitanika razgovara s drugim korisnicima parka, dobiveni rezultati ukazuju da sa socijalnog gledišta korištenja prostora park ispunjava svoju funkciju. Rezultati ukazuju da na kvalitetu gradskih parkova bitno utječu upravljanje i održavanje. Stoga je neophodno uvođenje jasno prepoznatljive službe koja će se baviti upravljanjem i održavanjem parka.

Rezultati istraživanja ukazuju na upotrebljivost četiri korištena kriterija za procjenu upotrebnog potencijala parka. Dobiveni rezultati daju podlogu za izradu preporuka za unapređenje procesa pejzažnog oblikovanja i projektiranja u gradu, u cilju poboljšanja kvalitete parkova i zadovoljavanja potreba korisnika za određenim vrstama aktivnosti, što će unaprijediti i samu razinu korištenja ovih prostora.

---

**KLJUČNE REČI:** pejzažno oblikovanje, gradski park, kriterij kvaliteta, park Tašmajdan, Beograd