

Examining the Concept of Quality of Space in Public Open Spaces: The Example of Çanakkale Özgürlük Park

Alper SAĞLIK^{1*}, Merve TEMİZ¹, Fatoş KARTAL², Dilan ŞENKUŞ²

ORCID 1: 0000-0003-1156-1201 ORCID 2: 0000-0002-6662-4399

ORCID 3: 0000-0003-3897-7493 ORCID 4: 0000-0002-4577-7580

¹ Çanakkale Onsekiz Mart University, Faculty of Architecture and Design, Department of Landscape Architecture, 17100, Çanakkale, Türkiye.

² Çanakkale Onsekiz Mart University, Graduate School of Education, Department of Landscape Architecture, 17100, Çanakkale, Türkiye.

*e-mail: alpersaglik@gmail.com

Abstract

Public open spaces provide many services that will improve the physical and mental health of the society and increase the quality of life. These services are an important indicator for measuring spatial quality. In this study, it is aimed to evaluate the reinforcement elements used in the Özgürlük Park in the city of Çanakkale according to the spatial quality criteria in the Space Quality Diagram. Situation analysis, which is a component of the qualitative research design, was used in line with the target and the reinforcement elements were evaluated as successful or unsuccessful. As a result, it was determined that the park is an area with high quality value, but the "maintenance" criterion was found to be insufficient in the area. It is suggested that the maintenance and repair works of the reinforcement elements and plant elements in the area should be carried out regularly.

Keywords: Quality of life, urban identity, Çanakkale

Kamusal Açık Alanlarda Mekân Kalite Kavramının İrdelenmesi: Çanakkale Özgürlük Parkı Örneği

Öz

Kamusal açık alanlar, toplumun fiziksel ve ruhsal sağlığını iyileştirecek ve yaşam kalitesini artıracak birçok hizmet sunmaktadır. Sunulan bu hizmetler, mekânsal kalitenin ölçülmesi için önemli bir göstergedir. Bu çalışmada, Çanakkale kentinde yer alan Özgürlük Parkı'nda kullanılan donatı elemanlarının Mekân Kalitesi Diyagramında yer alan mekânsal kalite ölçütlerine göre değerlendirilmesi hedeflenmiştir. Hedef doğrultusunda nitel araştırma deseninin bir bileşeni olan durum analizi kullanılmış ve donatı elemanları başarılı-başarısız olarak değerlendirilmiştir. Sonuçta, parkın kalite değeri yüksek bir alan olduğu saptanmış ancak "bakım" kriterinin alanda yetersiz olduğu görülmüştür. Alanda yer alan donatı elemanları ve bitkisel öğelerin bakım onarım çalışmalarının düzenli olarak yapılması önerilmiştir.

Anahtar Kelimeler: Yaşam kalitesi, kent kimliği, Çanakkale

Citation: Sağlık, A., Temiz, M., Kartal, F. & Şenkuş, D. (2022). Examining the concept of quality of space in public open spaces: The example of Çanakkale Özgürlük Park. *Journal of Architectural Sciences and Applications*, 7 (2), 795-812.

DOI: <https://doi.org/10.30785/mbud.1169558>



1. Introduction

Since the formation of cities, each city has shaped the society it hosts, and in the same way, it has been shaped by being influenced in many ways by each individual that makes up this society. This state of motion is one of the main reasons why we define cities as living organisms. At this point, the most important element that turns the citizens into constantly changing, transforming, and developing, that is, "living" organisms, emerges as public spaces. This important role of public spaces, especially open public spaces in cities and human life, makes cities more livable and more dynamic (Erdönmez & Çelik, 2016).

Public spaces are social and cultural textures consisting of common living spaces and spaces that are accessible to everyone and arranged for the benefit of society. These areas, which provide the integration of people with the city in establishing the structural balance in the city, regulate or direct its relationship with its environment, are planned or formed spontaneously, and have a structure that almost constitutes the whole of the city. Sidewalks, avenues, streets, parks, sports fields, shopping malls, and squares are examples of public spaces (Karayılmazlar & Çelikyay, 2018).

According to Jacobs (1969), public open spaces are one of the most important elements that make the city noticeable and exciting. The streets in the corridor structure create a crowded sidewalk life, creating an opportunity for interaction in society and revealing the forms of interaction (Erdönmez & Akı, 2005).

Public open spaces have a social as well as a political function. As a social space, it creates suitable environments for people to come together and interact. Its political function is to hold people from all walks of life together for democracy, freedom, equality, and justice (Uzgören & Erdönmez, 2017).

According to Jacobs (1969), parks are defined as open spaces that people can access for free. Parks and open spaces not only provide a pleasant and natural environment but also improve the quality of life in the urban area and take on necessary environmental functions (Uzgören & Erdönmez, 2017).

Parks increase the ecological quality of cities as well as having a recreational resource value. It provides users with healthier living spaces by enabling them to establish social, physical, and psychological bonds with nature and other individuals. The presence of parks and open spaces in the city and its immediate surroundings increases the quality of life and welfare of individuals (Sağlık, Baytan, Bayrak, Temiz & Kelkit, 2020).

With the development of urban life, many changes have occurred in urban areas. The rapidly increasing population and developing technology have had a significant negative impact on living spaces and quality of life. Studies that cannot meet the needs of users in urban areas and negatively affect the quality of life, also negatively affect the development of the city (Öztürk & Özdemir, 2013; Sağlık et al, 2020). In addition to the pressure on the environment, we live in, unplanned, uncontrolled, and uncontrolled studies cause damage to the existing tissue and decrease the quality of life. The deterioration of the ecological balance, the destruction of natural resources, and the decrease in the quality of urban life have led to the emergence of concepts such as livability and quality (Temiz & Sağlık, 2021).

Open public spaces and the activities carried out in these areas are important urban environmental elements that contribute to the quality of life. The existence of cities depends on the existence of elements such as quality of life, movement, and collective, cultural, and social life in that city (Uzgören & Erdönmez, 2017).

Success criteria that are effective in creating a quality living environment; are activities and uses, accessibility, comfort-image, and sociability (True & Türel, 2017).

According to Burt (1978), quality; are the total features that allow the needs to be met. They are also associated with individual characteristics. These relations must be integrated and balanced inside or outside the building (İnceoğlu & Aytuğ, 2009).

According to Das (2008), "Quality" is an objective concept that expresses the level of well-being of any character/situation and can vary from person to person. However, there are objective indicators used

to measure quality in urban space. The dimension of quality of life in the urban area is considered an environmental factor in a broader sense, including the physical, social, and economic environment (Uzgören & Erdönmez, 2017).

The concepts of quality and quality of life may vary according to individuals and periods. While quality of life includes meanings such as well-being, health, and happiness for individuals, it means a good place spatially. The concept of quality of life has been formulated with factors determined as a result of various research. In the landscape architecture discipline, it is a priority to create spaces that meet the expectations of the users and to increase the quality of life, taking into account the design principles (Dissart & Deller, 2000; Sağlık, Sağlık & Temiz, 2020).

Public spaces, whose importance is increasing day by day at the urban scale, cannot meet the expectations of individuals and society due to their different functions and negativities in the design process. To increase the welfare level of the city, necessary attention should be paid to the existence and protection of these areas. All elements of public spaces in the city should be created according to planning and design principles. For this reason, this study, it is aimed to evaluate the reinforcement elements used in Özgürlük Park, which is an important urban part of Çanakkale and represents one of the recreational areas, according to spatial quality criteria. The scope and limitations of the study consisted of various equipment elements in Özgürlük Park and their evaluation with situation analysis according to spatial quality criteria.

2. Material and Method

Özgürlük Park, which is connected to the Esenler District of Çanakkale city, has been determined as the study area (Figure 1). Özgürlük Park is located at latitude 40.163357 and longitude 26.407953. It has been chosen as the study area because it is a public open space that can appeal to different age groups and different class users, and also because it is very rich in terms of plant material, which is one of the most important parameters when determining the quality of the space.



Figure 1. Workspace (Google Earth, 2022)

Providing service with a unique Bosphorus view, the park is positioned on an area of 35 thousand square meters. Troy Square, which is the basic element of Özgürlük Park, is an area where sound and light plays can be made at night. In the place to be built here, motifs reminiscent of the ancient city of Troy on the hard ground and the history of the city from Troy to the Dardanelles wars were emphasized

on the relief walls around it. The road in the park leads down to Troy Square with amphitheater steps. During the shows, these steps are also used as a viewing terrace.

In the park, there are walking, jogging and cycling paths (1), 3 playgrounds (2), 1 skateboard track (3) and seating areas (4) connected to the buffet service. In addition, green areas where entertainment and cultural activities are carried out cover the area (Figure 2).

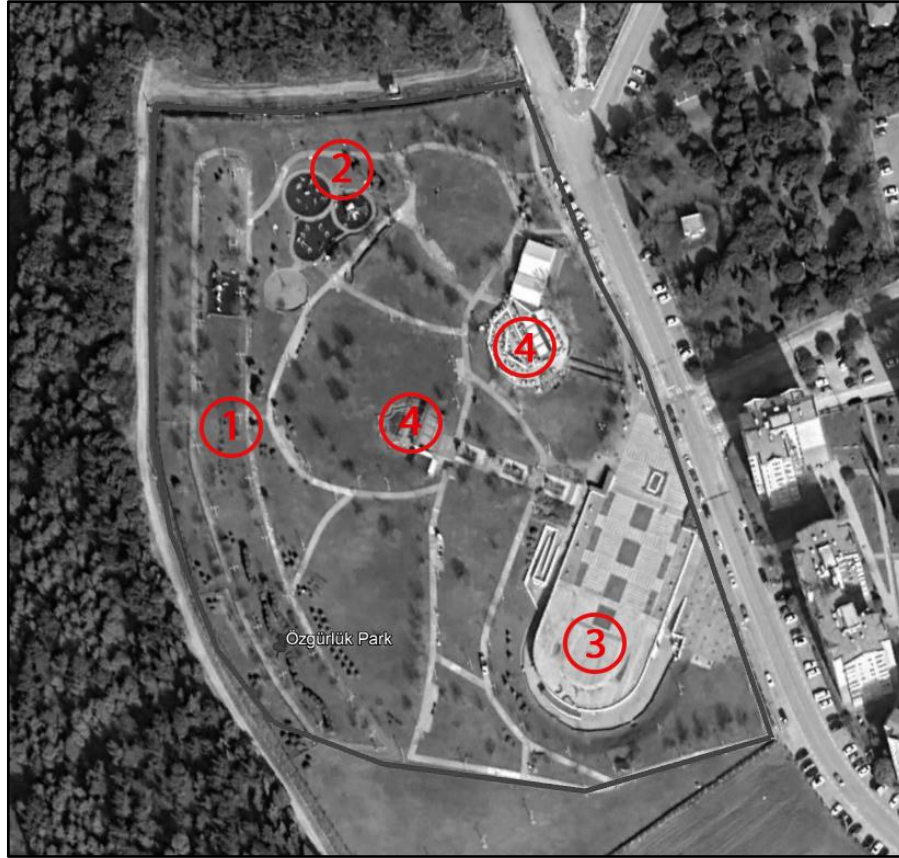


Figure 2. Özgürlük Park usage areas (Google Earth, 2022)

“The Place Diagram” developed by the team called Project for Public Spaces (PPS), which produces projects for public spaces in the USA, constitutes the starting point of the research (Figure 3). The method approach that is planned to be used for the evaluation of the reinforcement elements in Özgürlük Park according to the spatial quality criteria is situation analysis, which is a component of the qualitative research design (Yazıcıoğlu and Erdoğan, 2011). In situation analysis; The case study was determined by being inspired by previous studies and the equipment was discovered by scanning in the field (Özgürlük Park).

What Makes a Great Place?

Project for Public Spaces

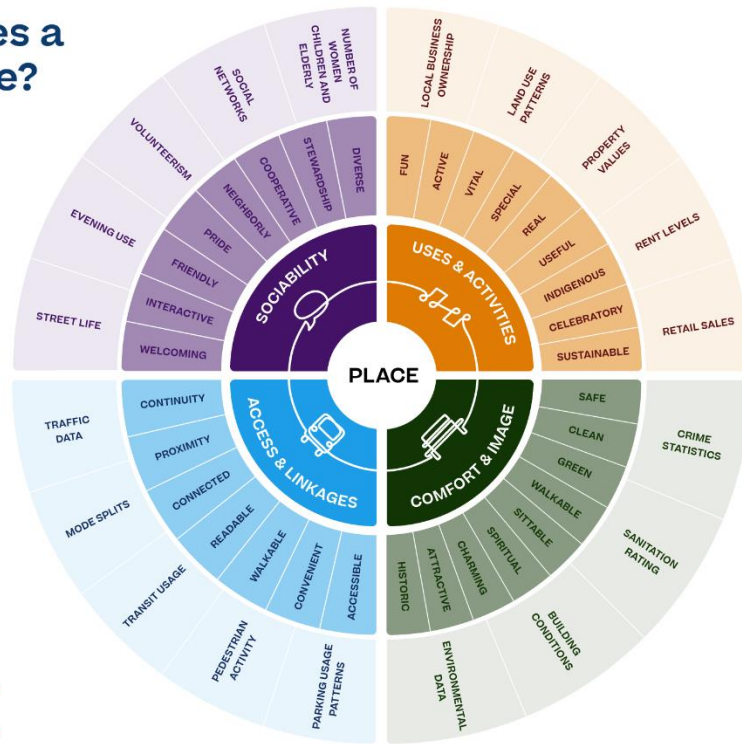


Figure 3. Space quality diagram defined by the project for public space (PPS) (Project of Public Spaces, 2022)

The landscape research method based on the survey, data collection, analysis, and synthesis was used in the process of the study (Sağlık et al., 2014). The study was carried out in 4 stages:

1-Literature Review: A literature review was conducted on public spaces, public open spaces, the concept of quality, and associating these spaces with space quality.

2-Area Analysis: Photographs were taken in Özgürlük Park, which was chosen as the research area, and after on-site detection, transfer to digital media was carried out. Visual analysis and preliminary observation were made in the research area.

3- Data Analysis and Evaluation: Based on the Space Quality Diagram Defined by the Project for Public Space (PPS), a situation analysis will be made through observation in line with the criteria adapted according to the characteristics of Özgürlük Park, and the equipment will be evaluated as successful or unsuccessful according to this diagram. Thus, the space quality success will be determined within the scope of the equipment in the area (Table 1).

4-Conclusion: As a result of data analysis and evaluation, design suggestions have been developed to make the space quality success determined in line with the quality criteria stronger, functional, aesthetic, and sustainable.

Table 1. Space quality criteria determined to be used in the study

ACCESS & LINKAGES	USE & ACTIVITIES	SOCIABILITY	COMFORT & IMAGE
Accessibility	Variety of activities	Suitability of the Space for Social Activities	Safety
Availability	Activity	Inclusivity	Maintenance and Cleaning
Legibility	Sustainability	Interactive	Charm/Attractiveness
Links	Use of the space for different purposes	Suitability for Recreation	Build Quality

3. Findings and Discussion

In the study area, the sub-criteria were examined by the criteria specified in Table 1 of the area uses that were transferred to the digital environment after on-site detection, and the quality of the space was evaluated.

3.1. Access & Linkages

Accessibility: According to Burn (1979), accessibility is defined as the freedom of individuals to participate in different activities in their social lives, and according to Hansen (1959), it is defined as the potential of all possibilities of interaction between individuals. Accessibility is an important factor in the evaluation of public green spaces in cities. The accessibility of individuals living in cities to activities in that region varies depending on the city unit they serve. The balanced distribution of the accessibility distance in the city is closely related to the quality of life of the citizens (Sağlık, Demir, Çelik, Durdymyradov & Bayrak, 2021). When the work area is evaluated in terms of accessibility, it is possible to reach the area by many means of transportation (bicycle, private vehicle, public transportation, electric scooter, etc.) or on foot. There is a bicycle path surrounding the park, a 6-car parking lot at the park entrance, and a bicycle park and vehicle parking pockets surrounding the park (Figure 4).



Figure 4. Bicycle path, parking lot, bicycle park, and vehicle pockets (Original, 2022)

There are 2 public transportation stops at 85,67 m and 115,17 m distance from the study area (Figure 5).



Figure 5. Nearest public transport stop locations (Google Earth, 2022)

Availability: According to Hacıhasanoğlu & Hacıhasanoğlu (1997), availability is defined as the ability of individuals to reach all places around them by themselves or with the help of any vehicle (Alpagut, 2003). In society, individuals have to perform some activities to live and integrate with their environment. The availability of urban spaces allows individuals to move freely without hindering each other. The study area, together with its surroundings, has been evaluated in terms of availability. The

fact that the area is positioned in line with the bus stops, as well as being at the intersection of Özgürlük Avenue and Sadi Fenerciğil Avenue, which is one of the important transportation axes, creates a positive effect in terms of availability in the area (Figure 6).



Figure 6. Study area neighborhood (Original, 2022)

Legibility: Due to the fact that the park consists of green areas, it is separated from the surrounding spaces in terms of texture (Figure 7). The presence of green areas in the urban fabric provides many social, economic, and ecological functions to the city (Önder & Polat, 2012).



Figure 7. Green texture dominates the area (Original, 2022)

At the entrance to the area, guiding-informative signboards and signs that increase the legibility of the area are used. There are also many guiding and informative signs and signs in the area (Figure 8).



Figure 8. Guiding and informational signs in the study area (Original, 2022)

Urban equipment elements are urban elements that define urban spaces and contribute to the urban identity with visual and functional importance. Urban reinforcement elements can sometimes define

a space where they are alone (Külekçi, 2018). Therefore, in the study area, a symbolic statue was used at the entrance of the park to indicate that the park is also a resting area (Figure 9).



Figure 9. Symbolic sculpture (Original, 2022)

Links: There are 4 entrances in the area that connect the park and the surrounding uses and are actively used today (Figure 10).

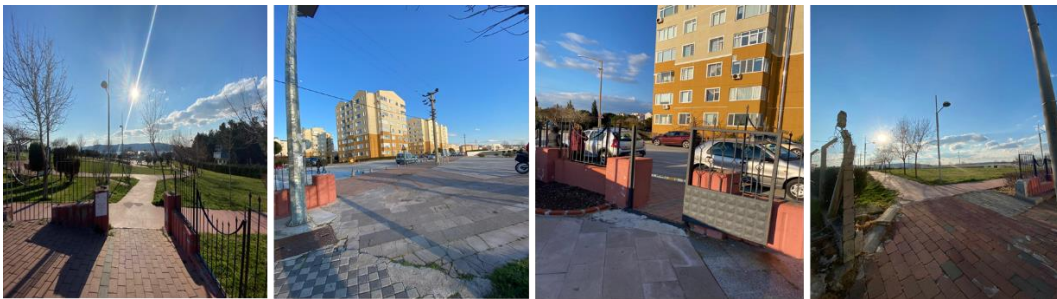


Figure 10. Park entrances (Original, 2022)

To disconnect the area from the external environment and to separate the park from the immediate surroundings, a concrete flower pot and iron fence detailed limiting element and a wire mesh limiting plant element was used (Figure 11).



Figure 11. Limiting elements and plant elements (Original, 2022)

3.2. Use & Activities

Variety of Activities: Özgürlük Park is a recreation, resting, and entertainment area spread over a unique large green area surrounded by certain borders. The area is not used as a transition zone, activities are not carried out involuntarily; It shows that optional activities have emerged in addition to compulsory activities in the field. The park, cafe, walking, and bicycle paths, recreational areas, skateboarding track, and large green areas in the area also allow social activities to take place.

Activity: this is one of the recreation areas where users spend time intensively, as it is a large area that receives plenty of sun during the summer season. It is actively used for purposes such as entertainment during the day and for activities such as concerts organized in addition to entertainment and rest in the evening. Özgürlük Park, which is located in one of the highest areas of Çanakkale city center, is not used very often by users, especially in winter, due to the prevailing winds, therefore the rate of usage activity decreases compared to the summer season.

Sustainability: The fact that the area is located at one of the highest points of Çanakkale makes the park airy and spacious. The Bosphorus view of the park, which creates different effects at different times of the day, is a positive feature of the continuity of the area (Figure 12).



Figure 12. Dominating landscape (Original, 2022)

Use of Space for Different Purposes: The main purpose of Özgürlük Park is to provide an area where the people of the city can have fun and rest, and perform their social activities in an area that is away from the stress of the city and integrated with nature. This area does not only serve people but also provides shelter and feeding opportunities for animals. In the park, there are areas where many animals can roam, animal kennels, food bowls, bird water pools, and waste bins and bags for animal excrement (Figure 13).



Figure 13. Animal kennel, food containers, bird water pool, and animal manure bag and trash bin (Original, 2022)

3.3. Sociability

Suitability of the Space for Social Activities: There are many uses in the area suitable for social activities for user requests and needs. Respectively; There are a cafe area, buffet area, and sitting area connected to this area, children's playgrounds, sand playground, children playground (Figure 14), walking-bike paths, and a skateboarding track (Figure 15). There is also a glass-ceramic workshop located under the skateboard rink, which is not currently operating (Figure 16).



Figure 14. Cafe area, buffet area, children's playgrounds, sand park, and children's play machine



Figure 15. Walking path and skateboarding track (Original, 2022)



Figure 16. Glass-ceramics workshop (Original, 2022)

Inclusivity: The area provides opportunities for communities of all ages and walks of life to come together and carry out activities without discriminating between men, women, old and young. At the same time, the uses were designed and created by considering architectural standards such as slopes and dimensions suitable for disabled use (Figure 17).



Figure 17. Disabled compatible uses (Original, 2022)

Interactive: The park is an area where both individual and community activities can be carried out easily. Many entertainments, rest, walking, cycling, doing sports, etc. uses are not disconnected from each other, but are positioned in a way that they can interact (Figure 18).



Figure 18. Interactive uses (Original, 2022)

Suitability for Recreation: Since the park contains very large green areas, it creates a very suitable ground for recreational activities. In addition, the elevation differences in the area facilitated the creation of different usage areas. The elevation difference between these elevation differences is provided by using stairs or leaving a sloping green area (Figure 19).



Figure 19. Sloping areas (Original, 2022)

3.4. Comfort & Image

Safety: The security of the area is ensured by controlling it with a hidden camera. In addition, the use of another area adjacent to the area as a military zone makes the park more reliable (Figure 20).



Figure 20. Military District (Original, 2022)

Maintenance and Cleaning: When Özgürlük Park, which looks clean and well-maintained in its entirety, is examined in detail, it has been determined that there are some areas in need of care. The stacking of unused materials in the area located close to the park entrance caused a bad image (Figure 21).



Figure 21. Stacked materials (Original, 2022)

The paths created by the users as shortcuts not only spoil the view but also cause muddying from time to time (Figure 22).



Figure 22. Trail example (Original, 2022)

Partly broken and neglected reinforcement elements, unrepaired borders, cracked and peeled floor coverings in the park caused the area to look neglected (Figure 23).



Figure 23. Maintenance-free reinforcement elements (Original, 2022)

Due to the erosion of the concrete flooding on the foundation of some of the seating elements used in the area, sludge has occurred in the soil. This resulted in the seating element not being preferred by the users and not being used effectively (Figure 24).



Figure 24. Sludge due to soil wear (Original, 2022)

Charm/Attractiveness: Since the area is mostly green, plant beds were created to make the park more attractive and attractive (Figure 25).



Figure 25. Plant partners (Original, 2022)

The use of deciduous plants created a calligraphic image in the area, making it look more attractive (Figure 26).



Figure 26. Calligraphic image with plant compositions (Original, 2022)

The colorful painting created on the walls made the work much more colorful and remarkable (Figure 27).



Figure 27. Murals (Original, 2022)

The use of different design compositions and equipment created in the area has made the area a center of attraction by attracting the attention of the users (Figure 28).



Figure 28. Design compositions (Original, 2022)

Build Quality: There are quite a variety of equipment elements in the park. It has been seen that the area lighting elements are sufficient for night lighting in terms of variety and lighting power. Single luminaire street lamps, double luminaire street lamps, three luminaire street lamps, four luminaire street lamps, solar panel street lamps, wall lighting, floor lighting, and design street lamp are used in the area (Figure 29).

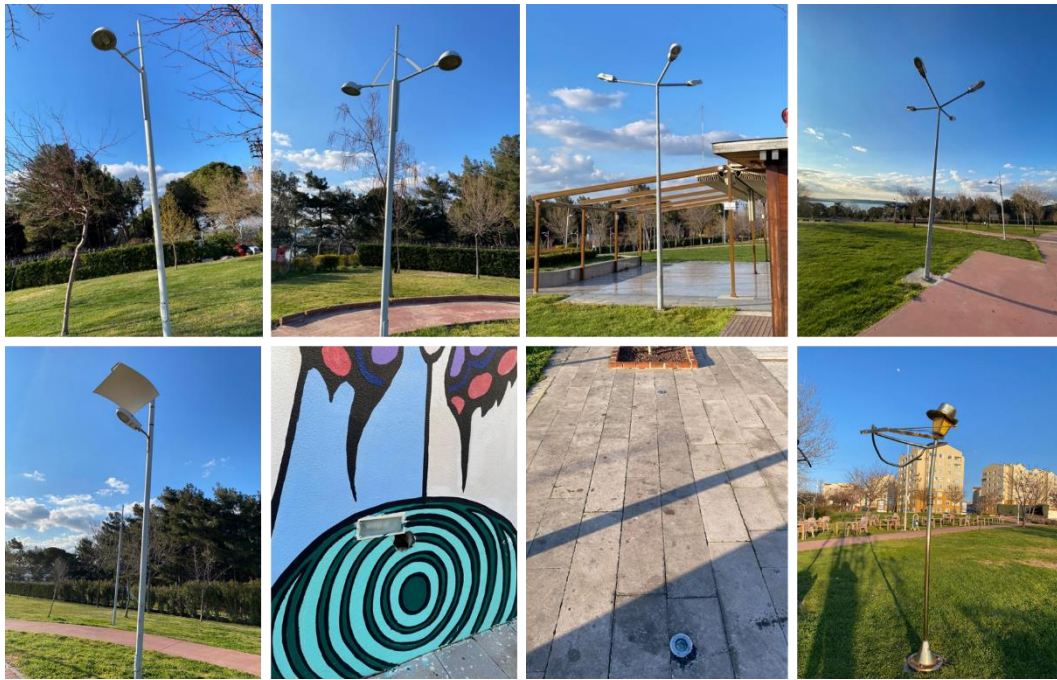


Figure 29. Lighting elements (Original, 2022)

As a seating element in the area; Seating elements with wood-metal details and wood-concrete details were preferred (Figure 30).



Figure 30. Seating elements (Original, 2022)

Metal-detailed, concrete-metal-detailed, and wood-metal-concrete detailed trash bins were used in the area (Figure 31).



Figure 31. Trash bins (Original, 2022)

Granite slab paving, granite cube paving, concrete paving stone paving, cast rubber flooring, marble slab, and basalt slab stone were used in the area in different colors and shapes (Figure 32).



Figure 32. Flooring materials (Original, 2022)

There are not many shading elements in the area, since it is generally a light green area. PVC tarpaulin shading element, which can be opened and closed, is generally used in the seating areas (Figure 33).



Figure 33. PVC tarpaulin shading element (Original, 2022)

Plants were used in concrete plant boxes to create aesthetic visual beauty in the area (Figure 34).

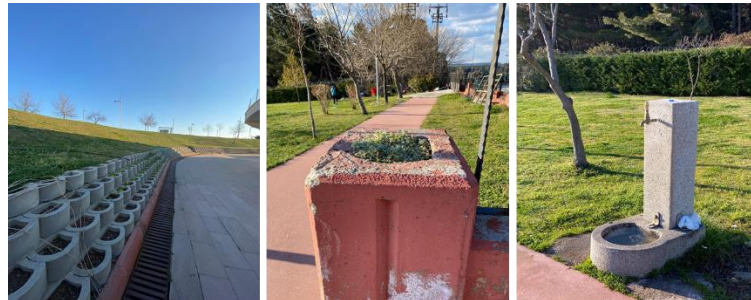


Figure 34. Concrete plant crates (Original, 2022)

4. Conclusion and Recommendations

From past to present, cities are in a state of constant change and transformation. This great change gains importance with urban transformation and renewal works. The increase in the quality and comfort of urban life increases the value of public spaces, which are open spaces in cities, in a sustainable way. Public spaces, which have become an important part of cities, are preferred both visually and aesthetically as well as functionally. To create more livable spaces, planning and design studies in aesthetic, functional, and functional dimensions should be given importance.

As the study area, Özgürlük Park, which has an important place in Çanakkale city center in terms of its location, function, and plant texture, and which has the quality of public space, was chosen. The question of "Is the spatial quality sufficient?" for the study area formed the basis of the study. This question formed the basis of the study. Özgürlük Park; The space was evaluated according to the quality criteria in the Space Quality Diagram Defined by the "Project Public Space" (PPS). Situation analysis, which is a component of the qualitative research design, was applied while making the evaluation. In situation analysis; The case study was determined by being inspired by previous studies and various equipment was examined by scanning the study area. The reinforcement elements were evaluated as successful or unsuccessful in terms of spatial quality criteria. As a result of this evaluation, it has been determined that the study area is an open public space with high-quality value.

The workspace largely meets the physical, perceptual, and social needs of users. The park creates a place where users of all ages and walks of life can come together, spend time and interact. It has been observed that the park was designed and implemented considering the universal design criteria. When the area is evaluated in terms of usage and activity diversity, it has been determined that recreational areas meet the expectations of users of different ages, genders, and cultures. The work area is adequate in terms of accessibility and usability. Connections, circulations, and the presence of necessary information boards in the area make the area sufficient at the level of accessibility. It has been seen that the criterion of "maintenance", which is one of the objective indicators used in the quality assessment of the urban space in the area, is insufficient in the area. Deformed floors and broken borders were encountered at different points in the area. There are deformations in the ground and foundation of the seating elements. Broken and neglected garbage cans, seating elements, etc. reinforcement elements are located throughout the area.

It is necessary to improve and renew the deformed floors and reinforcement elements in the area. In particular, regular maintenance and repairs of the reinforcement elements, regular watering of the plants, and continuation of these processes will contribute greatly to the increase of the quality value of the area. With this study, it is thought that Özgürlük Park, located in the city center of Çanakkale, will guide the changes that can be made in the future.

Acknowledgement and Information Note

The article complies with national and international research and publication ethics. Ethics Committee approval was not required for the study.

Author Contribution and Conflict of Interest Declaration Information

All authors contributed equally to the article. There is no conflict of interest.

References

- Alpagut, Y. (2003). *Toplu konut dış mekânlarında tüm kullanıcılar için erişebilirlik ölçütlerinin saptanması* (Yüksek Lisans Tezi). Access Address (09.07.2022): <https://polen.itu.edu.tr:8443/server/api/core/bitstreams/ba36853c-0e41-4790-a40b8ad18a5971a6/content>
- Burns, L. D. (1979). *Transportation, temporal and spatial components of accessibility*. Toronto: Lexington Books. ISBN-10: 0669029165.
- Burt, M. E. (1978). *A survey of quality and value in building*. Watford, UK: Building Research Establishment. ISBN-10: 0851250483.
- Das, D. (2008). Urban quality of life: a case study of Guwahati. *Social Indicator Research Journal*, (88), 297-310. Doi: 10.1007/s11205-007-9191-6.
- Dissart, J. & Deller, S. (2000). Quality of life in the planning literature. *Journal Planning of Literature*, 15(1). Doi: 10.1177/08854120022092962.
- Erdönmez, M. E. & Akı, A. (2005). The effects of open public urban spaces on social relations. *MEGARON*, 1(1), 67-87. Access Address (09.07.2022): <https://jag.journalagent.com/megaron/pdfs/MEGARON-21939-ARTICLE-ERDONMEZ.pdf>
- Erdönmez, M. E. & Çelik, F. (2016). Public space relations in the urban area. *Turkish Academy of Sciences Journal of Cultural Inventory*, (14), 145-163. Access Address (09.07.2022): <https://dergipark.org.tr/pub/tubaked/issue/57267/810019>
- Google Earth (2022). Google Earth Image. Access Address (09.07.2022): <https://earth.google.com/web/search/%c3%a7anakkale+%c3%b6zg%c3%bcrl%c3%bck+park%c4%b1/@40.1633576,26.4079543,56.27182868a,784.59513386d,35y,0h,0t,0r/data=CigiJgokCYZVCpW-hDRAEYZVCpW-hDTAGSvtfz-o5iVAIRQQc8ifzIbA>

- Hacıhasanoğlu, I. & Hacıhasanoğlu, O. (1997). İ.T.Ü. Ayazağa Kampüsü Binalarının ve Yakın Çevrelerinin Özürlülerin Kullanımına Uygun Olarak Düzenlenmesi. İstanbul: İTÜ. Araştırma Fonu Araştırma Projesi.
- Hansen, W. G. (1959). How accessibility shapes land use. *Journal of the American Institute of Planners*, 25(2), 73-76. Doi: 10.1080/01944365908978307.
- İnceoğlu, M. & Aytuğ, A. (2009). The concept of quality in urban space. *MEGARON*, 4(3), 131-146. Access Address (09.07.2022): <https://megaronjournal.com/tr/jvi.aspx?pdire=megaron&plng=tur&un=MEGARON-24772>
- Jacobs, J. (1969). *The Death and Life of Great American Cities*. New York: Random House.
- Karayılmazlar, A. S. & Çelikyay, H. S. (2018). Design and importance of public spaces in cities. *Bartın University Journal of Faculty of Economics and Administrative Sciences*, 9(17), 83-90. Access Address (09.07.2022): <https://dergipark.org.tr/tr/download/article-file/522467>
- Külekçi, E. A. (2018). Examination of original designs in urban equipment with landscape ergonomics approach. *Journal of Architectural Sciences and Applications (JASA)*, 3(2), 89-109. e-ISSN: 2548-0170.
- Önder, S. & Polat, A.T. (2012, May). The place and importance of urban open-green spaces in urban life. Formation and Maintenance Principles of Urban Landscape Areas Seminar, Konya.
- Öztürk, S. & Özdemir, Z. (2013). The effect of urban open and green spaces on the quality of life "The example of Kastamonu". *Kastamonu University Journal of Forestry Faculty*, 13(1), 109-116. Access Address (09.07.2022): <https://dergipark.org.tr/tr/download/article-file/159529>
- Project of Public Spaces. (2022). What Makes a Successful Place. Access Address (10.07.2022): <https://www.pps.org/article/grplacefeat>
- Sağlık, A., Sağlık, E. & Kelkit, A. (2014, May). Examination of urban reinforcement elements in terms of landscape architecture: Çanakkale city center example. 1st International Urban Planning-Architecture-Design Congress, Kocaeli.
- Sağlık, A., Baytan, N., Bayrak, M.İ., Temiz, M. & Kelkit, A. (2020). Optimization of lighting equipment in Çanakkale Public Garden in terms of energy efficiency. *Urban Academy | Journal of Urban Culture and Management*, 13(43), 4, 599-608. Doi: 10.35674/kent.754469.
- Sağlık, E., Sağlık, A. & Temiz, M. (2020). Landscape design-campus walkways-quality of life. *GSI Journals Serie A: Advancements in Tourism Recreation and Sports Sciences (ATRSS)*, 3(1), 35-46. Doi: 10.5281/zenodo.4003811.
- Sağlık, A., Sağlık, E., Kelkit, A., Öncül, N. E. & Temiz, M. (2020). The relationship between livability and landscape design in ÇOMÜ Terzioğlu Campus. *COMU Journal of Agriculture Faculty*, 8(2), 427-441.
- Sağlık, A., Demir, S., Çelik, R., Durdymyradov, O. & Bayrak, M. İ. (2021). Investigation of Çanakkale Public Garden in terms of design principles for everyone. *Journal of Bartın Faculty of Forestry* 23(3), 720-732. Doi: 10.24011/barofd.935509.
- Temiz, M. & Sağlık, A. (2021). Sustainable cities: green business parks. *Turkish Journal of Landscape Research*, 4(1), 1-12. Doi: 10.51552/peyad.786432.
- True, E. M. & Türel, H. S. (2017). Analysis of a public space based on the space diagram of Pps (Project For Public Spaces). *Journal of Agriculture Faculty of Ege University*, 54(3), 319-326. doi: 10.20289/zfdergi.387931.
- Uzgören, G. & Erdönmez, M. E. (2017). A comparative study on the relationship between space quality and urban space activities in public open spaces. *MEGARON*, 2(1), 41-56. doi: 10.5505/megaron.2016.42650

Yazıcıođlu, Y. & Erdođan, S. (2011). SPSS Uygulamalı Bilimsel Arařtırma Yöntemleri. 3. Baskı Detay Yayıncılık, Ankara.

