

A Model Proposal to be Used in Evaluation of Urban Open Spaces: Istanbul Ortakoy Square Example

Nasim Valizadeh Bazargan,

Masters Program, Istanbul Aydin University, Turkey

Gökçen Firdevs Yücel Caymaz,

Architecture and Design Faculty, Istanbul Aydin University, Turkey

Abstract

The aim of this study is to propose a checklist-based model that can be used to evaluate urban outdoor spaces, based on the example of Istanbul Ortaköy Square. International studies and theoreticians' perspectives on the subject were investigated in detail in order to determine the criteria that can be used to evaluate the success of the space. When creating the checklist, the result of the studies of Whyte (1980), Marcus and Francis (1997, 2003), Project for Public Places (2000, 2001, 2005, 2009), and Gehl (1996, 2002, 2008, 2009, 2010, 2011, 2013) in particular were effective. The main criteria believed to have an impact on the quality of the open spaces are; Functional qualities (Sub-criteria: Uses and activities, accessibility, attractive places), Social qualities (Sub-criteria: Sense of community, community identity, social interaction, place attachment, sense of ownership) and Perceptual qualities (Sub-criteria: Physical comfort physiological comfort, environmental comfort, safety and security, maintenance and management, technology). The generated checklist was tested in Ortaköy Square, considered a successful urban space in Istanbul. Methods utilized in the study conducted between 2019-20, were on-site determination, observation and photography. As a result of the study, it was determined that the Social and Perceptual Qualities of the urban space play a more important and more effective role than its Functional Qualities.

Keywords: Urban open space, Design Criteria, User Groups, Ortaköy Square

1. Introduction

Urban open spaces are places that combine extensive research and practical experience to demonstrate the opportunities and benefits of different types of outdoor areas to society and individuals. Urban public spaces provide venues for people to express both individual personal and cultural diversity. (Low and colleagues 2009; Thompson, 2002; Wari, 2010). Urban open spaces are areas that are "free to enter or use" in the city, hosting many activities and instant actions of people. Outdoor spaces need to provide social, political and physical venues for the people and communities living around them.

The design and management of urban outdoor spaces will inevitably have an impact on the users' perspective of that area. Many researchers have confirmed there are

significant relationships between the urban environment and user behavior, and that the environment can have beneficial or negative effects on individuals and societies (Marcus & Francis, 1997; Greenhalgh & Worpole, 1996).

In looking at the literary studies; outdoor spaces can be divided into two groups, as indoor and outdoor public spaces (Carr et al. 1992; Gehl, 2011). In looking at the historical process, public open spaces are where social life takes place in the cities; Nowadays, it is observed that most social life takes place in indoor public spaces that are generally semi-privatized.

From the user's point of view, outdoor spaces are defined as those that include different types of activities, including mandatory, optional and social activities (Wooley, 2003; Gehl, 2011; LeGates & Stout,



Figure 1. Top: Nashville Public Square, USA: Grass, natural gardens, fountains and sitting areas, passive and active recreation areas, meeting areas (Laud8, 2011). Bottom: Bryant Park, NY: Outdoor movie theater (Memo, 2019).

2015). These open spaces activities will depend on the environment and the quality of said environment. Social activities are considered the result of the integration of compulsory and optional activities. (Wheeler & Beatley, 2014). Social activities rely on the presence of at least one other person and may include children's games, greetings and conversations, social activities, as well as passive activities such as watching and hearing other people. The design and management of the physical environment will have a significant impact upon opportunities that may arise for such social activities (Figure 1). For the urban physical environment to be successful, the characteristics of the space must meet some criteria. These criteria can be categorized under three main headings as; Functional, Social and Perceptual.

Functional Qualities

Activities that happen in the area make the space lively and original, rendering it more recognizable as well as giving it an identity (Project for public space, 2000). The

primary reason attracting people to the place will be the activities it offers. Each outdoor space has a functional classification that reflects its main use. Priority use and expected uses are important in this classification. Activities define three fundamental types of urban open spaces: Recreation venues, Sports venues and Natural venues (Rutherford et al. 2013). Certain public outdoor space qualities can have significant effects on the initiation or continuation of physical activity (Santos, 2015). Public outdoor space can affect physical activity in at least three ways. First, the public open space can be an environment where people participate in physical activity. Secondly, the public outdoor space can be a destination where people go to get active or just socialize. Finally, said public space can be used as part of a route to reach another destination (for example, by taking a green route to reach a shop) or as part of a recreational walk or jogging route. Thus, public open spaces can contribute to different physical activity behavior (Sugiyama et al.2013).

Matters such as utilization and activity diversity of functional qualities (space and human scale, functional utilization types, user groups), accessibility (transportation to the area from the environment, transportation within the area), as well as elements that make spaces attractive (urban furniture, planting) will all bear an impact.

Social Qualities

Physical spaces are important in ensuring social interaction in urban spaces, outdoor spaces have an important role as social relations in the development and progress of cities, and are not only places where people meet with nature, but also where they mingle socially and culturally (Mamghani et al., 2015, Kara et al., 2011). Wherever there are people, outdoor spaces attract and bring others together; people communicate with each other, look for a place for themselves amongst others, and then new activities are initiated (Rahravi Poodeh & Pouriaye Vali, 2014). In social qualities, matters such as a sense of community, community identity, social communications, a sense of attachment to the place, and a sense of ownership will have an impact.

Perceptual Qualities

Human perception and judgment of the environment are comprised of three stages; the first is color, the second is shape and mass (volume), and the third are the symbolic aspects of the forms consisting of color and mass. Perceivable and identifiable venues give users a sense of security that allow them to learn and dominate the space and to control their movements in the venues (Lynch, 1960). The dimensions of the feeling of comfort include physical comfort (e.g. comfortable and adequate seating, etc.), physiological comfort (e.g. protection from sun, wind, etc.) as well as social and psychological comfort. While psychological comfort may be a precondition for relaxation, relaxation is a more advanced state with 'a comfortable body and mind' (Carr et al. 1992).

Physical comfort (human ergonomics and spatial dimensions), physiological comfort (issues such as heat, temperature, humidity), psychological and social comfort (color, aesthetics, noise, smell, privacy, security and safety, healthcare and management, technological issues) matters will all have an impact in Perceptive Qualities.

2. Materials And Methods

2.1. Research Problem

The main problem in the study is to determine which criteria should be considered in order to increase the success of urban spaces. Chosen as our research area, the problems of Ortaköy Square believed to affect the success of the venue are as follows.

- Lack of facilities or inadequate activities including a children's playground,
- The presence of unwanted persons and activities such as vagrants,
- Worries about filth which dogs and other animals leave in the environment,
- Security, vandalism, maintenance-related problems.

2.2. The Research Objective

The goal of this research is to consider the functional, social and perceptual needs of people while determining the design standards for increasing the quality of urban open spaces. With this goal in mind, a general literature search was carried out regarding the objectives of outdoor spaces, design standards and principles, whereas an attempt was made to create a checklist in order to boost the success of urban spaces. The Functional Qualities of the checklist field were examined under three main headings in order to research the Social and Perceptual Qualities.

- *Functional Qualities*; 'uses and activities', 'accessibility', 'attractive places';
- *Social Qualities*; 'sense of community', 'community identity', 'social interaction', 'place attachment', 'sense of ownership'
- *Perceptual Qualities*; are examined under the subheadings 'physical comfort', 'physiological comfort' and 'environmental comfort.'

The following stage of the research covers the checklist created based on the literature which was tested in Ortaköy Square in Istanbul.

In creating the checklist, the following issues believed to boost the success of the location, were taken into account.

- Defining (and expanding this definition) the public outdoor space; researching the optimal values needed to attract people to the public outdoor space,
- Defining user expectations by examining the forms of urban outdoor venues,
- The tendency towards physical activity measurements specific to public outdoor spaces,
- Using pedestrian grids to comprehend distances to the public outdoor space,
- A better understanding of the characteristics of urban outdoor spaces associated with physical activities,
- Determining how different user groups interact with the public outdoor space and how people use or will use the square or how to create an attractive public outdoor space,
- Setting up a utilization and activity program which represents the community vision and can be used to shape the design and management strategy,
- Creating an activity plan for each of the destination points in the area,
- Having a better idea of how independent public open space features are related to physical activities,
- Which opportunities will be taken into account in order to increase the social potential of the public outdoor space.

2.3. Location and Characteristics of the Area

Situated near the Beşiktaş and Levent central points and main vehicle traffic lines, Ortaköy Square is advantageous in terms of its view and climate characteristics, due to its close proximity to the Bosphorus (Figure 2,3). Its seaside location reinforces the reason why it is preferred by young people and all Istanbulians alike. Ortaköy Square was listed by PPS in America as one of “60 Great Places in the World.” This square sees some of the city’s heaviest foot traffic.

The population of the Ortaköy district is about 20,000. Ortaköy Square is a 20-minute walk from the center of Beşiktaş, which is a primary transportation hub between Istanbul’s Asian and European sides.

Ortaköy Square fits neither into the closed-off nor the core or shapeless square types (Öztürk, 2009).

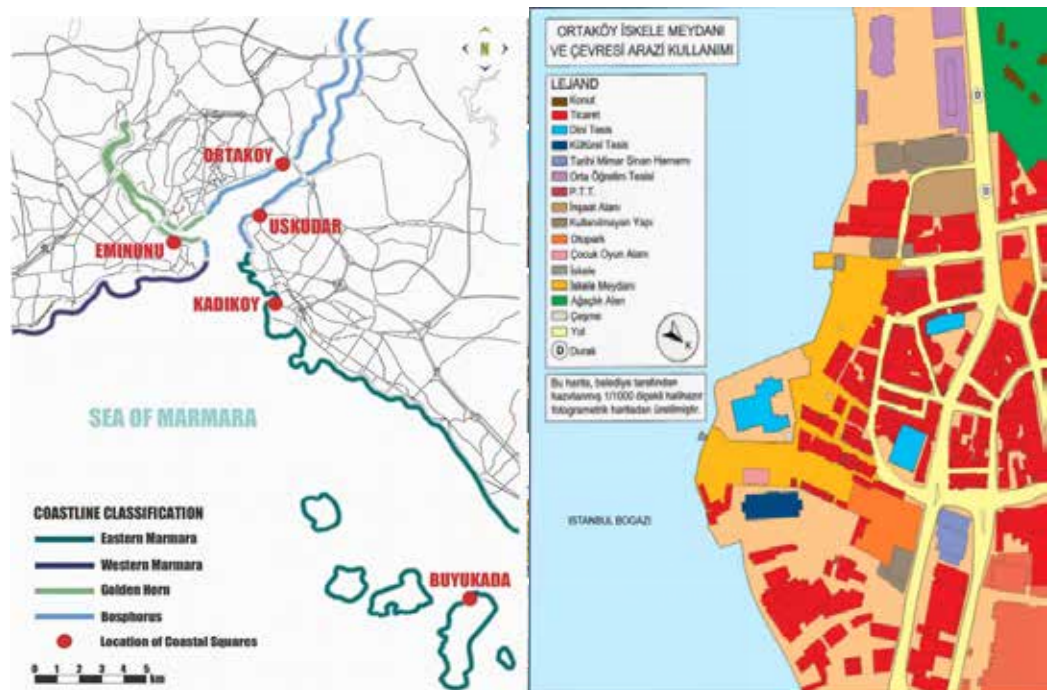


Figure 2. Ortaköy Pier Square and its surrounding land use (Baskaya et al., 2015)



Figure 3. Ortaköy's morphological structure; location of its public square (Dizdaroğlu, 2005)

2.4. Data Collection Method

In this study, a checklist was prepared by taking previously conducted international literary studies as a guide. Subsequently selected as a research area, the current status of Ortaköy Square was examined over a period of approximately a year between 2019-20 using on-site detection and observation methods together with photographs and measurements.

3. Research Results

In looking at the square's functional qualities, on a scale of criteria, the various uses and activities were rated as good overall. It was determined that the occasional presence of undesirable folks such as beggars and alcoholics was observed, whereas in terms of the scale of the square, pedestrians could not use the sidewalks comfortably due to the overwhelming number of street vendors. There were some issues pertaining to the functionality of the utilization areas; it was determined people were standing around due to inadequate places to sit, especially during busy hours, there were no related people lying down, the playing areas were moderately sufficient, the sports venues were insufficient, and they did not appeal to different age groups. Regarding

the issue of accessibility, access to the area is generally good. It was determined that accessibility for cyclists is insufficient, the marking of pedestrian crossings, visibility of the space from outside, and those using the space from adjacent spaces are moderately sufficient. There was no problem with the user groups criteria; it was observed that the area was used by different gender, age, income and education groups. It was determined the entrance of the square could be more inviting for inner area transportation, and the speed of the road transits, especially in the car parks on busy days, and the rest areas are moderate enough in busy times. As for the physically challenged, it was observed the roads were insufficient, whereas the touch guidance strips along the roads could be better. The permeability of the flooring materials was moderate, the square's hard floor ratio was high. It was determined that the marking system within the venue was moderately sufficient, the lighting was not timed and the trash cans were insufficient. It was determined no serious problem existed regarding the urban furniture and vegetation.

In looking at the social qualifications; It was observed that there was no problem with the sense of ownership,

community identity, social interaction, community commitment, and ownership of outdoor space.

In looking at the perceptual qualities; while no serious physical, physiological and environmental comfort

related problems were observed, it was determined that there was insufficient security personnel, there were a few blind spots in the square, and there was no effective management presence (Table 1).

Ortaköy Pier Square		
Ortaköy Functional Qualities	Typology of the Square	Pier Square
	<p>These attractions and destinations in Ortaköy Square provide functional diversity.</p> <p>The square diverse activities</p>	<p>Offers social and cultural, reasonably priced entertainment as well as religious activities.</p> <p>Ortaköy means 'middle village' in Turkish a reference to its unique location along the Bosphorus Straits.</p> <p>It is a favorite meeting and promenade for local residents.</p> <p>Interesting Objects and Market</p> <p>Bosphorus View / Historical Components</p> <p>Includes recognizability in terms of organization.</p>
Ortaköy Physical Qualities	Location	On the European side, near the Bosphorus
	Important Elements	<p>Ortaköy Mosque</p> <p>Damat Ibrahim Pasha Fountain</p> <p>Esmâ Sultan Waterside Mansion</p> <p>Ortaköy Pier Building</p> <p>Ayios Fokas Greek Orthodox Church</p> <p>Ha-Hayim Jewish Synagogue</p>
	Ortaköy Square Groups	The square is integrated with its environs.
	Ortaköy Square Proportions	Considered insufficient by its users even though it is spread over a large area.
	Ortaköy Square Shape	Has no particular shape.
	Topography and Geography	Situated next to the sea on flat ground, the square features a temperate climate. Moreover, the flat area helps in its accessibility.
	Ortaköy Square Arrangement	This square covers a district with the sea on one side and buildings and cafes on the other.

Figure 4. Ortaköy Pier Square Qualities (Gökhan, 1992)

Table 1. Ortaköy Square Assessment (Francis, 1987,1989,2003; Heath et al., 2011; Gehl, 2010; Gehl, 2011; Gehl& Svarre, 2013; Lynch, 1981; Marcus&Francis, 1997; Main&Hannah, 2010; ThinkCity, 2020; Project for Public Spaces, 2001; Rad&Ngah, 2013; Saftoe, 2012; Sakip ve ark. 2015; Sarkissian Colleagues Planners, 2000; Thomas, 2016; Whyte, 1980; Zube&Moore,2013).

1 - Sufficient 2 - Insufficient 3 - So-So	EVALUATION		
	1	2	3
1 FUNCTIONAL ATTRIBUTES			
1.1. USES AND ACTIVITIES			
Surrounded by destinations (shop, market, music store, cafes and restaurants)	*		
Physical possibilities for sitting, pausing and contemplating in the square.			*
There are focus areas such as playgrounds, bus stops, food courts for people to gather.	*		
Availability of a wide variety of activities.	*		
Non-planned event activities.	*		
Availability of various activity 'options.'	*		
'Undesirables'			*
There is a good balance between men and women.	*		
Availability of a wide variety of uses and activities every day, week and season.	*		
The area is used throughout the day.	*		
There are opportunities for active recreation activities.	*		
Availability of passive recreational activities (people watching, street coffee, informal street entertainment, etc.)	*		
Availability of entertainment / liveliness.	*		
There are local residents.	*		
The square is affordable.	*		
There is an opportunity to learn something new.	*		
1.1.1. Scale			
It's not too big.	*		
The surrounding buildings are at a height proportional to the avenue.	*		
The sidewalk design and layout is suitable for pedestrians.			*
The furnishing design and layout is comfortable for pedestrians.	*		
The vegetation design and layout is comfortable for pedestrians.	*		
1.1.2. Functionality of use zones			
<i>Field of activity description</i>	*		
Dining Availability	*		

Presence of people standing			*
Presence of people lying down			*
Presence of people sitting down	*		
<i>Playground Availability</i>			
A wide age range uses the playgrounds.			*
Presence of loose material such as water, sand or wood.	*		
<i>Availability of Food Outlets</i>			
Food and drink opportunities (self catering and available for purchase)	*		
<i>Existence of Sports Grounds</i>			
		*	
1.1.3. User groups			
Presence of various social groups	*		
Existence of different age groups (retirees, youngsters, etc.)	*		
Presence of different genders	*		
Group usage outnumbers solo users	*		
1.2. ACCESSIBILITY			
1.2.1. 1.2.1. ACESIBILTY THROUGH AREA (EDGE)			
Good location (preferably on a busy route and physically and visually accessible)	*		
Public spaces should be at most 91 cm above or below street level.	*		
Traffic thoroughfares should not border the public area.	*		
How is the connection between the square and adjacent buildings?	*		
Ease of entry and exit.	*		
How sidewalks connect adjacent areas to provide easy access for pedestrians.			*
The use of the square by residents in adjacent buildings.			*
Visibility of the square from outside.			*
Pedestrian crossings marking status.			*
Minimal transition distances.	*		
Proximity of public transport stops to the square.	*		
Vehicular accessibility.			*
Pedestrian accessibility	*		
Cyclist accessibility (bike paths, lockers, storage racks, etc.)		*	
Accessibility by all means of transport.	*		
1.2.2. INTERIOR ACCESS			
Entry			
Having more than one place and visitor participation.	*		

Visible entry and exit points.	*		
Inviting entry and exit points.			*
Bollards			
Bollards mounted 45cm from the back edge of the curb.	*		
Pedestrian Paths			
Compliance with standards	*		
Availability of path routes	*		
Passageway status			*
The ramps are parallel to the stairs.	*		
The slope of the ramps and stairs is 1/12.	*		
Vehicle Routes			
Strictly controlled vehicle circulation.			*
Easily accessible entrance.	*		
There are no obstacles on the route from entry to exit.	*		
Carpark Facilities			
Proximity to accessible entrances.	*		
High parking turnover rate in accessible public areas.		*	
Visible parking spaces.	*		
Sufficient parking area size.		*	
Physically Challenged			
Pedestrian transition along the travel route is not hindered.		*	
Are recreational facilities located outside of the main circulation route?	*		
Decent resting areas with places to sit.			*
Providing recreational facilities at regular intervals between 100-200 m.	*		
Touch guidance strips along the paths.			*
Ground Pavement			
Non-slip surfaces	*		
Resistant	*		
Easily replaceable materials.			*
Use of permeable surfaces.			*
Sign / Direction signage			
Are maps and other signage system components mounted at least 45 cm from the curb?	*		
Use of Direction Signs along the road at decision points and on main roads not obscured by vegetation or physical features.			*

Legibility of all direction signs.	*		
Availability of adequate signposts, maps and location information.			*
The presence of a decent orientation system in the square.			*
Illumination			
Road lights and light poles to be approximately 90 lcm.	*		
Pedestrian lights along the sidewalk and in open areas start at a height of about 12 feet, depending on the lighting required and lamp and fixture characteristics.			*
Lights are time adjusted		*	
Legibility (Landmark)			
Easily located.	*		
A decent 'front gate' with unobstructed roads.	*		
Marking of important landmarks			*
Defined boundaries.	*		
Finding the focal point.	*		
1.3. ATTRACTIVE SPACES			
1.3.1. Lighting			
Pedestrian friendly lighting installation (not too high and with full spectrum housings)	*		
Glare prevention Positioning of lighting at eye-level (i.e., 1.5 - 3 m above ground).	*		
1.3.2. Seating			
Adequate seating elements (one linear foot for every 30 m2 of seating area)	*		
Backrests approximately 17-18 inches from the front	*		
The seats are tilted back 3 - 10 °.			*
Seat heights about 42.5 cm	*		
Seat backs			
Seat depths can be 38 - 50 cm, with a typical depth of 45 cm.			
The presence of an angle of 100 - 110 ° between the seat base and back.	*		
Backrest at least 90 cm above the ground.	*		
Seating with backrest and armrest elements.	*		
Seating area for every 30 m2.	*		
Presence of movable chairs (mounds of grass, panoramic steps, seating walls, retaining walls that allow sitting)			*
Secondary seats should be 50% of the total.	*		
Use of wooden materials in the seats.	*		

Condition of benches, steps, ledges, seating elements.	*		
1.1.3. Sculpture			
The existence of public art	*		
1.1.4. Water Features (Fountains)			
Visibility and attractiveness of moving water.	*		
Auditory attraction of moving water	*		
1.1.5. Waste Receptacles			
Near garbage-generating environments and activities (i.e., food courts, food vendors, grocery stores, news agents and smoking areas.		*	
Has the average street waste capacity of 25 -35 gal. been considered?	*		
Minimum mouth opening should be 30 cm.	*		
Trash receptacles placed 12 m. from where people sit or gather.			*
Regular emptying of trash receptacles.	*		
Material use and quality status of trash receptacles			*
1.1.6. Other Furniture			
Table heights of 85-90 cm	*		
Use transparent metal bar fencing (if barrier is required)	*		
Apply anti-graffiti coating to accessible vertical surfaces in sensitive places.			*
Presence of graffiti walls and community billboard in the square.			*
Public toilet facilities and easy accessibility indoors.	*		
1.1.7. Planting			
Planting reaching up to 3.5 m in outdoor spaces.	*		
Planting suitable trees	*		
Use of elements that boost wind resistance of trees.	*		
Minimizing the use of shrubs (use of plants up to 1.0 m tall where deemed necessary).			*
Do not plant dense bushes with gray or dull dark green leaves.	*		
The use of colorful, fragrant herbs.	*		
Placing of trees near seating areas.	*		
Have trees with open canopy been planted in windy areas to reduce potential damage associated with intense foliage and high winds?		*	
2. SOCIAL ATTRIBUTES			
2.1. Sense of Ownership			
The presence of festivals, concerts and informal events in the square.	*		

Having opportunities for shopping.	*		
Presence of scenery	*		
Opportunity to make eye contact with foreigners	*		
Smiling people	*		
People showing affection in the square	*		
2.2. Community Identity			
Whether the square is somewhere to meet your friends	*		
Existence of different ages, gender and ethnic groups that reflect the majority of the community.	*		
2.3. Social Interaction			
People in groups of two or three.	*		
People chatting with each other.	*		
2.4. Place Attachment			
The presence of users' sense of belonging and preserving square.	*		
Preservation of personal or collective history not only through images, but also through different facilities and entertainment that attract people.	*		
The presence of people who know each other by their names or faces	*		
The presence of people who frequent the square	*		
2.5. Sense of Ownership			
Users coming to the venue with friends or relatives.	*		
Users tend to collect trash when they see it.	*		
Inexpensive	*		
3. PERCEPTIONAL ATTRIBUTES			
3.1. Physical Comfort			
Flexible design	*		
Presence of monuments, stairs, pools and other influencing factors	*		
If possible, add both main seating (chairs, benches, stools) and secondary seats (ledges, steps, flower bed edges) for overcrowded situations			*
The dominance of the 'undesirables' space' over the use of the space.	*		
A sense of connection with the past in the square.	*		
Enough seating space to people design.	*		
1.1. Physiological Comfort (Microclimate)			
Protection from sun, shade and cold winds (but encouraging cooling breezes on hot days)	*		

Most benches are positioned in shady or high activity areas.	*		
Provide umbrellas or other shade in areas that offer no natural shade, or add naturally shaded options.	*		
Place seating options along a wall, bush, or sheltered side of the building.			*
Protection against the wind.	*		
Provide glare control for sunny days.			*
1.2. Environmental Comfort			
Free view	*		
Presence of interesting facades	*		
Leaves a decent first impression	*		
Presence of people taking photos and opportunities to take photos.	*		
Sunlight			
Finding seating in places with maximum sunlight	*		
Using reflective light surfaces (if there is no direct sunlight)	*		
Wind			
Using elements to block large, open, unprotected areas from the wind (trees, buildings, etc.)	*		
Are the building roofs made with wind resistant materials?	*		
Color			
Night light color use	*		
Clever use of cheerful colors such as yellow, blue, orange and turquoise in buildings.	*		
The use of various colored trees, shrubs, flowers.	*		
The use of color in ground pavement.			*
Aesthetics			
Visually appealing	*		
Integration	*		
Visual connection of the square	*		
The liveliness of the square	*		
Quality of the square (largely defined by water, trees, walls, texture, floor and any other object in space)	*		
Noise Control			
Mechanical noise (does not prevent you from chatting)			*
Smell			

Presence of pleasant fragrance (preferably pleasant aromas (such as coffee, fresh bread or flowers))	*		
Trees, foliage and water features			*
Distance from vehicular traffic	*		
Weather Protection			
Canopies, canisters, shelters, gazebos			*
Privacy (Inner and Outer Distance)			
The manner the square is surrounded by trees, buildings and other items	*		
1.3. Safety and Security			
Feeling safe	*		
Police, security guard presence			*
More women than men	*		
Good visibility			*
Suitable lighting			*
Open views (having blind spots)			*
Use of signage			*
Placement of seating at a sufficient distance from the sidewalks so that feet do not protrude onto the curb (optimum distance is 75 cm)			*
Do not place benches where they can be used to support jumping over fences or obstacles.	*		
Bollards, benches, flowerbeds, bus stops and the like can be used to visually 'harden' the square and prevent vehicle occupation.	*		
Protection			
Protection against traffic and accidents - a sense of safety	*		
Protection against crime and violence - feeling of safety.	*		
Protection against unpleasant sensory experience.	*		
1.4. Maintenance and Management			
The square is clean and free from garbage	*		
Well-kempt status			*
Presence of caregivers.	*		
The existence of effective design and management of the link between natural and development areas	*		
Minimizing on-site pollution			*
Ground wear and surface erosion Management			*
1.5. Technology			
Mechanical control (Camera, door ...)		*	
Wi-fi usage		*	

FUNCTIONAL QUALITY ANALYSES	SOSYAL QUALITY ANALYSES	PERCEPTUAL QUALITY ANALYSES
<p>Diversity of Utilization and Activities + The square offers various activities such as; viewing the scenery, walking, exercising, cycling, eating, playing, sitting and chatting. It is seen in cultural and artistic activities. The size of the square is not very large. There are many food outlets in the area. There are utilization options for different age groups.</p> <p>Accessibility + Considering the transportation there is access from outside the area by various means of transportation such as private vehicles, buses and seaways. Since there are no height differences around the area, there are no serious problems in regards to usage by physically challenged people. ? There is no inviting entry point. Parking areas are insufficient on busy days. The directional signage bunched up at many points creates too much confusion.</p> <p>Furniture ? The square lacks adequate outdoor seating, and offers no shading elements around seating areas. There is no serious problem with furniture ergonomics, but problems do exist especially in the placement of benches, waste bins and signage. There are occasional problems with furniture coating materials.</p> <p>Planting ? There is no windbreaking vegetation.”</p>	<p>Sense of Community + The scenery and presence of people, as well as shopping opportunities support the sense of ownership.</p> <p>Community Identity + Daily and occasional activities socially cover all users of different age groups, cultural backgrounds and gender.</p> <p>Social Interaction + There are many cafeterias and restaurants catering to different social groups (drinks, traditional tea and light snacks). + Some outdoor areas include meeting corners, such as dining areas, where people can sit and relax.</p> <p>Place Attachment + There are people who frequent use the square.</p> <p>Sense of Ownership + There are people who frequent come to the square with their family, relatives and friends. Users feel a sense of control and ownership within the square.</p>	<p>Comfort ? The use of shading elements around the seating areas overlooking the sea is insufficient. ? On holidays and at night, the sound of music from surrounding cafes mix with human conversation.</p> <p>+ Aesthetically, the view of the Bosphorus, the presence of historical buildings and colorful facades exude a positive effect.</p> <p>Safety & Security ? Inadequate security personnel, low lighting in certain areas.</p> <p>Maintenance & Management ? There is inadequate maintenance service in the square, whereas the ground pavement seems to be of sufficient quality, albeit neglected. ? A camera system makes the place feel controlled; the utilization of smart furniture was not encountered in the area.</p>

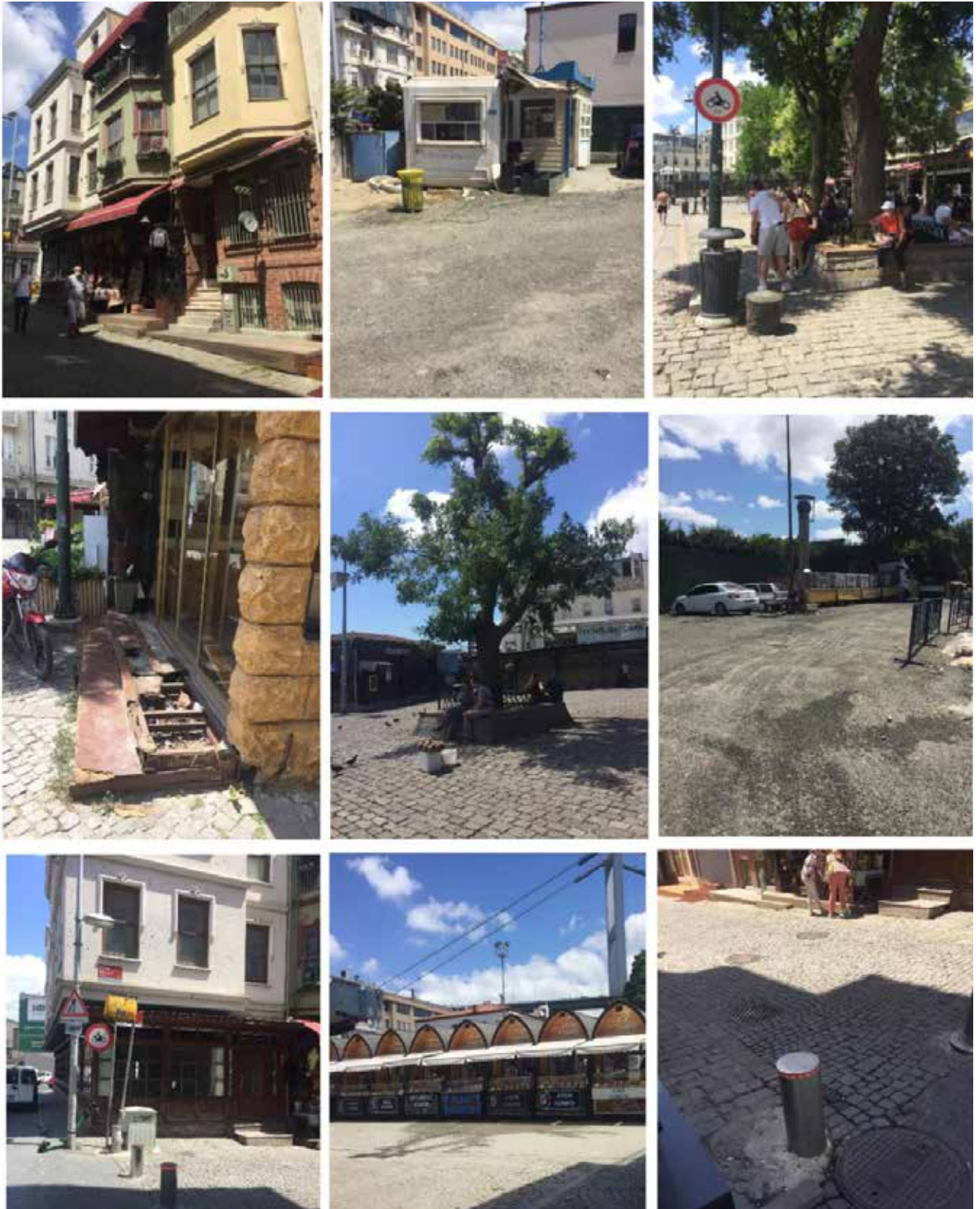


Figure 5. Overall views of Ortaköy (Photographed by the author)

As a result of the study, suggestions for increasing the spatial quality of Ortaköy Square can be listed as follows:

Functional

- The number and variety of seats should be increased.
- Sidewalk width and its use should be reviewed, especially in sections where street vendors peddle their wares.
- Seats are insufficient due to their heavy usage especially on weekends, evening hours and holidays. Temporary seating can be provided with the use of portable chairs. The existing playground can be positioned in a different location by slightly enlarging its scale.
- Increasing the playground functions can ensure the inclusion of more current activity elements.
- An entrance area should be designed with appealing spatial facilities.
- The parking lot volume should be raised, especially on busy days. Preferably, a multi-storey car park system could be useful on days of heavy use.
- An effective and simple marking system is needed, especially for those using the area for the first time.
- It is necessary to ensure unity and harmony in the design of waste receptacles as well as increase their number.
- Windbreaking vegetation, should be planted, especially in regards to the wind blowing in the square from the sea.

Social

- The presence of international festivals and events in the square can be increased.

Perceptual

- The use of shading elements such as pergolas and awnings can be increased, especially in the seaside portion of the square.
- A technical study on urban acoustics can be conducted whereby improvements can be made accordingly.
- The number of security personnel can be increased, and luminescence levels of lighting elements in certain areas can also be increased.
- Ground pavement can be rearranged without damaging the existing texture, especially where there are maintenance problems.
- The use of an effective and perceptible camera system, as well as the use of smart furniture, which is now widespread in today's design world, can be highlighted.
- It has been identified in international studies that functional, social and perceptual qualities affect the

success of the venue at similar ratios. The results of the research study conducted in Ortaköy Square support the impact of the aforementioned qualities upon the quality of any space. As a result of the study, it can be said that the Social and Perceptual Qualities of an urban space play a more important and effective role than its Functional Qualities.

References

Carr, S., Stephen, C., Francis, M., Rivlin, L. G., & Stone, A. M. (1992). *Public space*. Cambridge University Press. <https://books.google.com.tr/books?id=pjo4AAAAIAAJ&printsec=frontcover&dq=Carr,+S.,+Stephen,+C.,+Francis,+M.,+Rivlin,+L.+G.,+%26+Stone,+A.+M.+%281992%29,+Public+space.+Cambridge+University+Press.&hl=en&sa=X&ved=2ahUKEwjksqW6KnqAhX1ZxUIHX-TC50Q6A-EwBnoECAMQAg#v=onepage&q&f=false>

Dizdaroğlu, D. (2005). *Boğaziçi İskele Meydanları-Anadolu kavağı ve Rumelikavağı Meydanlarının Rekreatif Potansiyellerinin Değerlendirilmesi* (Doctoral dissertation, Fen Bilimleri Enstitüsü).

Francis, M. (1987). *Urban outdoor spaces*. *Advances in environment, behavior, and design*, 1(7).

Francis, M. (1989). *Control as a dimension of public-space quality*. In *Public places and spaces* (pp. 147-172). Springer, Boston, MA.

Francis, M. (2003). *Urban outdoor space: Designing for user needs*. Island Press.

Gehl, J. (2008_1987), *yenilenmiş baskı, Life Between Buildings: Using Public Space*, Danish Architectural Press. Copenhagen.

Gehl, J. (2002). *Public space* <https://books.google.com.tr/books?id=viYqPQAACAAJ&dq=Gehl,+J.+%282002%29,+Public+spaces+and+public+life:+City+of+Adelaide,+2002.+City+of+Adelaide,+Adelaide.&hl=en&sa=X&ved=2ahUKEwiomvG--qnqAhWy6KYKHYIAXEQ6AEwAHoECAAQAQs> and *public life: City of Adelaide, 2002*. City of Adelaide, Adelaide.

Gehl, J. (2011). *Life between buildings: using public space*. Island press. <https://books.google.com.tr/books?id=X707aiCq6T8C&printsec=frontcover&dq=Ge>

- hl,+J.+(2011).+Life+between+buildings:+using+public+space.+Island+press.&hl=en&sa=X&ved=2ahUKEwi6l-6vt-qnqAhWQwMQBHUVxBK4Q6AEwAHoECAAAQAg#v=onepage&q&f=false
- Gehl, J. (2009). *Downtown Seattle. Public spaces, public life.* Seattle: International Sustainability Institute.
- Gehl, J., & Gemzøe, L. (1996). *Public spaces. Public Life,* Copenhagen. [https://books.google.com.tr/books?id=Sf-FIQgAACAAJ&dq=Gehl,J.,+and++Gemz%C3%B8e,L.\(1996\),Public+Spaces&hl=en&sa=X&ved=2ahUKEwj_tJmR-6nqAhXNMZoKHcXPCPkQ6AEwChOECACQAQ](https://books.google.com.tr/books?id=Sf-FIQgAACAAJ&dq=Gehl,J.,+and++Gemz%C3%B8e,L.(1996),Public+Spaces&hl=en&sa=X&ved=2ahUKEwj_tJmR-6nqAhXNMZoKHcXPCPkQ6AEwChOECACQAQ)
- Gehl, J., & Svarre, B. (2013). *How to study public life.* Island press. [https://books.google.com.tr/books?id=DUGiAQAAQBAJ&printsec=frontcover&dq=Gehl,+J.,+%26+Svarre,+B.+\(2013\).+How+to+study+public+life.+Island+press.&hl=en&sa=X&ved=2ahUKEwjhsZDN-6nqAhWGFZoKHWfCC4cQ6AEwAHoECAEQAg#v=onepage&q&f=false](https://books.google.com.tr/books?id=DUGiAQAAQBAJ&printsec=frontcover&dq=Gehl,+J.,+%26+Svarre,+B.+(2013).+How+to+study+public+life.+Island+press.&hl=en&sa=X&ved=2ahUKEwjhsZDN-6nqAhWGFZoKHWfCC4cQ6AEwAHoECAEQAg#v=onepage&q&f=false)
- Greenhalgh, L., & Worpole, K. (1996). *People, parks and cities: a guide to current good practice in urban parks.* HMSO Publications Centre.
- Gökhan, Erce A (1992). *Ortaköy Meydanı ve Çevre Düzenlemesi,* Tasarım No:27, Tasarım Yayıncılık, İstanbul.
- Heath, T., Oc, T., & Tiesdell, S. (2011). *Public Places-Urban Spaces.* Routledge.
- Kara, B., Tuncay, H. E., & Deniz, B. (2011). Investigating recreational qualities of the parks in Aydın. *Procedia-Social and Behavioral Sciences*, 19, 158-164. <https://www.sciencedirect.com/science/article/pii/S1877042811012341>
- Krier, R. (1979). *Urban Space,* New York: Rizzoli. Transl. C. Czechowski. [https://books.google.com.tr/books?id=ZD-ZUAAAAMAAJ&q=Krier,+R.+\(1979\).+Urban+Space,&dq=Krier,+R.+\(1979\).+Urban+Space,&hl=tr&sa=X&ved=2ahUKEwj0q9yQj6rQhXKMZoKHZe1CskQ6AEwAHoECAAAQAg](https://books.google.com.tr/books?id=ZD-ZUAAAAMAAJ&q=Krier,+R.+(1979).+Urban+Space,&dq=Krier,+R.+(1979).+Urban+Space,&hl=tr&sa=X&ved=2ahUKEwj0q9yQj6rQhXKMZoKHZe1CskQ6AEwAHoECAAAQAg)
- Laud8, 2011. *Nashville Public Square,* <https://laud8.wordpress.com/2011/05/03/nashville-public-square/>
- LeGates, R. T., & Stout, F. (Eds.). (2011) *The city reader.* Routledge.
- Low, S., Taplin, D., & Scheld, S. (2009). *Rethinking urban parks: Public space and cultural diversity.* University of Texas Press.
- Lynch, K. (1960). *The Image of the City,* The MIT Press and the President and Fellows of Harvard College, Massachusetts.
- Lynch, K. (1981). *Good city form.* MIT press. [https://books.google.com.tr/books?hl=tr&lr=&id=fIjDgBoKQHQC&oi=fnd&pg=PA1&dq=Lynch,+K.+\(1981\)+A+Theory+of+Good+City+Form,+Cambridge,+MA:+MIT+Press&ots=W-GhrgEW5SN&sig=yUmKq_2ehxdA7JEd44a89dppt-IU&redir_esc=y#v=onepage&q&f=false](https://books.google.com.tr/books?hl=tr&lr=&id=fIjDgBoKQHQC&oi=fnd&pg=PA1&dq=Lynch,+K.+(1981)+A+Theory+of+Good+City+Form,+Cambridge,+MA:+MIT+Press&ots=W-GhrgEW5SN&sig=yUmKq_2ehxdA7JEd44a89dppt-IU&redir_esc=y#v=onepage&q&f=false)
- Main, B., & Hannah, G. G. (2010). *Site furnishings: a complete guide to the planning, selection and use of landscape furniture and amenities.* John Wiley & Sons.
- Marcus, C. C., & Francis, C. (Eds.). (1997) *People places: design guidelines for urban outdoor space.* John Wiley & Sons. https://books.google.com.tr/books?hl=tr&lr=&id=tFVLM-A5hEgC&oi=fnd&pg=PR7&dq=Marcus+%26+Francis,+1997&ots=Jt5FgDSKYM&sig=6bHh4rxVjka7Lc-FOH-mIjwVqg8Y&redir_esc=y#v=onepage&q=Marcus%20%26%20Francis%2C%201997&f=false
- Sakip, S. R. M., Akhir, N. M., & Omar, S. S. (2015). Determinant factors of successful public parks in Malaysia. *Procedia-Social and Behavioral Sciences*, 170, 422-432.
- Sarkissian, W., Bateman, R., & Hurley, B. (2013). *Outdoor space in medium-density housing guidelines for planning and design.* Nimbin NSW, 2480.
- Turer Baskaya, F. A., & Tekeli, E. (2015, October). *Coastline changes and Istanbul coastal landscape.* In *The Twelfth International Conference on the Mediterranean Coastal Environment (MEDCOAST'15)* (pp. 06-10).

Madanipour, A. (1999). Why are the design and development of public spaces significant for cities?. *Environment and planning B: Planning and Design*, 26(6), 879-891.

Mamaghani, N. K., Asadollahi, A. P., & Mortezaei, S. R. (2015). Designing for improving social relationship with interaction design approach. *Procedia-Social and Behavioral Sciences*, 201, 377-385. <https://www.sciencedirect.com/science/article/pii/S1877042815048387>

Marcus, C. C., & Francis, C. (Eds.). (1997) *People places: design guidelines for urban outdoor space*. John Wiley & Sons. https://books.google.com.tr/books?hl=tr&lr=&id=t-FVLm-A5hEgC&oi=fnd&pg=PR7&dq=Marcus+%26+Francis,+1997&ots=Jt5FgDSKYM&sig=6bHh4rxVjka7LcFOH-mIjwVqg8Y&redir_esc=y#v=onepage&q=Marcus%20%26%20Francis%2C%201997&f=false
Memo, 2019. Free movies with the Movie Nights at Bryant Park, <https://www.new-york-city-travel-tips.com/new-york-bryant-park-summer-festival/>

Öztürk, A. A. (2009). *Kentsel Kamusal Alan Olarak Meydanlar: Mekan ve Yaşamla Kurduğu İlişki* (Doctoral dissertation, Fen Bilimleri Enstitüsü).

Project for Public Spaces (Ed.). (2000) *How to turn a place around: a handbook for creating successful public spaces*. Project for Public Spaces Incorporated. <https://books.google.com.tr/books?id=HHhPAAAAMAA-J&q=How+to+Turn+a+Place+Around:+A+Handbook+of+Creating+Successful+Public+Spaces.+New+York:+Project+for+Public+Space.&dq=How+to+Turn+a+Place+Around:+A+Handbook+of+Creating+Successful+Public+Spaces.+New+York:+Project+for+Public+Space.&hl=tr&sa=X&ved=2ahUKEwjE-K2HjKrqAhXix6YKHbeZAhEQ6AEwAXoECAMQAg>

Project for Public Spaces (2005). *10 Principles for successful squares*, <https://www.pps.org/article/squaresprinciples>
Project for Public Spaces (2009). *Creating Park Signage*. <http://www.pps.org/reference/signage/>

Project for Public Spaces (2001). *Place Audit: An Assessment Exercise*, <https://www.dot.ny.gov/divisions/engineering/design/dqab/css/repository/audit.pdf>

Rad, V. B., & Ngah, I. (2013). The role of public spaces in promoting social interactions. *International Journal of Current Engineering and Technology*, 3(1), 184-188.
Radwan, A. H., & Morsi, A. A. G. (2019). *The Human Scale in Public Spaces. An Analytical Study of New Cairo Settlements. An Analytical Study of New Cairo Settlements* (April 8, 2019).

Rahravi Poodeh, S., & Pouriaye Vali, A. H. (2014). Investigating the Characteristics of Outdoor spaces to Enhance Social Interactions in Neighborhood Environments. *European Online Journal of Natural and Social Sciences: Proceedings*, 3(4 (s)), pp-148.7, http://european-science.com/eojnss_proc/article/view/4161

Rutherford, J., Carter, M., & Christidis, K. (2013). Classification framework for public outdoor space. *Australasian Parks and Leisure*, 16(1), 34.

Santos, P. M. Dos, Caccia, C.S., Barbosa Samios, A. A., Ferreira, L. Z. (2019). *The 8 Principles of the Sidewalk: Building More Active Cities*. <https://thecityfix.com/blog/the-eight-principles-of-the-sidewalk-building-more-active-cities-paula-santos/>

Sarkissian Colleagues Planners (2000). *Australian Capital Territory, Crime Prevention And Urban Design Resource Manual*, https://www.planning.act.gov.au/_data/assets/pdf_file/0010/891397/crimemanual.pdf

Shaftoe, H. (2012). *Convivial urban spaces: Creating effective public places*. Earthscan

Sugiyama, T., Giles-Corti, B., Summers, J., du Toit, L., Leslie, E., & Owen, N. (2013). Initiating and maintaining recreational walking: a longitudinal study on the influence of neighborhood green space. *Preventive medicine*, 57(3), 178-182. https://www.sciencedirect.com/science/article/pii/S0091743513001783?casa_token=cPEQ11t7NF8AAAAA:t3mz4be29wzG1lzGtjg3J8O0UOTDA_MnwsA0nv2RotlGp54t7o94iHGgU9X09ZHCdBqLPooQrA

Thomas, D. (2016). *Placemaking: An urban design methodology*. Routledge.

Thompson, C. W. (2002). Urban outdoor space in the 21st century. *Landscape and urban planning*, 60(2), 59-72.

ThinkCity (2020). <http://www.thinkcity.com.my/pps/pdf/Place.pdf>

Wari,S.(2010),Palestinian Berlin: Perception and Use of Public Space, Habitat - International: Schriften Zur Internationalen Stadt, Publication date 01 Sep 2018, Publisher Lit Verlag, ISBN10 3643908199_ ISBN13 978364390819.

Wheeler, S. M., & Beatley, T. (Eds.). (2014) Sustainable urban development reader. Routledge.

Whyte W.H. (1980) The social life of small urban spaces. Washington, D.C.: Conservation Foundation.

Woolley, H. (2003). Urban outdoor spaces. Taylor & Francis. [https://books.google.com.tr/books?hl=tr&lr=&id=7UJ5AgAAQBAJ&oi=fnd&pg=PP1&dq=Helen+Woolley\(2003\),%E2%80%9DUrban+Open+Spaces%E2%80%9C,+London,Published:Taylor+%26+Francis,ISBN9780203402146.&ots=k8TFZSZ-PNg&sig=99Y2UqmlKgSCJrgTU58F3DNejBw&redir_esc=y#v=onepage&q&f=false](https://books.google.com.tr/books?hl=tr&lr=&id=7UJ5AgAAQBAJ&oi=fnd&pg=PP1&dq=Helen+Woolley(2003),%E2%80%9DUrban+Open+Spaces%E2%80%9C,+London,Published:Taylor+%26+Francis,ISBN9780203402146.&ots=k8TFZSZ-PNg&sig=99Y2UqmlKgSCJrgTU58F3DNejBw&redir_esc=y#v=onepage&q&f=false)

Zube, E. H., & Moore, G. T. (Eds.). (2013). Advances in Environment, Behavior and Design: Volume 2 (Vol. 2). Springer Science & Business Media. s