ANALYSES OF FOUR URBAN SQUARES IN İZMİR ACCORDING TO THE LEADING URBAN DESIGN LITERATURE

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ABSTRACT

ANALYSES OF FOUR URBAN SQUARES IN İZMİR ACCORDING TO THE LEADING URBAN DESIGN LITERATURE

The squares are the significant elements of the urban public spaces that provide the users different experience in the city, activate their city life and they are human oriented places for cities and societies. The squares are strong accumulation places where each day a different experience comes true so they transfer society's culture, social habits, way of life, memories from past to the future. Since urban squares have those significant roles for cities, researching the spatial, functional and social qualities of the squares are very important to understand and identify them.

The aim of this study is to reveal the characteristics of urban squares according to leading literature studies. The study focuses on what are the criteria we need to analyze in order to determining the qualities of the squares. Accordingly, the main common ideas on urban squares in the literature have been categorized to evaluate the squares. The leading qualities of the squares comprise of the ten normative criteria based on sixteen important authors of related studies which are the main textbooks of the thesis. The content of the criteria consists mainly of the characteristics that the square must have physically, socially and functionally. In this study, Ali Paşa Square, Hatuniye Square, Cumhuriyet Square, and Gündoğdu Square are chosen in İzmir as case study area. The study cases are observed and analyzed according to ten evaluation criteria. The analyses results extract the characteristics of each square. All findings, results and normative criteria are together discussed as results. The results of this study may guide to reconsideration of urban squares within modern usages and designing more useful squares for further studies.

Key words: urban public space, urban square, evaluating criteria on urban squares, İzmir city squares

ÖZET

TEMEL KENTSEL TASARIM KAYNAKLARI IŞIĞINDA İZMİR'DEKİ DÖRT MEYDANIN ANALİZİ

Meydanlar, kentlilere farklı deneyimler sağlayan, onların kent hayatını canlandıran kentsel kamusal alanların önemli elemanlarından biridir, kentler ve toplumlar için insan odaklı mekânlardır. Meydanlar, her gün farklı bir deneyimin gerçekleştiği güçlü birikim yerleridir, böylece bir toplumun kültürünü, sosyal alışkanlıklarını, yaşam biçimini ve hatıralarını geçmişten geleceğe aktarırlar. Kent meydanları şehirler için bu önemli rollere sahip olduklarından, meydanların mekânsal, işlevsel ve toplumsal özelliklerini araştırmak onları anlamak ve tanımlamak için çok önemlidir.

Bu çalışmanın amacı, önde gelen literatür çalışmalarına göre kent meydanlarının karakteristik özelliklerini ortaya çıkarmaktır. Bu çalışma meydanların özelliklerini belirlemek için analiz etmemiz gereken kriterlerin neler olduğuna odaklanır. Bu doğrultuda, literatürdeki temel ortak fikirler meydanları değerlendirmek için kategorize edilmiştir. Meydanların öncü nitelikleri, tez çalışmasının ana ders kitaplarının, on altı önemli yazarının çalışmalarına dayanan on normatif kriterden oluşmaktadır. Kriterlerin içeriği genel olarak meydanların fiziksel, sosyal ve işlevsel olarak sahip olması gereken bileşenlerden oluşur. Bu çalışmada, İzmir'deki Ali Paşa Meydanı, Hatuniye Meydanı, Cumhuriyet Meydanı ve Gündoğdu Meydanı örnek çalışma alanları olarak seçilmiştir. Çalışma alanları belirlenen on değerlendirme kriterine göre gözlemlenmiş ve analiz edilmiştir. Analiz sonuçları, her bir meydanın karakteristik özelliklerini açığa çıkarır. Tüm bulgular ve önde gelen çalışmalardaki normatif kriterler bir arada sonuç olarak tartışılmıştır. Bu çalışmanın sonuçları, modern kullanımlar içerisinde kent meydanlarının yeniden düşünülmesine ve ileriki çalışmalar için daha kullanışlı meydanların tasarlanmasına rehberlik eder.

Anahtar Kelimeler: kentsel kamusal alan, kent meydanı, kent meydanlarının değerlendirme kriterleri, İzmir kent meydanları

dedicated to
my family, Ceyhun Abacı
and
all inspirations…

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CHAPTER 1

INTRODUCTION

Cities are composed of different essential components, which are approached in various forms in urban literature and every author handle the component differently. One of the most important components within these complex structures of cities, beyond any doubt is the ‘urban square’ as a kind of urban public space. This thesis, in terms of spatial research, focuses on ‘urban squares’ as they are one of the most important components of open public spaces.

The squares have significant roles in cities; the most essential of which is that they form a gathering space for people, as the most well-known being *Agora of Greek polis*. Urban squares have been of great importance for societies, citizens to be particular, since the ancient times as they offer a chance for interaction for people in their everyday life and for purposeful gatherings for special events. At the same time, urban squares are owned by no one and yet belong to all simultaneously. Since they have been a gathering, meeting, socializing space for societies, the squares which have witnessed significant events, evolved or transformed in time carrying traces of social life, culture and history and turn these over to future generations. It must be as a result of these reasons that they are described as city’s “heart”, “center”, “soul”, and “focal point” by many authors (Cullen, 1961; French, 1978; Lynch, 1981).

The urban square is the focal point of this thesis. . The main research question and starting point for this thesis has originated from a desire to understand and discern the characteristic features of the urban square through an examination of main urban design literature studies. This thesis briefly seeks to find the answers of following questions: Which aspects are required in order for an urban space to be considered as an urban square? What are the conditions and dimensions for urban spaces to be recognized as a square? What are the evaluating criteria to define urban squares? How can we define or analyze urban squares? What are the parameters to be used in finding the answers to these questions?

1.1. Aim of the Study

The aim of this study is to reveal the characteristics of urban squares as described in the literature. To do that, this study focuses on the leading studies within the urban design literature. In order to evaluate and define the characteristics of urban square, ten evaluation criteria are determined after close examination of these leading studies. Then, this study explores and analyzes four of the urban squares in İzmir based on the determined criteria and investigates the observational findings in order to identify the squares in all aspects.

The importance of the evaluation criteria depended on turning the information provided by established scholars in the literature into common parameters while analyzing the squares. Abstracting the information and then analyzing the city squares under these criteria was the initial aim of this study. The criteria is turned into encapsulated titles in order to analyze and identify the social life, usage, physical features, etc. of the square. Sixteen researchers and their books, which have been acknowledged as classics of the urban design field are chosen in order to compose of the evaluation criteria. The selected books are by scholars who are the established experts on the urban square and their works are considered as textbooks for normative studies. These scholars start with Camillo Sitte (1889) as the leading name. In 1959, Paul Zucker's book *Town and Square* made its mark in urban square literature. Following these two leading names are some the prominent authors: Gordon Cullen (1961) whose *Townscape* contains some significant visual work, and Christopher Alexander et al.'s (1977) *A Pattern Language* which is a rich seam of information, Jere Stuart French (1978) who tackles the history of city squares, Francis D.K. Ching (1979) who studies the squares by their physical features, Rob Krier (1979) who develops a different language on the form of the squares, William Whyte (1980) with his distinctive case studies and analyses about social life of squares, Kevin Lynch (1981), Bill Hillier (1984), Ian Bentley, et. all. (1985), Roger Trancik (1986), Jan Gehl (1987) who focuses on understanding the way of life in city squares, Clare Cooper Marcus & Carolyn Francis (1997), Cliff Moughtin (1999), and Jon Lang (2005).

In order to discover the key criteria, these books have been thoroughly examined and the normative discourses on urban square are carefully noted. The topics which

each writer individually described in different ways are, on one hand, related to each other, and, on the hand, some of them are totally different and opposite. Consequently, all these discourse is analyzed and categorized under specific titles based only on their common points. This, that is to say, forms the evaluation criteria of this study. The following titles from the most stated topic to the least respectively are: 1- Users, usage & activity, 2- Enclosure, 3- View from the square/View of the square, 4- Elements in & surface of the square, 5- Size, 6- Edge, Centre and Corner, 7- Types of Square According Plan Shapes, 8- Pedestrian Accessibility, 9- Climatic and Temporal Conditions, 10- Location, Comfort and Flexibility of the Urban Furniture.

Upon categorizing the criteria necessary for analyzing the squares, it is the secondary aim of this study to analyze those criteria on four of the squares in İzmir. Thus, it is aimed to determine the characteristic features of these four squares in accordance with the literature studies. Instead of working on one square, working on four squares are preferred in order to be able to find various results. As for the case studies, various squares with varying sizes, namely Ali Paşa, Hatuniye, Cumhuriyet and Gündoğdu Squares, from different places in Izmir were selected. After these different types of squares are analyzed, the findings of the analyses are evaluated.

1.2. Content of the Study

This thesis consists of four main chapters.

The first chapter starts with an introduction of the research topic, and continuous with the aim, contents and methodology of the study.

The second chapter starts with the theoretical framework of the study examining the previous work on the subject. As the square has a substantial role within the context of urban space, several researchers have multifaceted contributions. This chapter goes on with the summary of the literature which covers the studies carried out in the field until present time, as well as the question of how the squares are approached in the previous studies. The section, titled general studies on urban squares, outlines the works as follows: morphological and functional studies, good design criteria, urban squares and social life, users and behaviors, historical perspectives, studies on specific squares, urban squares and landscape, and lastly visual studies, inventories and design guides on

urban squares. This chapter focuses on the sixteen essential readings and textbooks which elaborate normative analysis of urban squares. After introducing the significant resources, it is explained that the importance of the evaluation criteria within the context of urban squares consisting of ten criteria on squares. The statements, by each writer that are turned into evaluating criteria are explained chronologically.

The third chapter includes case studies, which are analyzed via the proposed ten criteria. Case study areas are introduced and detailed analyses of each square have been made. The urban squares are four cases in İzmir; the first one is Ali Paşa Square which is the smallest square of the four cases and located in Kemeraltı. The second one is Hatuniye Square, which is the medium-sized square and located in Basmane. The third one is Cumhuriyet Square, which is a large square and located in Konak. The fourth one is Gündoğdu Square which is the largest square of this study and located in Alsancak. After analyzing the four squares in depth, the findings are evaluated by juxtaposing the ten criteria and the analysis of case studies at the end of this chapter.

The fourth chapter ends with the conclusion. The importance of this study in literature, the contribution to the urban context and possible further studies are written.

1.3. Research Methodology

The method of this thesis has three parts, one being the examination of the main literature in order to arrive to a commonality among the definitions of squares within these works. Second is the morphological analysis of the four squares in İzmir according to certain criteria within the main literature. And third is the observations in these squares. The last two are done in order to understand whether the selected cases could be considered as urban squares according to the selected leading literature.

Firstly, content consisting the base of the spatial analysis is gathered within the literature. In order to do this, sixteen researchers and their books are selected within many sources. These works are selected as they are the ones that are the most referred ones in almost all papers and articles, and used as textbooks in urban design courses.

Thus the normative criteria are extracted from the each work selected. Finally, ten criteria are determined through the method of classification. No criterion is left out

from the list, but they are listed hierarchically starting with the most common to the least.

Second technic of the methodology is the morphological analysis of the case studies according to the physical qualities of the urban squares that require no in situ surveys or observation of their uses. This part is integrated with the data gathered by the observations while discussing the cases in the third chapter.

The classifications as conceptual certainly are not enough to understand and evaluate a square. According to Gehl (Gehl, 1987), “design always begins with an analysis of the space between buildings” (PPS). Although the morphological analysis has significant role to understand a space, it is not enough to discern certain spatial qualities. Therefore, this research also includes observational method, which focused on observing the daily life of a square. After the selection of the case study areas observation process has started. Ali Paşa, Hatuniye, Cumhuriyet and Gündoğdu Squares were observed by me and it took totally one month. I spent one week in each square. The pedestrian circulations, human behaviors and activities are observed hourly and even some important times, such as lunch hours, are observed in every half an hour. These observations are noted down on the layouts by drawings and markings. I also talked with some users, shopkeepers or waiters. With these conversations, what the squares signify to the users is understood. Additionally, every moment is photographed for collecting information without disturbing people.

After observations and analyses of all squares, all findings are evaluated through the discussion. The findings of all analyses are also explained with drawings to create a visual language. At the end of the thesis, detailed analyses of each square are provided.

CHAPTER 2

EXAMINATION OF THE LEADING URBAN DESIGN LITERATURE ON URBAN SQUARES

Initially seventy sources were studied. These studies mostly consider morphological, functional, and physical dimensions; especially how the forms and shapes of the urban squares should be are discussed.

Approximately one hundred master theses related to squares have been found and examined throughout research process. The subjects of these master theses are generally as follows: physical qualities, liveabilities, symbolic meanings, accessibilities, urban square design and historical development of squares. In addition, case studies are notable in researches. There are lots of studies on specific squares. There is a special interest on the squares of European town squares such as Copenhagen, New York, Rome, and Florence. The most mentioned examples are Piazza San Marco, Piazza Delcampidoglio, Piazza del Campo in Italy, Trafalgar Square in London, Times Square in New York, and Red Square in Moscow. In Turkey, the squares in Istanbul are mostly studied when we look at the specific studies and there are case studies on the squares in Anatolia. Some of these case study areas, which are generally the open spaces of the mosques, are namely: Sultan Ahmet Squares, Hacıbayram Square, Beyazıt Square and Taksim Square in İstanbul, and Orhangazi Square in Bursa. When we look at the case studies in İzmir, Konak square is mostly mentioned. Additionally, the urban public spaces in the coastline of İzmir, e.g. Gündoğdu Square and Cumhuriyet Square are studied as seperate cases.

Almost all of these sources refer to the selected books in this thesis.

2.1. Introducing Sixteen Essential Books as the Leading Literature on Urban Squares

I realized while surveying the literature that some studies identify squares through 'ideal qualities' that are necessary for being a square because the squares need to be distinguished from any urban open space. These kinds of sources are supposed as normative studies. In order to investigate the characteristics of urban squares as defined in the literature, the focus was on the normative references and the most important leading studies among the previous studies have been chosen. Accordingly, sixteen significant scholars have been chosen and specified their essential books on urban square. These normative books are the textbooks for this thesis and guides for determining the evaluation criteria. These books are briefly introduced below.

The earliest study belongs to Sitte. *City Planning According to Artistic Principles* as his seminal work was published in German in year 1901 and in English in year 1965. Another book of Sitte that was benefited for this study was *The Art of Building Cities*. Like Sitte, Zucker (1959) is another important source of the literature. These two scholars' studies are accepted as essentials for understanding urban squares. They mention the formal and physical features the most. They create formal classifications on urban squares and these formal norms are still regarded by the researchers using Sitte's and Zucker's terminology.

Another source belongs to Cullen (1961). His book '*Townscape*' is very useful visual source for us. He handles each topic through the pictures of town scenes. His most important technique is the 'serial vision' in the book. Squares are one of the ingredients of townscape the book includes many definitions, principals and serial pictures about squares. So this book teaches very useful ideas about urban experience through the squares.

A Pattern Language of Alexander et al. (1977) provides a broad language on towns, buildings and constructions. This book has important patterns about public squares. It addresses physical, social, and functional issues related to squares.

French (1978) evaluates squares within historical developments in his book *Urban Space: A Brief History of the City Square*. Starting from what he considers to be

the very first square formations, he investigates the squares periodically. His studies relate mostly the physical features of squares but he also considers social dimensions as well.

Another book is *Architecture: Form, Space* by Ching (1979). The original edition of this book has been a textbook for the students of architecture and a guide on the subjects of form, space and order. Some parts of this book focus on the physical features of the squares and these parts are taken for this study.

Krier (1979) has done morphological studiesin the book of *Urban Space*. His most significant study is about geometric patterns and typology on the shape of urban square.

Whyte (1980) in his *The Social Life of Small Urban Spaces* focuses on the life of public squares, for which he utilizes observations and interviews which were also useful in terms of the certain parts of the methodology of this thesis. Whyte significantly examines the plazas as an impotant part of urban life of the New York City. The public squares are not described by form, size or design but described by human behaviors and activities within the spaces in this book.

Lynch (1981) deals with the image of cities and offers five criteria as city's essential elements. Among these, two elements: 'nodes' and 'landmarks' are considered in the urban square studies. Also, *A Theory of Good City Form* and *The Image of the City* are other sources drawn on from as supporting studies.

Hillier's books provide different perspectives to this study. While many researchers focus on the 'sense of enclosure', his studies are focused on the movement and integration of space. There are various analyses on urban space in his books *The Social Logic of Space* (1984) and *Space is the Machine* (1995) The parts related to public squares are investigated.

Another textbook is Bentley et al.'s (1985) *Responsive Environments: A Manual for Designers*. This book includes normative statements on urban squares in order to increase their uses.

Trancik (1986) explains the urban squares by associating with social life rather than physical features. He investigates his researches through the three dimensional

frames which are helpful to understand the squares in multi-dimensional way in his book *Finding Lost Space*.

Gehl's (1987) *Life Between Buildings*: *Using Public Space* and *Cities for People* are two of the essential books of this study. His studies based on 'making cities for people' and human dimension is a starting point of him. He investigates, observes and analyzes the squares by minding the 'human scale'. He also evaluates the squares according to behaviors, activities and usages of people.

Marcus & Francis (1997) consider both the design and usage of urban spaces in *People Places: Design Guidelines for Urban Open Space*. Seven types of urban open space are discussed in this book and 'urban plazas' are determined as one of these types. In their design guide, the specific features distinguishing the squares with the other open spaces are explained and there are design recommendations about squares in their book.

Moughtin's (1999) *Urban Design: Street and Square* has a broad concern on urban space design. He states that urban plazas are seen as a 'chief method' in the city design and the best setting as a public space in the city is urban plaza. He investigates the squares in terms of the forms, functions and especially the enclosing features.

Lang (2005) elaborates urban design with over fifty case studies in *Urban Design: A Typology of Procedures and Products*. According to him, squares are one of physical public realms of the cities in the context of architecture, planning and landscape. He presents proposals for better urban squares and reinforces his ideas with various case studies.

The sixteen researchers and how they handle the squares are briefly mentioned. Each author has a unique approach to urban squares. There are studies that deal with the physical qualities of urban squares within these sources as well as considerations about social life, human behaviors, and activities in urban squares. All of these studies are analyzed deeply, everything that are stated on squares has been noted. Thus, this thesis handles all of those significant researchers and sources about squares by bringing them together. These significant scholars and their books considered in this study can be seen as a list in table 2.1.

Table 2.1: Sixteen essential readings for this study

Researchers	Textbooks
1- Camillo Sitte, 1889	*City Planing According to Artistic Principals (C.P.A.A.)* *The Art of Building Cities (A.B.C.)*
2- Paul Zucker, 1959	*Town and Square: From the Agora to Village Green (T.S.)*
3- Gordon Cullen, 1961	*Townspace (T.)*
4- Christopher Alexander et. al., 1977	*A Pattern Language (P.L.)*
5- Jere Stuart French, 1978	*Urban Space: A Brief History of the City Square (H.C.S.)*
6- Francis D.K. Ching, 1979	*Architecture: Form, Space, and Order (F.S.O.)*
7- Rob Krier, 1979	*Urban Space (U.S.)*
8- William Whyte, 1980	*The Social Life of Small Urban Spaces (S.U.S.)*
9- Kevin Lynch, 1981	*A Theory of Good City Form (G.C.F.)* *The Image of the City (I.C.)*
10- Bill Hillier, 1984	*The Social Logic of Space (S.L.S.)* *Space is the Machine (S.I.M.)*
11- Ian Bentley et. al., 1985	*Responsive Environments: A Manual for Designers (R.E.)*
12- Roger Trancik, 1986	*Finding Lost Space (F.L.S.)*
13- Jan Gehl, 1987	*Life Between Buildings: Using Public Space (L.B.B.)* *Cities for People (C.F.P.)*
14- Clare CooperMarcus & Carolyn Francis, 1997	*People Places: Design Guidelines for Urban Open Space (P.P.)*
15- Cliff Moughtin, 1999	*Urban Design: Street and Square (S.S.)* *Urban Design: Method and Techniques (M.T.)*
16- Jon Lang, 2005	*Urban Design: A Typology of Procedures and Products (T.P.P.)*

2.2. Categorization of the Criteria within the Leading Literature

After focusing on the sixteen significant authors in literature, the normative statements and quotations of the authors about the squares have been identified. In order to transform the statements into evaluation criteria, they are grouped according to the subjects and shared features. Based on considering all aspects of urban square through these books, ten criteria are determined for defining the squares. The content of the parameters determining the characteristics of the squares will be explained in separate sections in detail. These criteria are briefly mentioned below.

Almost all of the authors mention the usages of squares, users and people' activities in their studies. For this reason, 'Users, Usage and Activity' are the first criterion.

'Enclosure' is another crucial subject in debates. The authors importantly state that the squares should be physically enclosed. It can be stated that for all, enclosure is a must for any open space to be a square. So that 'enclosure' as a crucial term is the second criterion of the study and it is examined under two titles: 'Degrees of Enclosure' and 'Enclosing Boundary Elements (Builds & Structure)'.

'The View from the Square / View of the Square' is the third criterion. The visual dimensions of squares in the city have been given importance by scholars. How the squares are perceived by the users while approaching and while being in them is a significant subject for the usage and liveliness.

'Elements in and Surface of the Square' is the fourth criterion. The architectural elements, especially monuments, make the squares more memorable and attract people more. Since the surface material of the floorscape and even roofscape affect the usages of the squares, they are the two criteria which need to be examined so as to identify squares properly.

'Size' is the fifth criterion. There are many normative ideas about ideal sizes of the squares and each author identified different dimensions. These different ideas will be mentioned in this criteria.

‘Edge, Center & Corner’ is the sixth criterion. These three spatial elements are substantial steps while evaluating the squares. Urban squares cannot be considered alone. They should be handled with its environment as a whole. Since the built environment has curial role on the character of the squares, edge and corner of the surroundings should be considered and if we are in the square, the center of the square is another crucial topic.

‘Type of Square According to Plan Shapes’ is the seventh criterion, which is about the form of the squares. The notable typologies about squares’ forms exist in literature. The plan shape of the squares should absolutely be examined while analyzing the squares since this criteria gives information about their borders.

‘Pedestrian Accessibility’ is the eighth criterion. Because the squares are human-based urban spaces, they should be primarily pedestrianized and far away from vehicle traffic. Also, access to the squares is another crucial point to success of the squares. All of the issues on accessible of the squares will be discussed in this criterion.

The ninth criterion is ‘Climatic and Temporal Conditions’. There are some important aspects on the temporality of the squares. How the outdoor living of the squares is affected by changing seasons, weather conditions and peak hours and whether they have found solutions for these conditions are discussed. Although these issues are not mentioned by all researchers, it is included in the criteria and examined while evaluating the squares. All of these discussions will be argued under the ninth criterion.

‘Location, Comfort and Flexibility of the Urban Furniture’ are the tenth and the last criterion. The squares need to be furnished in order to make people stop and stay in them. Under this title, the seating elements in the squares are discussed as well as how these elements should be located, whether they are comfortable and flexible are examined.

When all of the researchers and the ten criteria are arranged in an order, the below table 2.2 is made. In this table, we see which author corresponds to which ideas according to the criteria. Therefore, it is possible to state that the references about squares in the selected books have given the answer to ‘which criteria we should handle the squares with’.

Researchers / 10 Criteria	Sitte (1889)	Zucker (1959)	Cullen (1961)	Alexander et. al. (1977)	French (1978)	Ching (1979)	Krier (1979)	Whyte (1980)	Lynch (1981)	Hillier (1984)	Bentley et. al. (1985)	Trancik (1986)	Gehl (1987)	Marcus & Francis (1997)	Moughtin (1999)	Lang (2005)
Users, Usage & Activity	■	■	■	■	■		■		■	■	■	■	■	■	■	■
Enclosure	■	■	■	■	■	■	■		■	■	■	■		■	■	■
View from the Square View of the Square	■		■	■		■			■	■	■	■	■		■	
Elements in & Surface of the Square	■		■	■				■	■			■		■	■	■
Size	■			■	■				■		■		■	■	■	
Edge, Center & Corner	■			■	■			■		■	■	■	■			
Types of Square According Plan Shapes	■	■		■	■		■			■	■					
Pedestrian Accessibility	■		■					■	■	■			■			■
Climatic & Temporal Conditions				■				■			■		■	■	■	
Location, Comfort and Flexibility of the Urban Furniture			■					■			■			■		

Table 2.2: Sixteen researchers and ten criteria

2.2.1. Users, Usage & Activity

The most emphasized criteria is ‘users, usage and activity’ in the literature studies. Since the behaviors of users and their activities have given life to urban public spaces for decades, users are the main elements of the urban square. These three terms are discussed by almost all authors from different aspects. Some criticize the fact that contrary to the usage of old squares; the modern squares’ usage has become diminished. Some make observations and focused mainly on users of the squares. Many others examine the squares based on the activities and functional relationship they have has with the surrounding built environments.

The owner of the earliest remarks on the town squares, Camillo Sitte (1889) believes that the medieval squares have had an important and functional use for the community life while he criticizes the usages of modern squares. According to him, old town squares has strong relations with its environment. Unlike these, he defines the modern squares as “totally vanished” (1965: 154). He bases his argument on the fact that modern squares don’t generally have a relationship with the surrounding buildings. Since, for Sitte, today’s plazas lost all public usages of old town plazas, they are used for parking lots and generally empty spaces.

Zucker (1959) emphasizes the importance of the squares from a socio-historical point of view. One of his various valuable sentences referring to the idea of civilization is of great importance. For him, the squares are; “where the anonymous human being had become a ‘citizen’” (1959: 19). Hence, the significant role of squares in human social life is pointed. According to him the squares are not only gathering spaces of citizens but also “psychological parking space” for users. Like Sitte (1889), Zucker (1959) also criticizes the fact that squares are given less significance in modern town planning due to the problems in traffic and developments in communication.

Cullen (1961) considers humans as moving subjectsof the cities. He also adds that human beings need to be tempted by something to participate in urban public life, and outdoor activities succeed in creating this temptation. According to Cullen, all kinds of activities are “a part of urban life” (1961: 99). Without categorizing the activities as good or bad, he admits that all kinds of activities contribute to urban life. Moreover, he analyzes the activities and visuality together in his studies and suggests that the various

activities affect the visual qualities of the urban square. In other words, activities animate the visual scene of the squares (Cullen, 1961). In his *Townscape*, the urban square can be considered as a scene of visual theatre where users are actors. He gives Leicester Square as an example of a popular visual attraction (Figure 2.1).

Figure 2.1: A view of Leicester Square in 18th century

(Source: Cullen 1961)

Alexander et al. (1977) writes about activities in the 'Small Public Square', a chapter in the *Pattern Language*. According to Alexander et al. (1977), urban public squares allow activities since the main role of the squares is bringing people together. They point out that the square should contain activities for having people inside. There are different kinds of activities, which may occur in the public square. These are "small crowds, festivities, bonfires, carnivals, speeches, dancing, shouting, mourning" (1977: 311). Distinctively**,** they contribute to the urban square literature by mentioning 'voiced activities' and think that joggers, small or crowded meeting groups and dancing people, such as the folk dancers, add much more liveliness to a square than the silent activities. Besides, they coin the term "pockets of activity". They claim that the activities in the squares should start at the very edges in order to create 'pockets' in which, without even noticing people become the users of the squares. Figure 2.2 clarifies the importance of the activities in the surrounding buildings thanks to Alexander et al.'s concept of "pockets of activity".

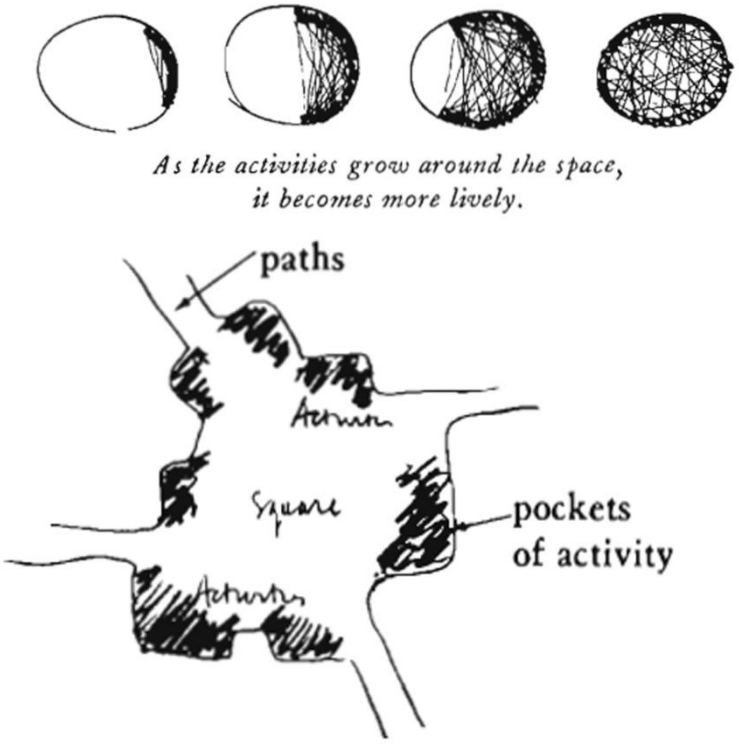


Figure 2.2: Alexander's pockets of activity

(Source: Alexander et al. 1977)

French (1978) claims that the market squares are the origins of the urban squares. He adds that squares come into being by the expansion of main trading streets. Accordingly, he states that the original purpose of using the squares was commercial activities and trading. Furthermore, he defines the square as the "city's heart" (1978: 12) and the square's main role as being a public gathering space.

Although Krier's (1979) studies are mostly related with physical considerations he also refers to roles of squares. He describes the squares as a "stereotype" of public space. He mentions the squares as where people shared experiences throughout the history. Like many other authors, he also claims that the main purpose of the squares as "gathering". Like French (1978), he considers commercial roles of the squares and adds that the best match in terms of activities for squares are commercial ones. In addition, he also mentions that all activities indicate cultural communion as these are related to people and their social life. Moreover, Krier considers temporal functions of the square**,** especially central squares, he states that they should go on "twenty-four hours a day" (1979: 19).

Whyte (1980), as an urban researcher, focused on the social activities in squares. These are various activities from couples to groups, from meeting other people and exchanging goodbyes. One of the most interesting analyses of him is the activity of 'watching'. The figure below presents a realistic fracture from urban life; men lining up facing the pedestrian flow watching the girls passing by (Figure 2.3).

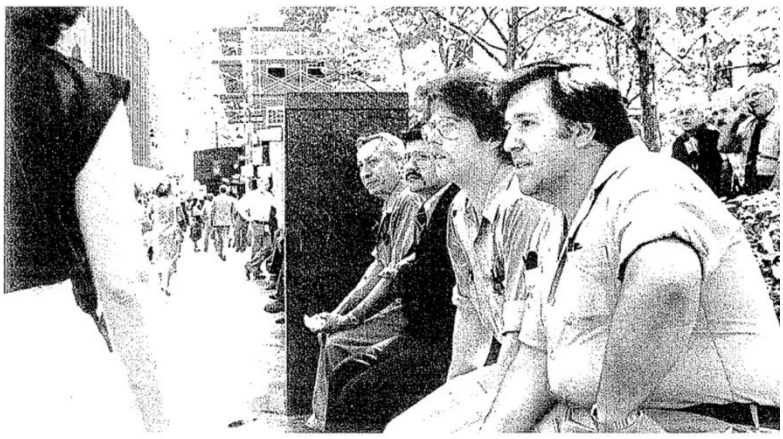


Figure 2.3: Girl watchers

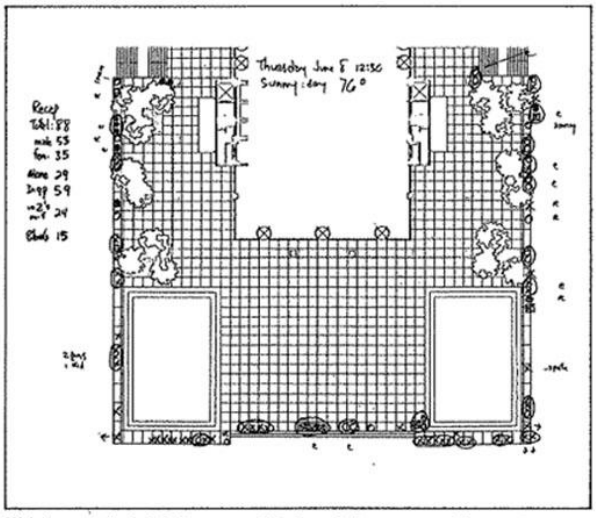
(Source: Whyte 1980)

In describing activities, he dwells on the user diversity in different categories such as couples, groups of people, men and women watchers, families with children, and people from different ages or different incomes. Whyte (1980) has invaluable studies on human behavior in the urban squares. When he analyzes plaza life in his book, he considers mostly users and instead of focusing on only the activities, he evaluates those activities according to the users. For instance, while describing the plaza, he observes that young office workers mostly go to an urban plaza close to their office buildings while their patrons rarely prefer the same space. Yet, when they come across with each other in the same plaza, patrons and workers try to sit far away from each other. Another important point in his analysis is that patrons and older people with considerable income prefer smaller squares because small public squares are more hidden spaces for individual activities. People decide which square to use based on their necessities. Unlike those who prefer smaller squares, there are also a considerable number of people choosing crowded squares for their safety. His other analysis is related to the male-female ratio of the users. This analysis puts forth a significant point in terms of square usages. He finds out that the number of women is usually more than

the number of men in the most used squares. He also suggests that a remarkable fewness of women in a square signals a problem with the space. According to Whyte, women are observed to be more sensitive and selective compared to men when it comes to the use of urban space. Hence, the squares predominated by women are considered as successful squares (Whyte, 1980). He also states that in order for an urban space to be "best-used", it has to include a good number of couples and groups of people. What is more, he observes those findings while producing detailed and useful drawings about them. In Figure 2.4, it is clearly seen how women, men, groups of people or singles are depicted by Whyte (1980) while observing the squares.

Whyte also states that, since people are attracted to other people, the crowded squares are more successful than the non-occupied ones. People generally prefer not to be in a deserted square. In order to feel secure, people would more likely to go to crowded places where they can be close to the other users. Another wide ranging study of him is that evaluating the activities of users according to changing weather conditions, different time of the day, or special days. Whyte observes the rhythms of plaza life in detail from dawn to dusk. Although these types of analyses are described more under 'climatic and temporal conditions' as the ninth criteria of this study, these considerations always relate with the usages.

Left: The new parklet in front of the Boston Five-Cent Savings Bank has become one of Old Boston's most congenial gathering places.



This is a typical sighting map. We found that one could map the location of every sitter, whether male (X), female (O), alone, or with others (XO), in about five minutes, little more time than a simple head count would take.

Figure 2.4: An example of Whyte's sighting map

(Source: Whyte 1980)

Lynch (1981) as an another important researcher on urban space, states that the plaza is the focal point of the activities, strictly speaking, the plaza appears as the heart of the urban area. At this point, it would be wise to mention the concept of 'nodes', one of the five crucial elements of Lynch. According to him, nodes are the strategic focus points, focal spaces, junctions, crossroads and also some squares are given an example of nodes in his textbooks. Yet, it is also important to know that not each urban square is a node. Lynch specifically uses these words in analyzing the concept: nodes are the most frequented spaces in the city and the nodal points have "dominant features". He gives San Marco Square in Venice as an example of nodes as this square has turned into a differentiated, well-off and complicated place for the city. He points out the fact that even the people who has never been to Venice know about this square (Lynch, 1981). The concept of nodes by Lynch has to be studied and handled wisely since every square in town may not have dominant characteristics like these. Thanks to this concept, he poses a different perspective in evaluating the squares.

In 1984, Hillier stresses the importance of the usage of urban space :

> "… the idea of "space" will usually be transcribed as the 'use of space',..., the idea of space is given significance by linking it directly to human behavior or intentionality" (1984: 19).

Despite the fact that Hillier makes a more general description, this sentence has an important role on identifying this criterion because it adds to the idea that the triplet, 'users, usage and activity' is an inseparable from each other for urban public spaces.

Furthermore, the relationship of the squares with their surroundings is one of the important subjects being mentioned throughout the book. Bentley et al. (1985) have a significant contribution to this subject. They distinctively separate the activities as 'outdoor and indoor' activities and investigate the relationship between the squares and indoor spaces surrounding the squares. They believe that once the activities extend in and out of the surrounding buildings physically and visually, there occurs a positive dynamic for the squares. The more the inside and outside - the buildings and the square - are interactive, the more vigorous the square becomes. Thus, when indoor spaces contribute to the square as outdoor spaces, it is called an "active area" (1985: 58). Also it should be noted that; like Bentley et al.'s active area, the concept of "active frontage"

discussed in the book of *Urban Deisgn Compendium* by Llewelyn-Davies (2000) also evokes the importance of surrounding usages. If these different spatial organizations which are: “inside and outside, built and open, public and private” (2000: 89) integrated with each other through the various facilities, the life of urban space is successful.

Trancik (1986), a distinctive author in the field, names the users as “human actors” of the square in *Finding Lost Space*. According to him, people animate the urban square and keep it alive. Additionally, in his opinion the success of the square’s design depends on the sufficient activities one can perform there.

On the other hand, Gehl (1987) doesn’t attribute the liveliness of the squares with the number of the people or events in them. The amount of time they spend inside the square is more important for him. As the people approach to the square, the activities should stimulate them and make the people asking “stop and see what’s happening here” (1987: 38). Then, a more important role of the activities is to provide people a comfortable space and make them stay longer inside (Gehl, 1987). According to Gehl, the most attracting thing for the people is to see, hear and know the other people getting together around them rather than the other activities. People in an urban space don’t prefer the places very much where other people don’t exist, on the contrary, they want to be close to the other people even though they don’t know them. It has lots of reasons, people enjoy watching other people, they feel themselves safe and comfortable (Gehl, 1987).

Approach of Marcus & Francis (1997) to the usage of square is similar to Gehl's (1987) opinions. They stress a particular effect of the squares on people; that is, to make them stop and observe the surrounding. Like Gehl, they define the sidewalk as a space to pass through while the square offers an invitation for pausing and staying. In this context, the significant point to acknowledge is what these “stopping” moments of cessation mean. Various activities, such as “strolling, sitting, eating, and watching the world go by” catch people’ attention and succeed in their decision to stay in the squares (1997: 10). They argue that if the square is greatly used, it should invite people inside and people should remain in it.

In addition to Cullen (1961) and Bentley et al. (1985), Moughtin (1999) discusses “visual attraction” of the activities. He mostly discusses visuality from the

point of view of the proportion of square and user population. He cites Vitruvius about the design of the forum:

> "… should be proportionate to the number of inhabitants, so that it may not be too small a space to be useful, nor look like a desert waste for lack of population" (Moughtin, 1999: 87).

The relationship between the density of the people and the greatness of the square is an important subject because it is necessary for a user to face with a proportional view while approaching to the square. People prefer neither remarkably small places nor places they get lost in within the urban public place. Moughtin (1999), stresses the importance of the functional programs of the buildings next to the square and states that when the square and its surrounding buildings have interactive usage, that is more successful city square. In other words, when the square and the surrounding buildings correlate with each other in usage, the city life arouses. Thus they shouldn't be disconnected to each other.

Lang (2005) considers both usage and temporality at the same time. There are a great number of field surveys about the squares in Lang's (2005) book. When those surveys are examined, it is seen that he has a great deal of temporal consideration to understand the square life and usage. For instance, while he mentions Rittenhouse Square in Philadelphia, he states that it is used as a shortcut during different periods of a day; but activities around the fountains increase during summertime, especially when children play around them and climb on them. Therefore, there are certain authors who think that usages of the square and temporal factors cannot be separated from each other. They focus on when the square is used or which period it is crowded or empty in the daytime. The following pages discuss temporality as a separate category; however, this section, also, informs us about the relation between usage and temporality.

Various kinds of activities and functions of squares are pointed out by innumerable authors. These activities demonstrate how the squares have been used. According to these authors, there are several activities and user diversities that contribute to the urban public life. Finally, since squares provide people with chances to experience different activities, it wouldn't be wrong to claim that squares revive the urban public life by their 'users, usages, and activities'. A sufficient number of authors

in this study distinguish this criterion and hence it is the most important one while evaluating the squares.

2.2.2. Enclosure

In evaluating the urban square, another crucial criterion is ‘enclosure’. Almost all authors focus on enclosure in their studies and they see enclosure as an essential quality of urban squares. This criterion will be examined in two titles as ‘degrees of enclosure’ and ‘enclosing boundary elements (buildings & structures)’.

2.2.2.1. Degrees of Enclosure

The ‘degrees of enclosure’ is the focal point in understanding the room-like state of the squares. There are significant normative studies on showing what a square’s ideal degree of enclosure should be. The writers generally consider the ratio between height of the surrounding buildings and width of the square and they recommend different specific ratios for being an enclosed urban square. All of these ideal height to width ratio discussed in the textbooks will be described below.

The oldest ideas about enclosure belong to Camillo Sitte (1889). Sitte suggests that “public squares should be enclosed entities” and adopts the quality of enclosure as the principle of architectural design (1965: 172). He draws a parallel between the square and the room, as they both have the quality of being enclosed. The completely surrounded squares create more holistic architectural environment in the urban space and they offer a “closed vista” for someone inside the square (Sitte, 1889). According to Sitte (1889), the ideal ratio of height to width is 1:2 so that the users can properly sense the main building in the square, and this ratio shouldn’t exceed 1:4 in order to not lose the sense of enclosure (Sitte, 1889).

Zucker (1959) describes the “closed squares” as surrounded by buildings, which should have limited heights. That is, the tallest building in the square should be three or four times the width of the square (1959: 7).

Cullen (1961) discusses the degree of enclosure in terms of vista. According to Cullen, the enclosure gives us the feeling of being completely surrounded and the eye

perceives the surroundings of the square as a whole through closure, such that the enclosed character of the square surrounds the squares both physically and visually. So, according to him the degree of enclosure affect the physical and visual senses.

Alexander et al. (1977) describe the degree of enclosure from a different point of view. They assort the outdoor space as “positive and negative space” and draw on the degree of enclosure for differentiating these two kinds of space from each other. When positive spaces are surrounded by buildings, they have an enclosed character. Alexander et al. indicate that the urban square as an example of positive urban outdoor space. Moreover, the shapes of surrounding buildings are mentioned in order to provide enclosed spaces. Positive spaces generally have convex shapes and their boundaries are always definite due to their enclosed character. Negative spaces, on the other hand are non-convex shapes and their boundaries cannot be perceived (Alexander et al, 1977). Accordingly, the way of combinations of the buildings can give information about the degree of enclosure. If they are close to each other they can create more defined spaces within the outdoor space (Figure 2.5).

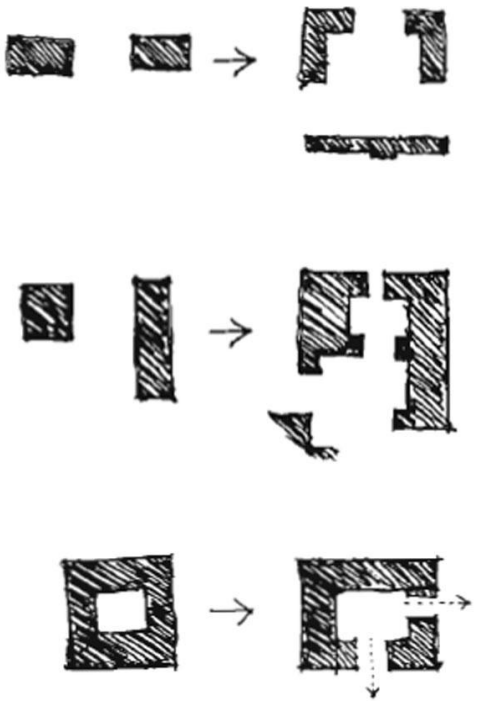


Figure 2.5: Formation of enclosure

(Source: Alexander, et al. 1977)

Like Alexander et al.'s "positive and negative space", Trancik (1986) examines the urban spaces in two sections: "hard spaces and soft spaces". Hard spaces are enclosed and more defined spaces because they are bounded by architectural elements. According to Trancik (1986) the urban squares share qualities of hard spaces. The enclosed squares have definite boundaries due to the surrounding elements.

French (1978) discusses the issue of enclosure and boundary of the squares together. According to him, enclosure provides more defined borders and hence the enclosed squares don't need any signals or directions, it is easy to distinguish where the square is. For this reason, the enclosed square performs clear demarcations in an urban space. Moreover, French (1978) accepts Alberti and Palladio's ideas about ideal ratio of height to breadth that is the height of the surrounding buildings, which should not be higher than one third of the breadth and not less than one sixth.

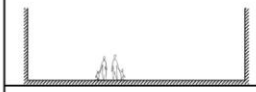
Although enclosing structures are dealt with in detail in the next section, it would be appropriate to mention a few writers who relate the degree of enclosure and the qualities of facades of surrounding buildings to each other in this section. According to Ching (1979) the ideal degree of enclosure provides form and sense of direction. In addressing the degree of enclosure, he focuses especially on surrounding buildings' patterns of openings, proportion, scale, shape, surface, edges, dimensions, configurations qualities which affect the interrelations of squares and enclosed buildings. In addition, Trancik (1986) focuses on the architectural elements in tree-dimensional frame, which are "the edge of the space, the degree of enclosure, and the characteristics of the spatial wall" (1986: 61). According to him, the degree of enclosure depends on the enclosing building's architectural qualities. These qualities are transparency, opacity, openings, and surface ornament which affect the enclosed character of the square directly (Trancik, 1986).

Moughtin (1999) investigates the enclosure of the squares in depth. According to him enclosure is the essential quality of the urban square and he defines the enclosure as "purest expression of a sense of place" (1999: 99). Like Sitte, Moughtin associates the square with an 'outdoor room' and states that the square and the room of the house share the same spatial quality, which is physical closeness by a wall or a building. Distinctively, Moughtin (1999) explains the sense of closeness by evaluating the gaps in the square in three dimensional viewpoints and relates degree of enclosure to the corner

of the square. If the urban square has more open corners, it has less sense of enclosure; however, the more surrounding buildings it has, the more enclosed space it becomes (Moughtin, 1999).

The ideal ratios on degree of enclosure studies by different researchers are gathered by Moughtin in his book. He refers to Sitte's (1889), Alberti's (1955), Zucker's (1959) as well as the design guide prepared by Essex County Council (1973), related to the ideas on ideal height to width ratios. Alberti states ideal enclosed intervals between 1:3 and 1:6. According to the design guide, the appropriate height to width is 1:4. Moughtin also identifies the appropriate height of the surrounding buildings for enclosed squares as twice of the width, which is also equals at angle 27°. He adds that users see more than one building at angle 18° which equals to 1:3. Also he points out that the squares start to lose its enclosed character below angle 18° and advices that the heights of the building to the width of the square should not exceed the ratio of 1:4. If it is more than the 1:4, one will start to lose the feeling of enclosure. The diagram about all of these ideal ratios can be seen below (Table 2.3).

Table 2.3: A diagram of degrees of enclosure

DEGREES OF ENCLOSURE		
1:2 	-buildings can be seen clearly -most proper dimension to feel enclosure	Sitte, 1889 Alexander , 1977 Moughtin, 1999
1:3 	-proper height to width ratio -ideal height to width -seeing more than one building	Alberti, 1955 Lynch, 1981 Moughtin, 1999
1:4 	-start to lose its enclosed character	Sitte, 1889 Moughtin, 1999
	-appropriate ratio to enclose	Zucker, 1959 Essex C.C., 1973
1:5 	-sense of enclosure diminished	Moughtin, 1999
	-still proper ratio	Alberti, 1955
1:6 	-minimum height to width ratio -not less than 1:6	Alberti, 1955

2.2.2.2. Enclosing Boundary Elements (Buildings & Structures)

Enclosure is the most considered physical criteria on urban squares in the literature Sitte and Zucker significantly state the importance of the 'closseness' of urban square formations. Enclosure is Sitte's precondition in order that any urban open space becomes an urban square. For that the buildings' arrangements provide continuous enclosure to the square. Hence, Sitte always descripts squares with their surrounding buildings. For instance, when he studies Piazzo del Duomo in Ravenna and Pistoia (Figure 2.6), he refers to the location of cathedral buildings as "purest types of ingenious system" (1965: 172).

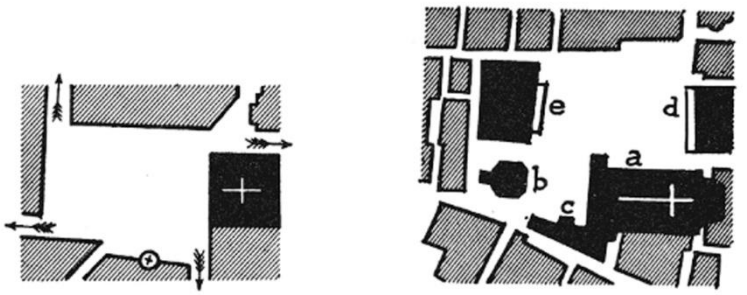


Figure 2.6: Sitte's cathedral squares

(Source: Sitte, Collins (ed.) 1986)

Sitte also emphasizes the importance of the colonnades and archways as surrounding architectural structures. If the squares are formed by these surrounding structures, they could prevent the vacant spaces, fill the gaps of the squares and animate the life of the squares (Sitte, 1889). However, freestanding structures cannot identify any characteristic space and also these kinds of arrangements cannot provide definite borders to a square. For this reason, Sitte (1889) criticizes the modern squares for surrounding buildings have no relations to them. Also the modern urban planning causes many problems thus affect the enclosure of the squares negatively as buildingsrelate to block ordered structures in modern urban planning framework. The unity of the squares is deformed so long as the openings increase. These problems cause modern squares to be surrounded by roads and then turn into stations of the vehicles (Sitte, 1889). Due to the negative effects of inbuilt environment, Sitte strongly proposes

that the buildings should be joined to one another “rather than being freestanding” (1965: 162).

Alexander et al. (1977) examine the “wings of buildings, trees, hedges, fences, arcades, and trellised walks” (1977: 522) as boundary elements of the squares. Each element affects the sense of enclosure but they especially mention the contributions of the arcades and the trees on enclosure. The arcades that are one of the boundary structures of enclosed spaces are generally located at the perimeters and edge of the square and these walkways are “partly inside, partly outside” (1977: 581).

Trancik (1986) addresses the “loggia” as giving an enclosed structure to the square. The loggia places at the edge of the square and it connects the different functions in the streets, edges, and square to each other (Trancik, 1986). Thus, it could be said that they are transitional spaces for urban squares and have the vital role between urban space and urban square; they are like a bridge between the squares and the surrounding buildings. Moreover, according to Alexander et al. (1977), since trees have psychological impact on human being, they give meaning to urban open space. Hence, when the trees are placed in the squares, they form the sense of enclosure (Alexander et al., 1977).

French (1978) identifies the enclosed square as “solid and obvious” (1978: 22). Enclosure strengthens the boundaries of urban squares and gives direction to users where the square is and hence the squares differentiate from any open space. Also, he discerns certain dominating structures, especially vertical elements affecting the enclosure character. Like the tower or campanile, the dominant vertical elements emphasize the location of the square and strengthen the enclosed character visually. “Architectural detailing, fencing, walls, trees, shrubbery, awnings, umbrellas and patterns of ground plane” are another boundary elements that providing enclosure to the squares (French, 1978).

Bentley et al., (1985) think that in addition to main enclosed buildings, trees provide the sense of enclosure within the square. Although the trees are not a structure, their shades, bodies, and expanding branches facilitate in establishing the enclosure (Cullen, 1961; Bentley, 1985). Even though there are many views that defend the positive roles of enclosing structures, Bentley et al. (1985) criticize the enclosing

buildings as they can cause some problems at the corners of the buildings. If windows or openings of the buildings are close to each other at the corners, it may disturb inhabitanats' privacy. They suggest that the surrounding buildings should not be fully adjacent to each other; there should be a gap at the corner of the square.

Moughtin (1999) elaborates the effects of surrounding buildings' architectural qualities on the square. According to him, roof line, height, size, shape of the enclosing buildings should be considered when evaluating the enclosure of the square. In addition, these buildings should have an architectural unity, a continuous surface and facades in order to provide proportional openings to the urban square (Moughtin, 1999).

Lang (2005) provides a different point of view. Although all of the writers focus on physical dimensions on enclosure, he associates the character of the square with the use of enclosing buildings' ground floors. The program and activities within the surrounding buildings ground floor has undeniable influence on the enclosure since ground floor activities of the surrounding buildings can create the enclosed spaces as well as physical closeness. This reminds us the concept of "active frontage" (Llewelyn-Davies, 2000) stated in the previous section. In order to increase the use of the ground level, he points to various design proposals about frontages of the buildings (2000: 89). Therefore, in addition to physical qualities of the surrounding buildings, their uses should support the sense of enclosure of the square.

2.2.3. View from the Square and View of the Square

Visibility and visuality of the squares are the other important criteria in the literature. There are two main subjects related with the view of the squares. Some authors discuss the 'view from the square', and others discuss the 'view of the square'.

Firstly, we know Sitte's (1889) fundamental principle is considering the enclosure. In conjunction with this, he deals the issue enclosure simultaneously with the issue of the vista. According to his aesthetic principles, one should loose contact with the outside of the square, but if possible, one street should open the square in a manner to provide the inner view of the square. The enclosure offers a consistent vista to the users and enclosure and view are interrelated. On the other hand, when there is no enclosure, that is when everywhere is open, the vista of the square becomes more

complicated, and the square cannot be defined spatially (Sitte, 1889). So, he defends that when the squares are encircled with the surrounding buildings, such that people inside the sqaure have the inner view concurrently. This makes the squares in a city meaningful and special aesthetically (Sitte, 1889).

Another different statement about viewing the square belongs to Cullen (1961) who concentrates especially on visual sense of urban scenes. Like Sitte (1889), Cullen (1961) handles the enclosure with the visual approach. He states that the enclosure provides a "complete private world which is inwards looking, static and self-sufficient" (1961: 106). The sense of in and out arises visually for a person who is in a square surrounded by buildings. In accordance with this thought his one of the most important findings are "here" and "there" which are visually established. With his expression, the "man-made enclosure" (1961: 183) divides the public space into these two spatial qualities. When the user looks out of the enclosure system, the sense of "hereness" and "thereness" exists. According to Cullen's concept, "hereness" is our private place and close to us visually while "thereness" is always far away from our perception. While illustrating the squares, Cullen describes inside of the squares as "here" and outside as "there". By this he means that squares create the sense of outdoor room, which is different from any other urban open space. We can see the visualizations made by Cullen below in Figure 2.7.

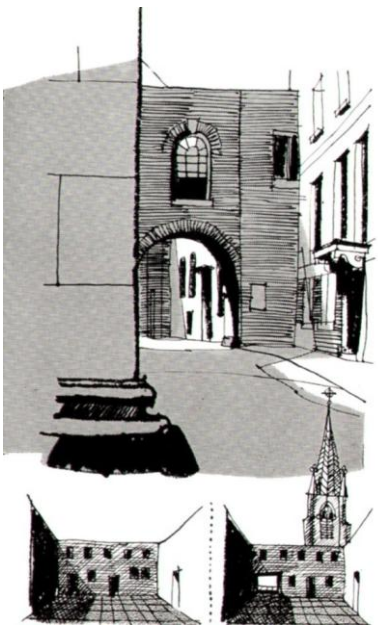


Figure 2.7: 'Here and there' concept of Cullen

(Source: Cullen, 1961)

Another book considering this criterion is *Pattern Language*. Alexander et al. (1977) approache visuality in a different subject related with comfort and seating. They address two patterns for people to feel comfortable in an urban space: first one is “a back” and the second one is “a view into a larger space” (1977: 558). He considers these two patterns in three scales which can be seen in his drawings (in Figure 2.8). The term “back” is generally explained with seating activities in the smallest scale. As the people prefer comfortable seating places in an urban square, their backs have to protected by trees or small bushes in smaller spaces. According to him, people don’t need any visual qualities at this scale. For about a little larger space, they state that people want to see good views and large openings when they sit in an urban square; however, they do not want to sit against a wall. To achieve this, there should be enclosing buildings around the square and seating places should be placed facing a larger vista. Hence, enclosure buildings fulfill the task of being a back and these urban spaces give comfortable viewing feelings to the users.

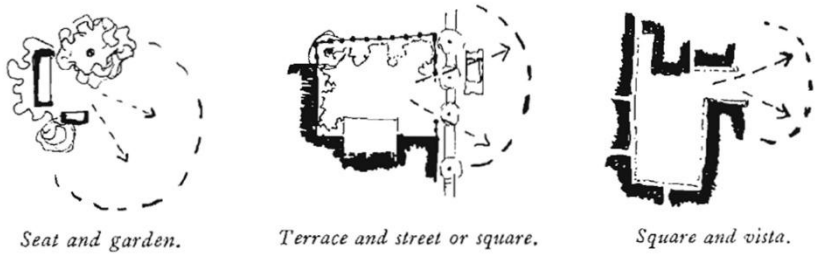


Figure 2.8: ‘Back’ and ‘open vista’ concepts of Alexander, et al.

(Source: Alexander, et al., 1977)

The enclosed spaces being illuminated in different scales establish important visual hierarchy for cities and they are related with each other visually (Figure 2.9). Alexander et al. narrate this subject with these following sentences in their ‘hierarchy of open space’ part:

> “Whatever space you are shaping - whether it is a garden, terrace, street, park, public outdoor room, or courtyard, make sure of two things. First make at least one smaller space, which looks into it and forms a natural back for it. Second, place it, and its openings so that it looks into at least one larger space. When you have done this every outdoor space will have a natural "back"; and every person who takes up the natural position, with his back to this "back", will be looking out toward some larger distant view” (1977: 559).

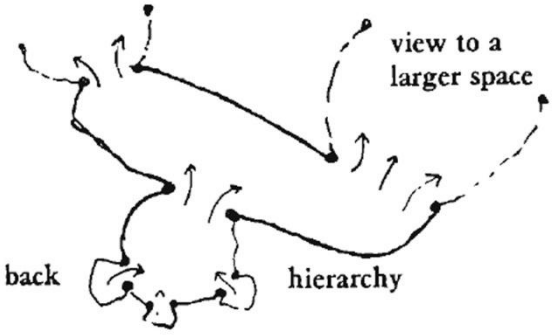


Figure 2.9: Visual hierarchies

(Source: Alexander, et al., 1977)

In addition to viewing inside the square, viewing from outside of the square is another significant issue in the literature. It is named by Ching (1979) in his textbooks as 'approach'. There are three main physical approach forms which are "frontal, oblique, and spiral" (1979: 243). When people approach any space, if the space or building is seen directly and perpendicularly it is a frontal approach; if it is seen in an angular and perspectival view it is an oblique approach; if the point of arrival is hidden and access is via the perimeter of the space, it is a spiral approach. Approach is being out of the enclosed space, and it is a gradual performance starting with the distant view toward the square, entrance image of the squares when people prepare to see the squares totally. He illustrates Piazza San Marco in Venice. The drawing draws attention to the entrance's being apparent by two columns while people are approach it (Figure, 2.10).

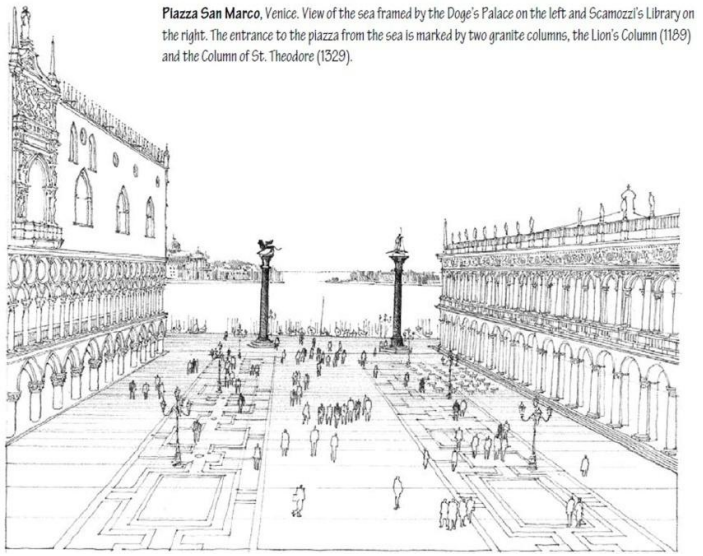


Figure 2.10: The entrance view of Piazza San Marco, Venice

(Source: Ching, 1979)

According to Lynch (1981), before a street or a square's activities, size, or form, the most important factor is that it 'has to be viewed'. Even though Lynch doesn't have a direct statement on 'view on the squares', the basis of his studies are related with vision of environment and image of the cities. Lynch often states that places should be readable that is, "legible". For Lynch legibility structures people's experience in the city. When we adapt his suggestions about legibility to the squares, these are necessary to increase the visuality of the squares: physical components should be clear, the urban squares should have recognizable objects and citizens should have the chance use and experience the squares directly (Lynch, 1981).

Hillier (1984), in one of his analyses, compares the visibility of two layouts having different deformed grids. The first one is linearly and axially of a deformed space and the second layout is convexly deformed space. There are various results of these analyzes that are discussed in detail in his book, Space is the Machine, but briefly one of the findings is that in a space with axially deformed layout has more clear visible areas whereas convexly deformed one offers wider and narrower visual scenes. Hence, he shows that the formal differences affect the degrees of visibility of the spaces and he expresses in detail that the integrations of spaces and the density of usage change accordingly. How the squares are perceived while being approached is an important criterion that should be considered for their usage.

Bentley et al. (1985) consider the issue of view under the heading of "visual richness". He relates the users' sensual experiences in outdoor places to the sense of motion, smell, hearing, touch, and sight as "richness" quality, and they indicate that the most important of these senses is the visual one. Richness is related to quality of viewing the urban space. The visual richness is examined in two different scales: as long range and close range (Bentley et al, 1985). A square needs to contain elements with different scales both from a distance and at a close range to have a visual richness. In other words, it needs a large-scale richness to be visible from a long distance and at the same time it requires more small-scale visibility when people get closer to the square.

The elements in the squares will be discussed in the following chapters. But Trancik (1986) tells that the elements in the squares have positive contribution to the visuality of the squares. He refers to the success of the impressive buildings, sculptural

monuments and dominant vertical objects with regards to visual quality. If the squares contain such elements, people form an interaction with these places easily and these places become memorable for the people. Trancik (1986) gives an example the tower, Plazzo Pubblico, in Sienna as the visual focus of the city. He thinks that these structures increase the visual diversity of the square, Additionally, if the square is perceived from a certain distance it has more chances to attract people for its use.

In addition to Trancik (1986), Gehl (1987) states that people need to be attracted by the good view in order to get involved into the square life and the squares should provide attractive elements in them to achieve this. He focuses on the question 'how the place could be more visually attractive' and lists some attractive elements as "water, trees, flowers, fine space, good architecture and art works" (1987: 140). Their appeal depends on their visibility from a certain distance.

While Moughtin (1999) depicts a square, he defines the impressive square as "open vista of a large". It could be useful to note Moughtin's words about importance of the vista:

> "A public square can be dominated by a vista or void rather than a building or piece of great sculpture" (1999: 108).

Contrary to Trancik (1986) and Gehl (1987), Moughtin (1999) thinks that great vista is more important than the elements in the square. Moughtin gives Piazza del Campidoglio as an example having great vistas both from inside and outside (Figure 2.11).

Figure 2.11: Piazza del Campidoglio, Rome

(Source: Moughtin, 1999)

Each scholar states various ideas that a square must have for having a good view. Perceiving the square in a long range, viewing from inside to outside, and approaching the square are essential issues related to issue of view. For some, being visible does not mean that they are completely open. It is an important for enclosed entities to attract people visually. The squares, which have good views both in and out of the square are easily attracting people to the square since approach and vista provide an element of surprising to people.

2.2.4. Elements in & Surface of the Square

Any empty open space in a city cannot be considered as a square. In order for an urban space to be accepted as a square, there must be elements, objects, and also specific floor patterns inside of it. Most scholars have nearly same classification about what the elements are in the square. These are: fountains, sculptures, monuments, clock towers.

For Sitte (1889) the most important elements of the squares are the monuments. According to him, the best location for the monuments is on the perimeter, near the buildings, where it could have a good view and could provide a background to the monuments. He emphasizes that the center must be vacant and must not be disturbed by monuments. Although the monuments embellish the squares, he complains that there would be no adequate monuments, statues, or any sculptural elements in modern squares. Cullen (1961) believes that the elements in the squares increase the liveliness. The fountains, seats, sculptures, monuments are defined as the main objects of the square. He also states that those kinds of objects, especially vertical ones, create a focal point for the city (Figure 2.12). When people look at a tall vertical object from a certain distance, they would like to visit the square and see it closely.

Cullen (1961) also refers to the contribution of the surrounding cafes as elements of the squares. Cafes around the square provide tables, chairs, valeriums that substantially increase the use of public space. According to Cullen, thanks to these elements, gathering spaces become more fascinating.

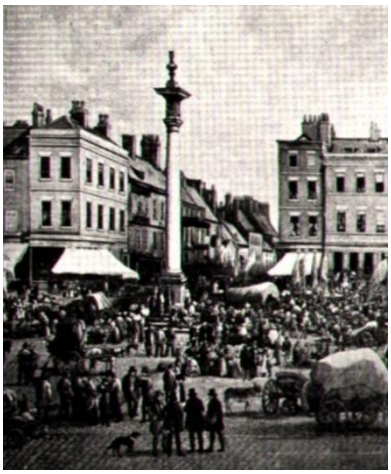


Figure 2.12: The vertical element in the square

(Source: Cullen 1961)

Alexander et al. (1977) give special interest to the ‘steps’ as elements of the squares. They should have appropriate dimensions for public use but below in height. The steps in the square should not make one think only about the stairs. They could be in different forms and roles. Alexander et al. give several examples of steps such as “stepped cafes terraces, steps surrounding public plazas, stepped porches, stepped statues and seats” (1977: 604). Although their primary role is to link different levels, people like spending time by sitting on the steps and watching the public life from a raised place. If they have enough space in terms of width, people can lean on the steps (Alexander et al, 1977).

Distinctively, according to the findings in Whyte’s (1980) observations, while people are waiting for each other, chatting or standing in the square, they prefer standing close to the “well-defined” objects. He states that these are particularly vertical elements and exemplifies these like flagpoles, statues, or steps.

It will be useful to talk about ‘landmarks’, as Lynch’s (1981) one of the five significant city components. The most important physical features of landmarks are being “unique, catchy, and single”. Landmarks are the images of the cities and while this image is being designated, this element should be visible from many points. It might have opposite features from its surrounding with regard to its physical features and also it should be dominant (Lynch, 1981). For an object in a square to be a landmark, it should gain a place in a citizen’s memory and it should have a symbolic meaning for the city. Lynch gives Campanile Tower inside the San Marco Square as the

square's landmark element . However, we cannot state that every monument in a square is Lynch's landmark, because not every monument has dominant character in the scale of the city.

Trancik (1986) has close ideas to Cullen (1961) about the elements. According to him, objects in the square like sculptures, water features, fountains, and trees provide many advantages to the users such as showing direction, animating the public space, creating focal points, and giving symbolic character to the square (Trancik, 1986). Also, existence of historical objects in the squares succeeds in carrying the society's social and cultural meanings into the future by connecting different ages with each other.

Like Cullen (1961) and Trancik (1986), Lang (2005) also states the elements in the square as sculptures, clock towers, monuments, fountains, and art works. These elements impact the visual scene of the city. In his opinion they are the focal points of the squares and people show interest to these elements. Hence the squares could be the center of attention and used by many in the city. Lang (2005) also states that the stairways can be regarded as "pieces of sculptures" in the squares. He descriptions the usages of these elements like that when people are in a square and come across a sculpture and then they may pause and spend time around the steps of the sculpture. Thus, they may offer different experiences to the pedestrians. According to Lang (2005) open spaces, which do not have any elements can be boring.

Figure 2.13: Sculpture by Picasso, Daley Plaza Chicago, in 1993

(Source: Lang, 2005)

In addition to all these discussions, there are also two-dimensional elements in the squares. These relate the surface qualities of ground floor of the squares. When Trancik (1986) evaluates the square in regard to surface qualities, he analyzes its material, texture, pattern, composition, and color. According to him, ground plane is one of the criteria for a successful square. Floor surface materials should have composition such that they become a part of the design of the square. If the environmental structures and floor patterns of the square are compatible to each other, a square can be considered as a good designed public space. Trancik (1986) gives an example to explain the importance of ground plane on the square:

> "In Sienna, for example, the shape of the piazza is reinforced by a radiating pattern of stone strips. Michelangelo's elliptical paving in the Campidoglio, rising slightly toward the base of the Marcus Aurelius statue at its center, helps optically regularize this somewhat skewed piazza" (1986: 69).

Marcus & Francis (1997) assert that hard surface of the square should be more than a planted surface. The reason for that is, if planted surface exceeds the hard surface, the urban open space turns into a park rather than a square. However, they note that the planted surface must still be present in the squares consisting colorful plants, a variety of trees, interesting shrubs. And even the smell of planted surface increase the attractiveness of the square (Marcus & Francis, 1997). Additionally, Moughtin, in 1997, emphasizes the opportunities of surfaces in the square and he diversely considers roofline as a surface pattern. In his opinion, all of the surfaces should be integrated with each other through the architectural detailing.

Therefore, authors state that squares should have different kind of elements and their surfaces should have complementary effects on design and usage of the square. When the squares are filled with some architectural elements, these squares become more interesting open spaces and have a better chance tobecome more memorable for the citizens.

2.2.5. Size

Some authors offer recommendations related to the ideal size of the square and they also evaluate the squares considering these ideal dimension due to the importance of these critical ideas associated with the size of the square. Sitte points out that the subject of size is critical for a square to be successful in terms of aesthetical and artistic principals. Firstly, Sitte (1889) states the maximum size of a square as nearly 137 meters that is upper limits to distinguish the body gestures. He draws a line about the length to width rates of the squares and determines that the ratio of length to width should not exceed three to one in long plazas (Sitte, 1889). He also points out that there may not be any certain ratio of length to width which can be applied to each square because it is variable by different shape and form. Nonetheless, he significantly states that, all squares have uniquely ideal dimensions to meet in order to have enclosure. As it is remembered in the enclosure criterion, the ideal dimension is related with width to height ratio. According to Sitte (1889), the width should be double of the height of the main building in the square. It is the best rate for the visual relations between the square and the environment because when an observer stands opposite the building, s/he could easily see every detail in the surroundings at this ratio. The size of the square and its dominating building must be in a coherent relationship. In other words, a square shouldn't be too small because the surrounding building starts to lose its proportion. On the other hand, if the square is too large, even a massive building loses its grandiosity and becomes minuscule (Sitte, 1889).

Alexander et al. (1977) emphasize the success of small public squares. According to the surveys they made, small squares are the most preferred urban spaces in the cities and the squares which have a diameter up to 60 feet are used best. Also, the size of the shortest direction should "not be more than 45 to 60 feet across" (13 to 18 meter), and never "more than 70 feet across" (22 meter) (1977, p. 313). They criticize large squares since they are perceived somewhat negatively as if they were deserted. They add that the architects design huge squares, which may seem good in plan layouts; however, in real life they are mostly empty spaces. They evaluate the size of the squares with the number of people inside the squares. So, according to them whether a square is small or large depends on the number of people occupying it.

They explain this with some numerical estimation by giving example:

> "… a square with a diameter of 100 feet will begin to seem deserted if there are less than 33 people in it. There are few places in a city where you can be sure there will always be 33 people. On the other hand, it only takes 4 people to give life to a square with a diameter of 35 feet, and only 12 to give life to a square with a diameter of 60 feet" (1977: 312).

This numerical study is to the point in illustrating the significant afore mentioned issue; that is, larger squares usually seem vacant in terms of the people inhabiting them while smaller squares seem more lively as a public space considering the crowds populating them (Alexander et al., 1977).

According to French (1978) a square which has the ideal dimensions of Alberti and Palladio provides the users a more proportional and comfortable public space. He states that being in ideal dimensions for a square brings those achievements in its wake; "aesthetic balance of form, as well as a healthy space – open to passage of air and sunlight" (1978: 78).

Whyte (1980) in *The Social Life of,* his book *Small Urban Spaces,* addresses point that users do not want to exist in the "middle of a large space" (1980: 22). People do not like feeling lonely in a large urban space and naturally they tend to escape from that place. Instead, people prefer to be in smaller spaces; that is, places which have a more personal sense to them such as Paley Park in New York.

Another significant ideal size is determined by Lynch (1981). He takes into consideration both small and large squares. According to him, the ideal size of small squares ought to be between 12 meters and 24 meters. However, the size could be nearly 100 meters for large squares.

Bentley et al. (1985) distinctively contribute to the literature on the issue of ideal dimensions and locations of trees in the squares. Trees increase the sense of enclosure and provide different atmosphere to the square, hence their sequences and height should be considered while analyzing and also designing the square. The tree's stock must be at least 2.5 meters higher than the ground floor (Figure 2.14) and they should be placed about 5 meters apart from each other. They state that although these considerations are

seen simple in the square plan, they provide strong enclosure effects in real life (Bentley et al., 1985).

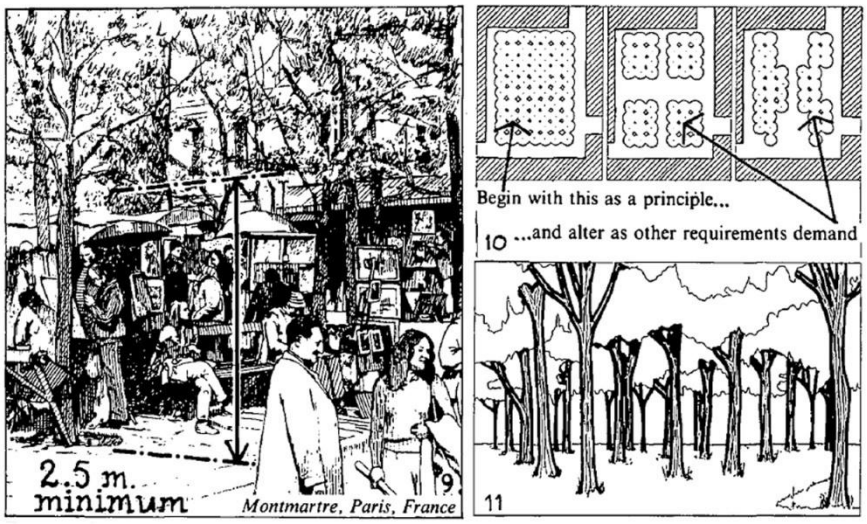


Figure 2.14: The ideal size of trees in the square

(Source: Bentley, et. al. 1985)

Gehl (1987) in his book of *Cities for People* classifies the ideal dimensions of squares for analyzing different activities and behaviors of users. He states that one should be able to understand all the details of surrounding buildings from the distance of 100 meters, and additionally from this distance one should be able to watch all activities by standing at a corner of the square. While walking towards the center, people start to recognize the other users individually at 60 meters. The 25-meters distance is appropriate for understanding facial expressions; also the visual field is more detailed in 25 meters (Gehl, 1987).

Marcus & Francis (1997) mention the success of small proportional squares on social life. They specifically state how small proportional squares provide ease for citizens and how convenient they are to use. Since these types of squares are close to walking paths, streets, or any public stations people generally prefer being at these small spaces for escaping the rush of urban life.

Like many other writers, Moughtin, as well, (1999) writes about the negative effects of large squares. He thinks that a large square is usually deprived of an enclosing character. In his opinion, when the open public space has a larger proportion, it turns into an ordinary open space instead of a square.

As it is understood from the previous studies, there have been many different ideas on what the ideal size of the square must be. In brief, the authors generally claimed that the squares should not be too large. They mostly agree that the small scaled squares are more suitable for human social relationships. In addition to these, there is research detailing the ideal measurements of the squares numerically. All of these measurements can be viewed from the table 2.4 below. Considering these recommended size and limitations provides us many clues while evaluating the square in terms of the proportion of surrounding environment, social life of the squares and social needs of human beings. Each square has peculiar sizes based on the environment it inhabits. The most important feature here is whether or not the square serves best to the needs of the inhabitants.

Table 2.4: Ideal sizes of urban public squares

Ideal sizes of the urban public squares		
Small squares:	-not more than 13-18 m -maximum 22 m -between 12-24 m	Alexander, 1977 Lynch, 1981
Larger squares:	-maximum size 137 m -larger size nearly 100 m -between 70-100 m	Sitte, 1889 Lynch, 1981 Gehl, 1987
Visual Distances:	-grasping surrounding events 100 m -recognizing other users 50-70 m -seeing facial expressions 25 m	Gehl, 1987
Trees in square:	-must be at least 2.5 m high	Bentley, 1985

2.2.6. Edge, Center & Corner

Within the leading studies, many referenced books consider these three major elements are significant spatial parts of the urban space. Edge, center and corner should be considered as one of the main parts of the square.

Among these, Sitte has crucial assumptions on ‘center’. Sitte’s (1889) definition of center based on the idea that the “center should be kept free” (1965: 159) so that the center could be easily used by all citizens. According to him, the center of the square shouldn’t be disturbed by the vehicles, roads, paths, monuments, fountains, and buildings. He thinks that if the center is filled with any object, the opening spaces will be more restricted in the squares so that when even a single monument exists in the center, squares will be abandoned (Sitte, 1889). Briefly, Sitte’s one of the rules for an aesthetic square based on rule of “keeping the center open”. Also, it is important to emphasize that Sitte (1889) and Stuart (1978) have critical views about the center of the modern square. They complain that today the centers of the squares are constantly destroyed by buildings and vehicles. According to these authors, the centers are no longer suitable for public interactions.

On the other hand, Alexander, et al. (1977) and Trancik (1986) contradict Sitte (1889), stating that centers should have some special objects as they could attract people toward the center. According to them, the square with an open center is always barren. Instead of having an unoccupied center, it is recognized that trees, monuments, seats, fountains should be present in the center of the square. If there is an element in the center, it spontaneously provides a “back” to the users (Alexander et al., 1977). For this reason, these elements in the middle of the square attract people to the square and people prefer to pause near these elements. Moreover, Alexander et al. (1977) concentrates on the “edges” of the surrounding buildings in urban public life. He talks about the edges animate the surrounding life of the square so public life is almost started at the edge of the square. To illustrate, lots of small groups of people prefer to meet at the edge of a square, therefore it wouldn’t be wrong to claim that the edges succeed to attract the people to the square (Figure 2.15). According to him edges should be “scalloped” by the pockets of activity because in this way the edges surround the square specifically and people could easily participate the urban public life.

Hillier (1984) and Bentley et al. (1985) consider the edge just as Alexander et al. (1977). Hillier (1984) classifies the edges as the most integrating spaces. Due to the fact that the edges act as an entrance point, they link the surrounding buildings and square to each other and hence these spaces are generally crowded and have strong interactions. Bentley, et al. emphasize the importance of the edges with the following sentence; “the

edge of the space is the space" (1985: 59). He adds that edges should be considered first, as most activities begin at the edge of the square and also points the arcades surrounding the squares to exemplify those strong edge points (Figure 2.16).

A conceptual diagram.

Figure 2.15: Chirostopher Alexander's diagram on edges

(Source: Alexander, et al, 1977)

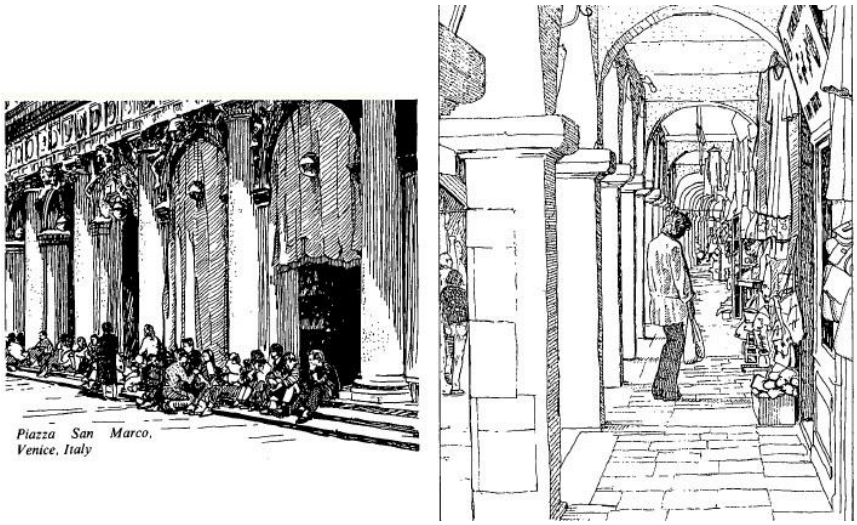


Figure 2.16: Surrounding Arcades of Piazza San Marco as an example of edges

(Source: Bentley, et al, 1985)

Whyte (1980) considers the 'corners' as an important space for the urban square since he views the corners as "transfer and junction" points (1980: 21). Corners are multi-functional spaces and they have substantial pedestrian densities. The corners of the square resemble foyers where various activities happen. To illustrate those activities at the corner, a few of them can be named: "face-to-face seating in steps, group

meetings, shortcuts, people waiting for each other, and so prolonging goodbyes" (1980: 32). Hence, the social life starts at the corner for public users before the users enter the square. According to Whyte (1980), whether a square is a successful or not depends on the street corner. So, it is supposed that if the activities start at the corner and continue toward the square, this public place is successful.

Gehl (1987) suggests that the edge zones, niches and also openings in the city give chance to sitting and standing, and so people want to spend times near these spaces. In addition, they offer a good view of the city or square and people could see each action happening in front of them (Gehl, 1987). For example, in figure 2.17 the edges with analyses and real life photos from Ascoli Piceno, in Italy. Based on Gehl's observations on this square, we can see that people prefer to gather mostly at the following spaces: around the edges under the "porticoes" and next to columns. Since peoples' back are protected by these kinds of places and elements, he considers the edges as safe spaces in the squares.

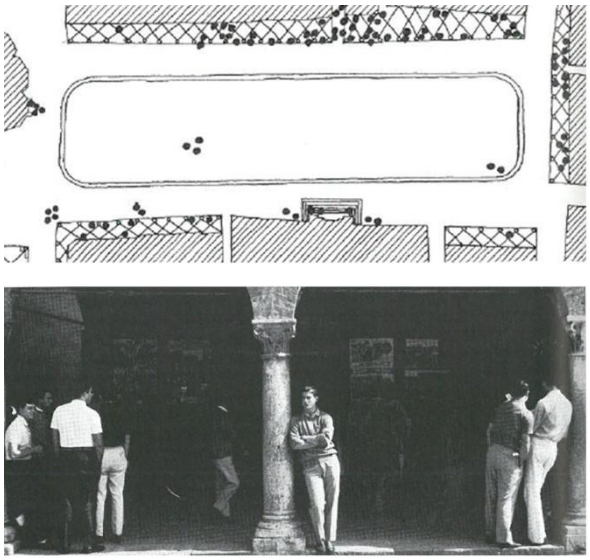


Figure 2.17: A Survey of Gehl's in Ascoli Piceno, in Italy

(Source: Gehl, 1987)

Therefore; edge, center, and corner, which are important spatial parts of the square are referred to from different point of views. They are generally defined as the most crowded activity points and dense pedestrian arterials.

2.2.7. Types of Squares According Plan Shapes

The types of the squares are much debated issue in leading studies. The types of the squares are classified in different ways by a number of scholars.

Sitte (1889) carries out a detailed analysis associated with the square types and plan shapes. Since enclosure is the main element of the squares for Sitte, he believes that the square is formed by surrounding buildings. According to him, there are two kinds of forms, which are the “deep” and the “wide” type (Figure 2.18). The dominant building in the square determines which of these two categories the square would fall under. When the observer stands opposite to this dominant building, if the facing and looking side is long, the square is a deep type; however, if the side to be looked at is short, this square is a wide type.

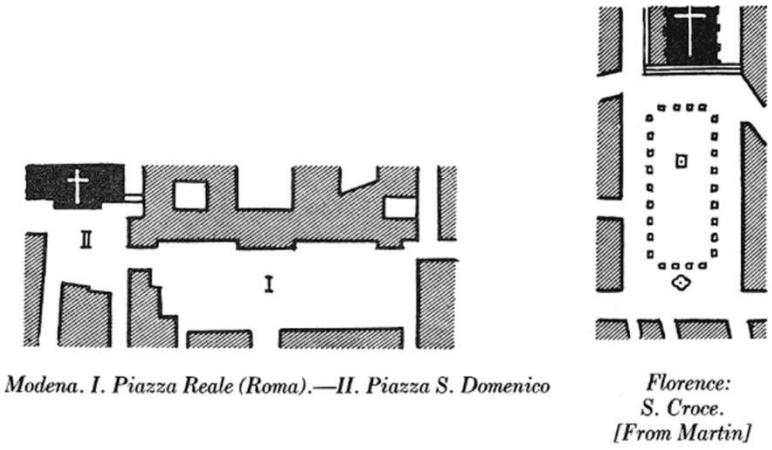


Figure 2.18: Wide and deep type of Sitte

(Source: Sitte, 1889)

Zucker (1959) offers his renowned five plan types of the squares that are mostly cited by various researchers. According to him a square does not represent only one type, he refers to those as “archetypes”. These five archetypes are closed, dominant, nuclear, grouped, and amorphous squares. If they are to be briefly explained, closed square has a definite enclosing character, and it is interrupted only by a street. The dominant square has significant and dominated buildings in it such as a church, palace, or town hall. The nuclear square is like a combined square and has multidimensional qualities. It can have definite forms, dominated vertical objects, or a dominant vista.

The grouped squares, on the other hand, consist of more than one square and these squares must be connected to each other visually and physically in order to be considered as a group. Finally, the amorphous square has no definite shape and artistic principals. Alexander et al. (1977) explains the forms of the outdoor spaces as contemplating the figure-ground plans. If the space remaining outside of the buildings is in an irregular shape, it is a negative space. Conversely, if the buildings, as 'figure', create regular open spaces as a 'ground', the space is positive (Alexander et al., 1977). In figure 2.19, based on the placement of the buildings, the plan on the left hand-side is an example of negative form. On the other hand, the plan on the right hand-side is an example of positive outdoor space.

Buildings that create negative, leftover space . . .
buildings that create positive outdoor space.

Figure 2.19: Negative and positive open spaces

(Source: Alexander, et al., 1977)

Buildings determining the form of the positive space also provide the enclosed character of the square. Thanks to these enclosed surrounding buildings, the square is a positive space and also its form has a definite shape.

Additionally, Hillier (1984) who is on the same line of thought with Sitte (1889) and Alexander (1977), states that open space is created by buildings. But according to him, surrounding buildings in the square not only compose the open space and constitute the form and shape of the square, but also, create the "syntax" of spaces .

There are also thoughts on how the geometric forms of the squares should be. First one belongs to French (1978) who focuses on centripetal studies. If the space includes a dominated obelisk or statue, this kind of space would have focal point toward the center and hence he calls it as "centric square". "Centrifugal and radial" types of

centric square has dominating axis that “may radiate outward from the center along streets or mall” (French, 1978: 21). In the figure 2.20 below, it is possible to observe the drawings of French on centric squares.

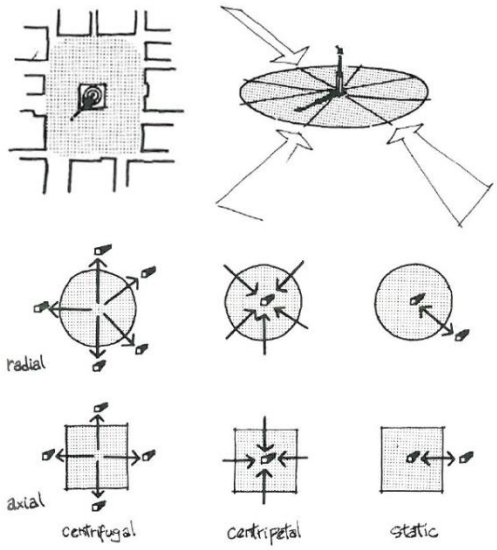


Figure 2.20: Centric types of squares

(Source: French, 1978)

Another leading geometric study is practiced by Krier (1979), and his study has remarkable effects on the literature. He determines the three basic shapes for the square types as “square, circle and triangle”. His main problematic issue is how these shapes are combined with each other. He develops several combinations by using the methods of modulating factors, which are “angling, segmentation, addition, merging, overlapping, or amalgamation”. After these combinations, he defines “regular” or “irregular” forms which can be “open” or “closed” (Figure 2.21). Also, he details the following titles in his textbook on the forms of the squares; intersections of street and squares, rectangular plan type variations, orthogonal plan forms of the squares, triangular squares.

Last geometrical form belongs to Bentley et al. (1985). They mention the importance of more spiral forms, and spatially define these forming “concave nodal space”. The urban squares are the best examples of this shape in their opinion (Figure 2.22). This plan shape results in increasing the legibility of both the buildings and the squares because it provides strong enclosed environment and more defined space (Bentley et al., 1985).

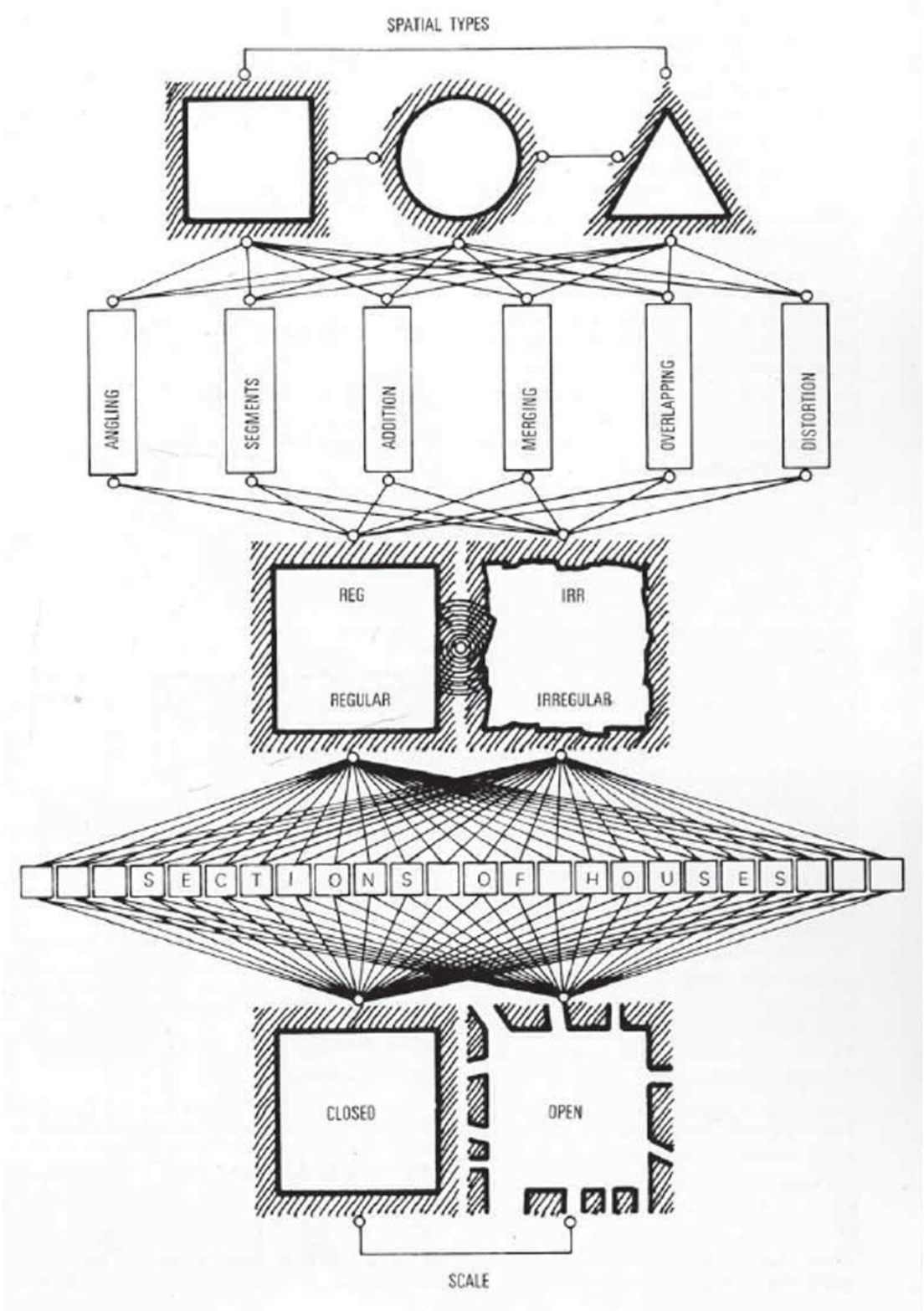


Figure 2.21: Rob Krier's formal diagram

(Source: Krier, 1979)

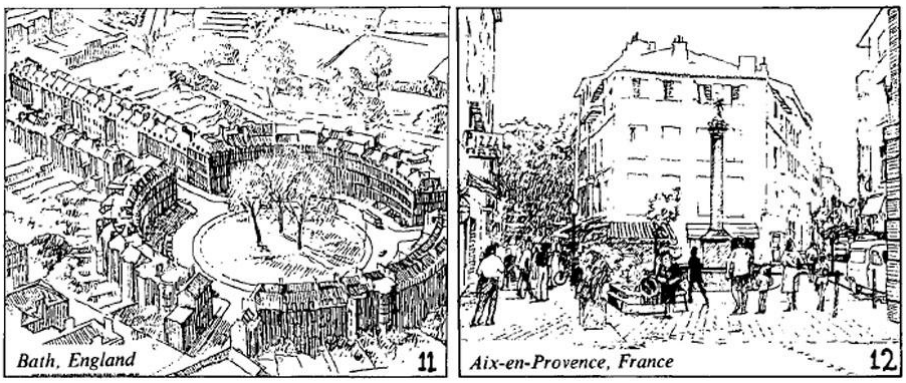


Figure 2.22: An example of concave nodal forms

(Source: Bentley, et al, 1985)

2.2.8. Pedestrian Accessibility

As the urban squares name 'public' suggests they should be accessible to all people. The very first condition of being a successful, preferred, and functional square is being accessible for everyone and particularly without vehicle traffic (Sitte, 1889). Pedestrian density of the squares increases so long as the vehicles "get out of the way of the pedestrian" (Cullen, 1961: 102) because the traffic is not respectful to the pedestrians. Cullen (1961) supports "pedestrian priority" in urban public spaces. He argues that the pedestrian areas must be clearly marked and points to the pavements, and in order to establish the pedestrian priority, the public spaces must be covered with flagstone. Therefore, only pedestrians may make use of the square.

Moreover, Lynch (1981) states that the city elements should strongly relate to each other for being accessible. Once his thought is applied to the squares, the squares are surrounded by the streets from the elements of the city and hence the sidewalks, pedestrian ways and roads inside the square ought to link the surrounding streets directly. In fact the life in the square start at the edges. Furthermore, he handles the squares and the edges from the point of view of visual access. There must be a visual relationship between them and the squares should be certainly visible from the edges (Lynch, 1981). If the access between them is easy, the squares are related to the surrounding environments. The people at the edges of the square may be attracted to this square to which they approached even from afar.

As Lynch (1981), Hillier (1984) has also related accessibility with visibility. Hillier (1984) thinks that if the space promotes full visibility to the users, people may easily recognize and access to the space. He links the terms of visibility and accessibility as "strategy". According to him, if a place inside the square has several access ways towards the edge, this point has high strategic value in the whole system. So, a strategic space has several access points, high density usages, and a good visibility field. Moreover, he claims that strategy is not related to size of the space, even if it is a small one, it would still be better than a bigger one which isn't as accessible (Hillier, 1985).

Lastly, while Gehl (1987) and Marcus & Francis (1997) focus on the good design principles, for them also one of the conditions to be considered as a square is accessibility. One of the biggest handicaps of being considered as a successful square is vehicles. In order to cope with the vehicle traffic and promote pedestrian accessibility, Gehl (1987) coined the following terms: "walking traffic", "pedestrian streams", "sidewalk capacity" and thanks to these terms, the importance of the pedestrians are emphasized. In addition, some physical precautions might be taken in order to increase the pedestrian accessibility. For instance, on the condition that pedestrian accessibility isn't obstructed, if the ground level of the square and level of the surrounding roads are different, this could result in making the square a special place. In addition, the ground floor materials of the squares can be selected specifically for preventing the intrusion of vehicles at the perimeters of the square. Gehl (1987) states that these design solutions are not only to enhance the pedestrian traffic but also to "strengthen the city life" (1987: 19). To put it in other words, accessibility is not only important physically and visually, but most importantly it enables the squares to become comfortable spaces, increases their usage and meets human needs more.

Therefore, public squares are places of citizens that should be accessible to all and completely pedestrian use. There should not be any physical hindrance which restrains people' access to the square. If the square is not accessible, it would be an empty space since it would not be preferred by people. It is frequently cited that the squares, which are considered 'the best' by the scholars are the ones that are completely pedestrianized and have easy links to the surrounding city streets.

2.2.9. Climatic &Temporal Conditions

The other leading criterion is climatic and temporal conditions. Climate changes, different period of the day, sun lights and shades inside the square are significant components of this criterion. Alexander et al., in 1977, is one of the first writers within the selected books to consider the climatic conditions in their *A Pattern Language*. They especially emphasize that the south side of the square, except for the squares in the desert climatic conditions, is more preferred than the north side and they demonstrate with an example that it is true. They said that:

> "The recently built Bank of America building in San Francisco … has its plaza on the north side. At lunchtime, the plaza is empty, and people eat their sandwiches in the street, on the south side where the sun is"
> (Alexander et al., 1977: 514).

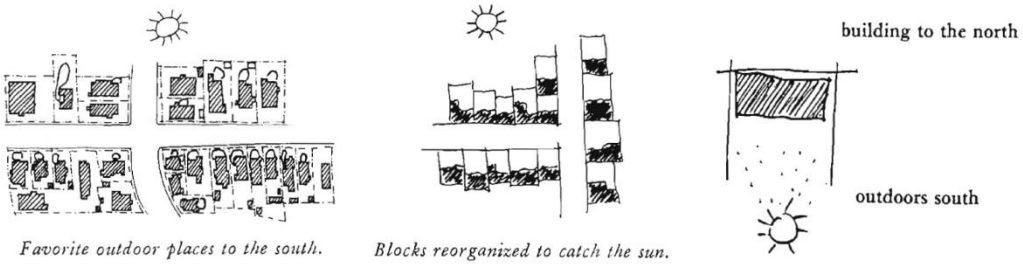


Figure 2.23: Sunny parts of the outdoor place

(Source: Alexander, et. al. 1977)

They advise that the surrounding buildings are usually located on the north side and the squares, as an urban open space, should be on the south. Second consideration belongs to Whyte (1980) who analyzes the temporal conditions hourly in depth. In his textbook, the plaza life is described temporally. He describes like these sentences: The patrons, workers, secretaries, and bosses, generally come to the square in the morning. The activities arrive their peak points at lunch times and go on nearly till 2:00 pm. These two hours are the busiest parts of the day in terms of users and activities. Then, after mid-day, the density of users starts to increase again and they stay on the square for a long time, and this willingness continues until 6:00 – 6:30 pm (Whyte, 1980: 18). Briefly, the peak hours, densities, number of users, and kinds of activities could be acquainted through this kind of daily and hourly detailed analyses by him. In addition,

these results vary in different seasons and weather and so the special days and celebrations affect the results (Whyte, 1980). The chart below exemplifies the temporal and climatic considerations (Figure 2.24).

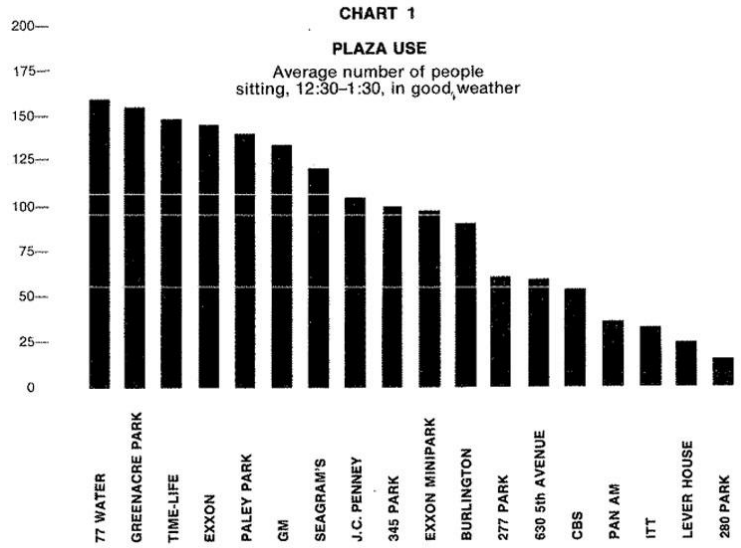


Figure 2.24: An example chart of Whyte's temporal analyses

(Source: Whyte, 1980)

Bentley et al. (1985) analyse microclimatic conditions of the urban space. The degree and direction of the sunlight, shades inside the square, wind speed are the issues of their detailed analyses. Additionally, in their book the term "robustness" is frequently used. This term evokes the meaning of the possibility of various purposes of using a space. If that space is described as "robust" it means that the place is designed successfully. They state that the squares must be "robust"; such that, they should provide the users with various choices and a range of activities even under changing microclimatic conditions (Bentley et al. 1985). Bentley et al. suggest that if the designers should be aware of climatic conditions, more useful squares can be created by some design adjustments, which relate to "building mass, open space width, level changes, and trees" (1985: 75, Figure 2.25). Bentley draws attention to these elements in design process because they have effect on shaded areas and thus the places that are used in the squares. For example, people prefer to sit under the trees in summer on sunny days, if the square is totally open and there is not any shaded area, no one prefers to stand in the middle. The surrounding buildings that could prevent sunlight and enough number of canopies would allow the users to spend time in shade and thus

activities could go on. They also add that these elements should be structured in such a way that in winter they should let the sunlight in (Figure 2.26).

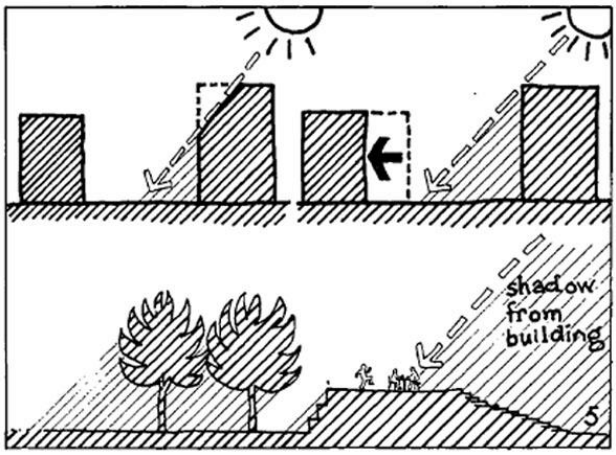


Figure 2.25: Building mass, open space width and trees

(Source: Bentley, 1985)

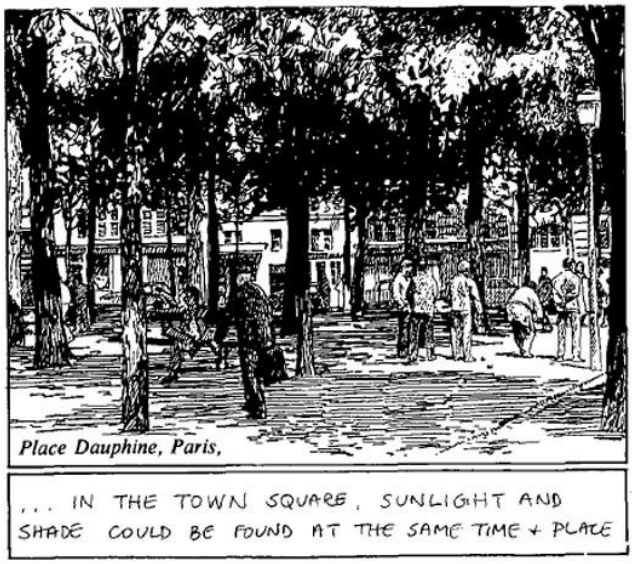


Figure 2.26: Sunlight and shade in the square

(Source: Bentley, 1985)

Moreover, there are two different types of street plazas that are good examples of sun/shade studies, described by Marcus & Francis (1997). The most significant quality of these two is designed by considering the climatic and temporal dimensions. First one is called “the corner sun pocket”. This small plaza is designed to benefit from the sunlight especially in lunchtimes. Secondly, the outdoor lunch plaza is occupied by

take-out restaurants, comfortable furnishings and chairs. As seen, they examine both the issues of climate and usages by considering comfortable climatic conditions. Thanks to these considerations the success of the squares increases. They advice some design solutions which makes the use of the square possible in different times and weather conditions, as well as providing various activities for users. Additionally, according to them, the buildings must be designed in such a way that they allow the sunlight in. Also, they point out the fact that the designers should work closely with the wind experts to make their designs considering the direction of the winds.

Moughtin (1987) directs attention to temporal studies for the sustainability of the outdoor living. He points to the Italian squares as the perfect examples since they adapt well to the changing weather conditions. He emphasizes the importance of the surrounding structures in Italian squares, especially arcades, in protecting the users from bad weather conditions.

As a result, climatic and temporal conditions affect the square multidirectional. When the writers mention this criterion, they always associate it with placement of surrounding buildings, trees, comfortable and temporal design solutions. These solutions are for mitigating negative effects of climatic and temporal conditions. All of these advices should be unique because each square has characteristic climate and different reaction to temporal variation.

2.2.10. Location, Comfort, and Flexibility of the Urban Furniture

Although it is discussed less in the examined textbooks, there are important ideas about how the furniture in the squares should be. Especially they are about location, comfort and flexibility subjects of the urban furniture.

The squares should provide opportunity for various kinds of activities to attract people. They need to be ‘furnished’ by some specific objects to support the activities and liveliness of the square. Cullen (1961) interprets these urban as immovable, because these objects always stand at the same point and people may develop memory of this point as a “rallying point” (1961: 104). Hence, the furniture in the square contributes gathering, integration, and socialization to social life.

Whyte (1980) considers both physical qualities and social comfort of the urban furniture in plazas and mostly focuses on seating facilities. He draws attention that comfortable and correspondingly placed furnitures or structures turn squares into habitable places. These needs and arrangements differ according to the usage in each square. People mostly sit near the amenities such as food, tables, sunlight, shade, trees and also users' choices relate to "sitting up front, in back, to the side, in the sun, in the shade, in groups, off alone" (1980: 28).

Whyte has some significant suggestions to the designers for creating good sitting spaces. He says that the benches should be located parallel to the most active pedestrian flows, by this way, people can both sit and watch the life in the space. Whyte observerations then had surprising results; he realized that all benches were sometimes empty while all users preferred to sit on the steps because they were far away from the traffic (Whyte, 1980). Hence, if the sitting elements are located in wrong places, these elements generally cannot be used. So, people prefer sitting in comfortable places and being close to the lively spots in the urban square.

Due to the fact that people like sitting wherever they want in urban space, flexibility of the objects can promote the popularities of the squares (Whyte, 1980). As Whyte claims that if the square contains chairs, tables, and a buffet it gives rise to an increased success of the square (1980: 62). The fixed elements in a square aren't used at different times in a day for some reasons. For example; in a hot season, people don't prefer sitting on the benches receiving sunlight in the afternoon. Consequently, movable furniture or their flexible installations give people the opportunity to sit wherever they want, thus people can spend more time in the squares.

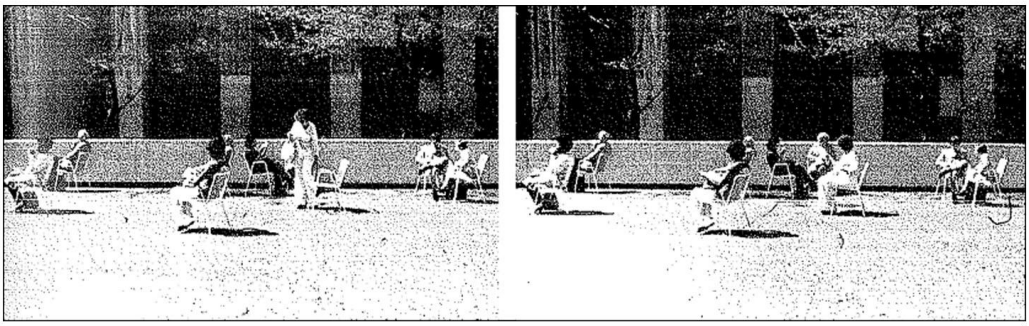


Figure 2.27: Flexible seating objects

(Source: Whyte, 1980)

Bentley et al. (1985) also take into consideration urban furniture. They draw attention to alternative classifications of seating elements. These are called “formal” and “informal or secondary” seating objects. Benches and chairs are formal objects while steps of stairs, low walls, planted surfaces, niches, column bases are secondary seating features of squares. They state that the informal sitting areas are usually more preferred than formal furniture since secondary objects give more chance to enjoy. Like Whyte (1980), Bentley et al. (1985) recommend that seating objects should be arranged in such a way that people can see each other, such as parallel to pedestrian flows, because people enjoy watching other people while they are sitting. We can see below their drawings and Whyte’s ideal dimensions about formal seating (Figure 2.28) and also we see the examples of informal seating in the Figure 2.29.

Marcus & Francis (1997) refer to stationary activities in urban squares. According to them, monuments, fountains, and sculptures succeed in drawing people into the squares. But stationary activities need urban furniture providing “sitting, lying and resting”. In addition, Marcus & Francis mention that the design of the benches are important in order to increase the comfortable sitting activities in squares. Therefore, benches should be ergonomic physically and to be social they should provide many seating opportunities to the users such as seating alone or in groups (Marcus & Francis, 1997). The following picture is the example from their design guides about different usage opportunities of the benches (Figure 2.30). Besides, they have examined other seating elements alternatives other than the benches. According to them, benches are the primary seating elements and the other ones such as mounds of grass, steps with a view, seating walls, planting boxes, and fountain edges, are named secondary elements (1997: 33).

Therefore, benches are the most significant furnitures in the squares. Since the benches are mostly associated with actions of sitting, they should be located in the right place, appropriated to human scale, flexible, and they should be comfortable enough. Comfort is an important factor in using furniture. Whether these objects are comfortable or not changes according to the types of the users, activities and temporality in the square. Consequently this criterion is considerably related with the criteria of ‘users, usage and activity’ and ‘temporal conditions’.

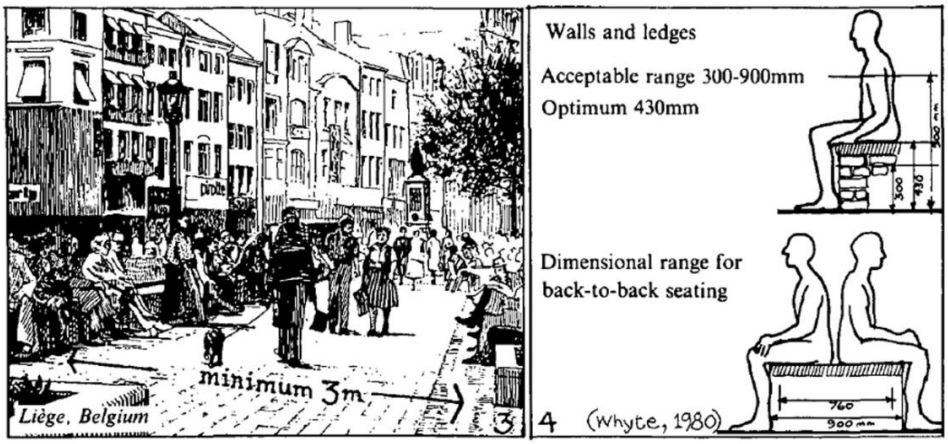


Figure 2.28: Formal seating and Ideal dimensions

(Source: Bentley, et al. 1985)

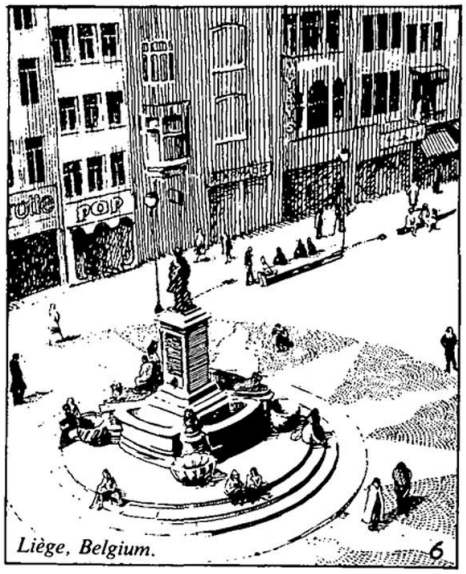


Figure 2.29: Informal seating around the fountain

(Source: Marcus & Francis 1997)

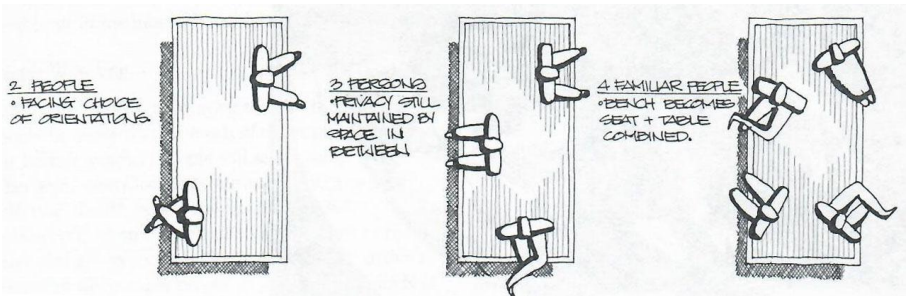


Figure 2.30: Seating opportunities on backless benches

(Source: Marcus & Francis 1997)

As a result, these criteria on urban squares offer a multi-dimensional point of view for evaluating the squares. As we see, some of the researchers focus more on physical or on behavioral qualities of the squares. Some of them examine the functional qualities and also behaviors and activities of users are considered as main issues of the squares. Also, the usage and social life of the squares have been the subject of the almost every author and the studies of urban square. All of these criteria will be examined on four case studies in the next section.

CHAPTER 3

CASE STUDY AND RESEARCH FINDINGS

3.1. Introducing Case Study Areas

This chapter starts with an introduction to the case study areas in the thesis. Four different squares are chosen in İzmir city center as case study areas in order to evaluate them according to ten criteria. These urban sqaures are; Ali Paşa Square, Hatuniye Square, Cumhuriyet Square, and Gündoğdu Square (Figure 3.1). Each of them is located in different areas of İzmir and they have different historical backgrounds. The history of the squares will be briefly explained before analyzing each square.

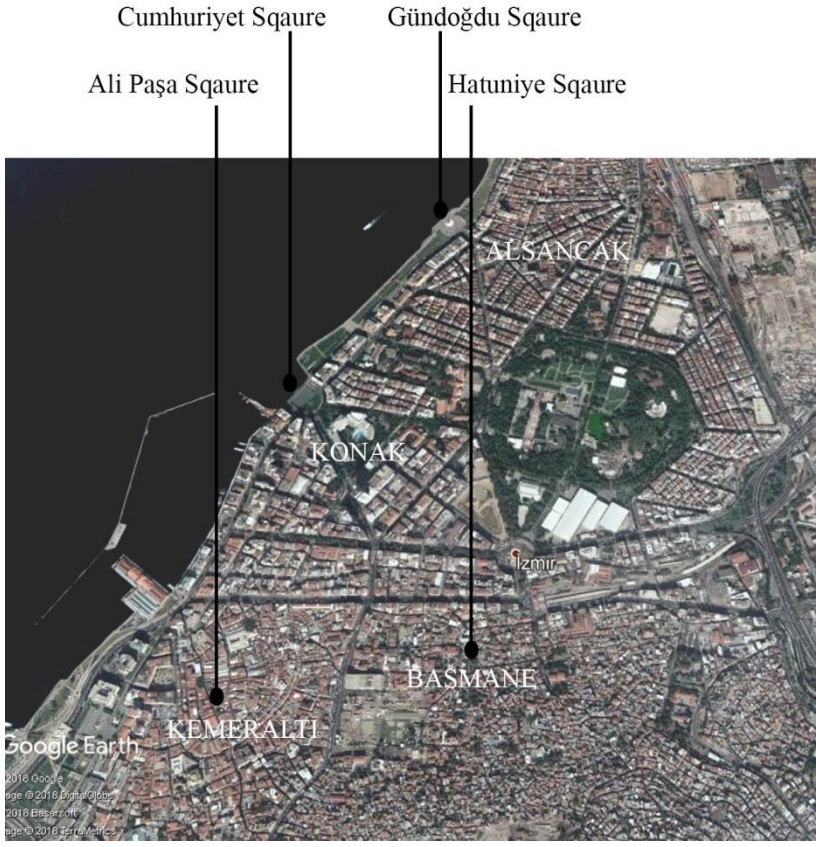


Figure 3.1: Four Squares in İzmir as case study areas

Ali Paşa Square is located in Kemeraltı district, which is the historic market area of İzmir. The square is a significant transition point within Kemeraltı. It has historic fountain in it and the importance of the square is also due to this water structure, which is known to be constructed in the beginning of the 19th century, by Hadji Salih Paşa who was one of the Ottoman grand viziers (Gültekin, 2010). It is known according to its repair inscription that the fountain was restored in 1894 by II. Abdülhamit.

The fountains are generally designed as attachments to the main buildings but the water structures could be designed alone and Ali Paşa Fountain is one of the oldest examples of the water structures standing independently (Gültekin, 2010). The fountain was used to by horse cart makers and repairers in the beginning of the 20th century.

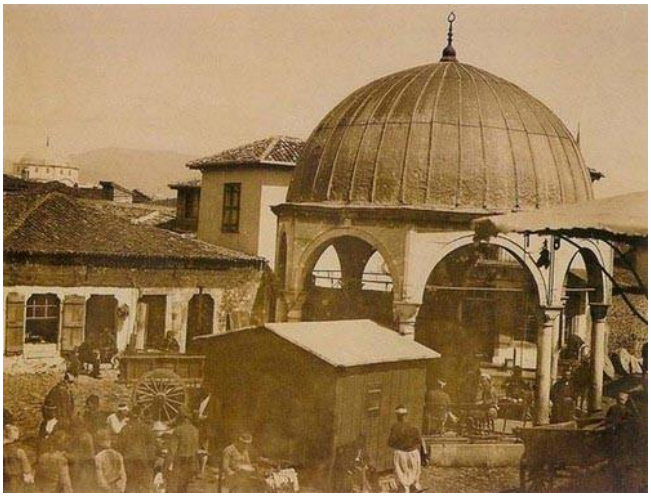


Figure 3.2: Ali Paşa Square and the Fountain in 1890s

(Source: Photographer Rubellin Pere & Fils Smyrna Archive)

Since the use of horse carriages diminished because of modern demands at the end of the 1940s, the square started to loose that use and users. Nevertheless, the square has succeeded to come up to present-day with various usages. Ali Paşa Square and the fountain were restored in 2005 by the İzmir Metropolitan Municipality. Before the restoration the square has turned into complicated space where vehicles were passing through (Figure 3.3). After restoration studies in 2005, the square is equipped with urban furniture and it became a pedestrianized square. Today the square is surrounded by restaurants, and various stores and it is frequented by people who come to the Kemeraltı Bazaar. As it is seen in figure 3.5, today the square is also surrounded by than trees and canopies.

Figure 3.3: A view of Ali Paşa Square before restoration

(Source: İzmir Konak Municipality, 2002)

Figure 3.4: Ali Paşa Square after restoration studies

(Source: İzmir Konak Municipality, 2005)

Figure 3.5: Ali Paşa Square in 2017

The second square of the study is Hatuniye Square, which it is located on the Anafartarlar Street in Basmane district of İzmir. The square accommodates two important historic buildings; Hatuniye Mosque and Döner Taş Fountain. It is known that Hatuniye Mosque was constructed in 1640 by Tayyibe Hatun and Döner Taş Public Fountain was built in 1814 by Seyyid Ismail Rahmi Efendi (Aktepe, 1976). The square is surrounded by Hatuniye Mosque at its eastern side. The square is located between low rise buildings, which belong to the 19th and 20th centuries. It can be said that the square functions as a neighborhood gathering space.

Figure 3.6: Hatuniye Square and its environment 1935s

(Source: Tevfik Paşa Konakları, digital photograph, Tarkem, accessed 7 October 2018, <http://www.tarkem.com/projeler/>)

Additionally there is an important mansion building at the corner of the square and next to the Döner Taş Fountain. This mansion's name is Tevfik Paşa and it was used as hotel building and it has Turkish bath in it. As it is seen in Figure 3.8, its ground floor served as a public café. Today, the mansion becomes a place where refugees stay, and unfortunately the building seems neglected.

The restoration studies of the square was completed by the İzmir Konak Municipality in 2015. After the restoration studies, there have been news published under the title of 'the square takes a breath'. It is designed like a park and currently has trees and benches. Besides, like in oldest usages, the surrounding buildings' ground floors serve as a cafés, which still attract people. On the other hand, the square has gained different users in the last three years. It hosts new comers, and homeless people.

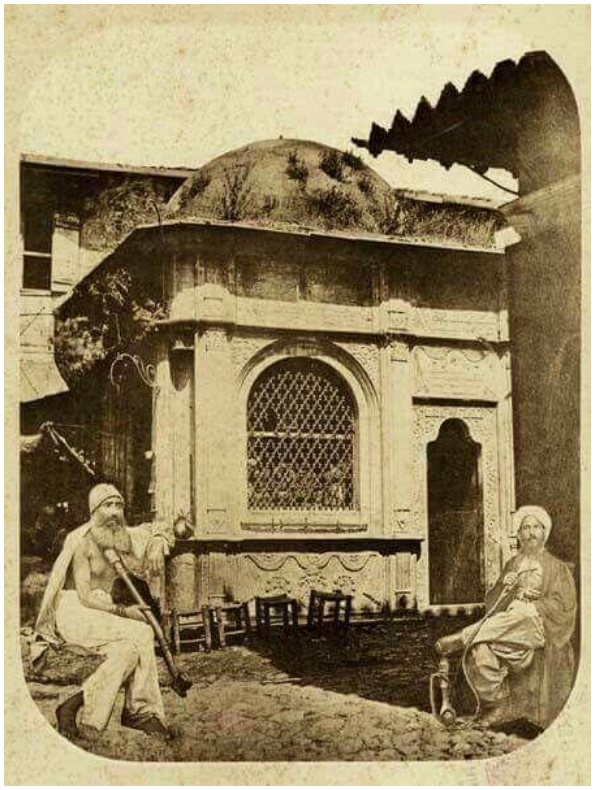


Figure 3.7: Döner Taş Fountain, 1940

(Source: Old Smyrna Postcards Archives)

Figure 3.8: 'Tevfik Paşa Konağı' as surrounding building of Hatuniye Square, 1950s

(Source: Tevfik Paşa Konakları, digital photograph, Tarkem, accessed 7 October 2018, <http://www.tarkem.com/projeler/tevfik-pasa-konagi/>)

Figure 3.9: Before – After photo of Hatuniye Square, 1935-2013

(Source: Photo Exhibition of "Changing Basmane",
Zeren+Mehmet Yasa Photography, 2015, accessed November 2018,
<http://zmyasa.com/personal/degisen-basmane/>)

The third square of the study is Cumhuriyet Square. It is located Konak district in İzmir. In 1923 by new Republican state understanding, urban public spaces began to change in line with this ideology. The city plan of İzmir was re-planned by Ren and Raymond Brothers in 1924. The new developed geometrical plan based on various symmetrical boulevards and radial roads and the squares, which were located at the intersection of the boulevards. Cumhuriyet Square is one of the prominent spaces in this planning. Its construction was completed in 1932. Also, it includes significant monument portraying Mustafa Kemal Atatürk which is designed by Italian sculptor Pietro Canonica. Due to the statue the square is sometimes called by different names like, 'Gazi Monument' or'Gazi Park'.

Figure 3.10: The monument of Cumhuriyet Square circa 1933

(Source: Views of Konak and Alsancak in the 20th century,
Levanten Heritage Foundations, accessed 1 November 2018,
http://levantineheritage.com/alsancak.htm)

Figure 3.11: Cumhuriyet Square with the La Centrale School in the distance
(Source: Views of Konak and Alsancak in the 20th century, archive photograph, Levanten Heritage Foundations, accessed 1 November 2018, <http://levantineheritage.com/alsancak.htm>)

Figure 3.12: The view of Cumhuriyet Square in 1960s (left) and 1970s (right)
(Source: Old Smyrna Poscards Archives)

Figure 3.13: A celebration in Cumhuriyet Square in 1930s (left) and today (right)

As it is seen in the figures, although its form is preserved, the environment of the Cumhuriyet square has undergone various changing. Some important buildings around it were destroyed while over time it is surrounded the new buildings as the most important one is ‘Swissotel Grand Efes İzmir’. Cumhuriyet Square has always been the public space where celebrations, official ceremonies and protests take place (Figure 3.13).

The last square of this study is Gündoğdu Square. It is located in on the Kordon Promenade, in Alsancak district of İzmir and also it is the one of the biggest squares in the city. Filling the coast in 1999 created the square, which was designed by the collaboration of Ersen Gürsel and Ferit Özşen in 2003. It is part of the recreational space of the city. It has important monument in it, which is called ‘Cumhuriyet Ağacı’. Moreover, Gündoğdu Square is used by both large scale public activities and more personal activities. The important celebrations, demonstrations, and meetings in city are generally performed in Gündoğdu Square. Also, it gives chance to more daily activities and people prefer the square in order to relax and gather.

Figure 3.14: The view of Gündoğdu Square 1950s
(Source: Old Smyrna Photo Archives)

Figure 3.15: A meeting in Gündoğdu Square

(Source: Ege Postası, 2016)

Figure 3.16: Gündoğdu Square at sunset

3.2. Analyses of Four Cases According to Ten Criteria

3.2.1. Analysis of Ali Paşa Square

Pedestrian Accessibility:

Ali Paşa square is located on 863th street in the Kemeraltı district in İzmir. It is in close proximity to some bus, ferry and metro stations. It has a convenient location. People can reach the square on foot from Konak Square, Konak ferry station, Konak metro station, and also Konak, and Mezarlık Başı bus stations within 10 minutes (Figure 3.17). Overall, it wouldn't be wrong to mention that Ali Paşa Square is accessible to all people from various directions.

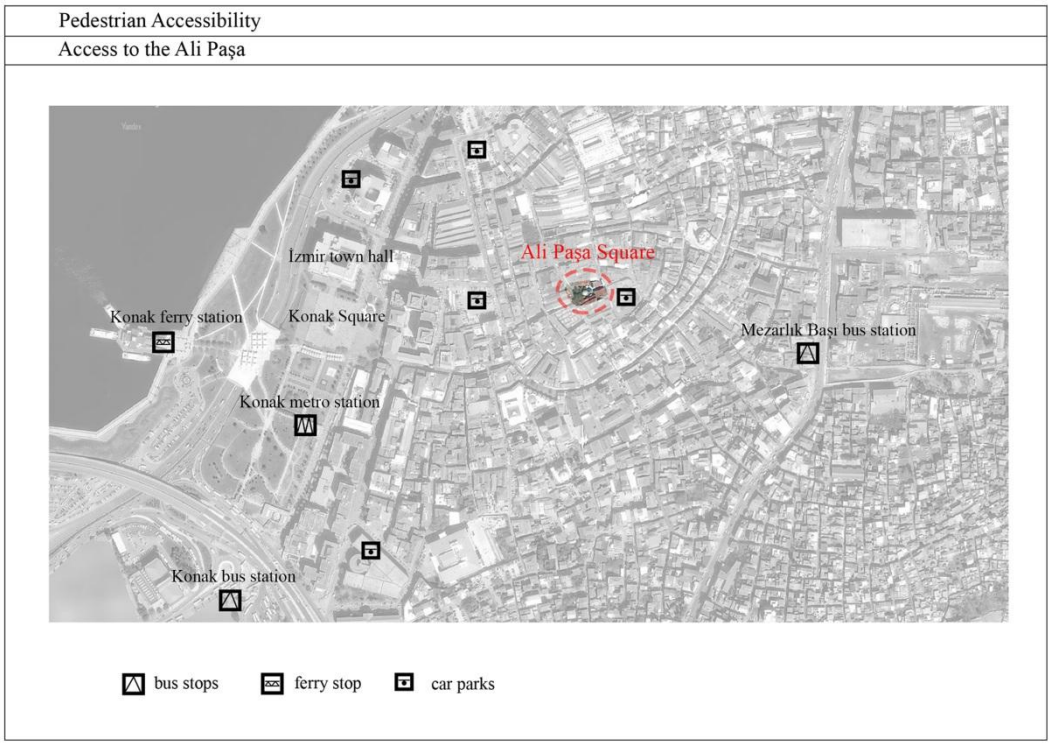


Figure 3.17: Access to Ali Paşa Square

The square is closed to vehicle traffic; therefore, the pedestrians can enjoy the square without having the stress of traffic and disturbance of vehicles (Sitte, 1889). As it could be seen in Figure 3.18, there are three pedestrian entrances in the square. Its sidewalks and walkways directly connect to the surrounding streets. Thus, it is a

strategic space because linking walkways between the square and the streets are easy to locate and comfortable to walk through (Hillier, 1984). Ali Paşa Square is also easily visible from the edge of the square. In other words, people could easily access the square visually from the edge (Lynch, 1981).

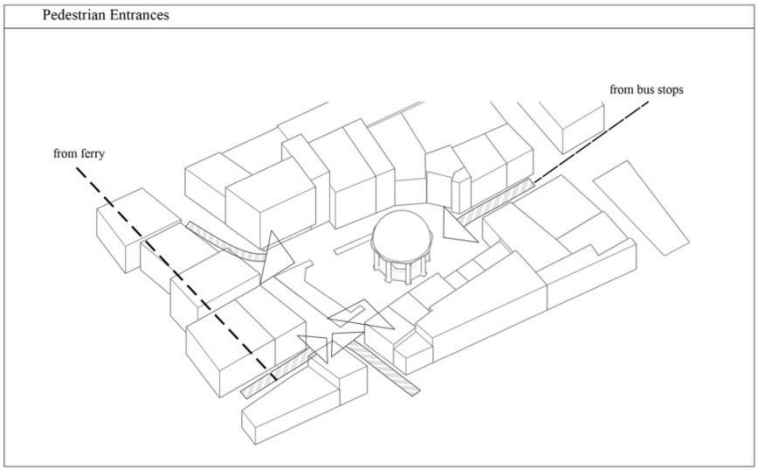


Figure 3.18: Pedestrian Entrances of Ali Paşa Square

Additionally, the square is accessible by disabled people. There is no level difference in the square except for the fountain's floor that is twenty centimeters higher than the street level. Therefore, it offers comfortable urban space with regards to accessibility to all citizens.

Size:

In terms of the size, Ali Paşa is the smallest square in this study. Its length is 27 meters and width is almost 17 meters.

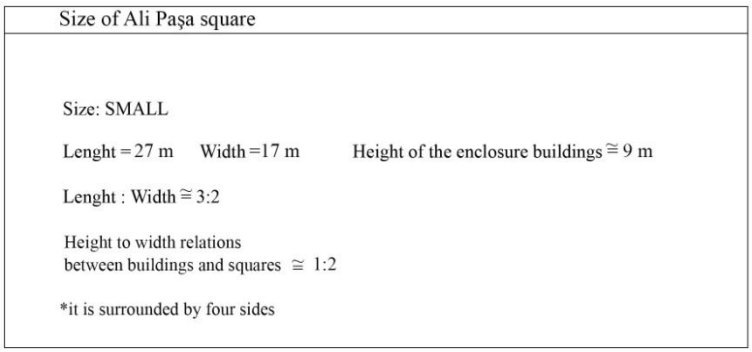


Figure 3.19: Size of Ali Paşa Square

In order to evaluate the size of Ali Paşa Square, it is important to revisit the ideas of the earlier mentioned prominent writers. Its inner short direction is between 45-60 feet (13-19 meter) (Alexander et al., 1977) and its size is suitable to Lynch's (1981) ideal size of small square definition that is 12-24 meters. As Bentley (1985) refers to the height of the trees in his study, it is important to consider the size of the trees in urban squares. There are group of trees in the square and they are 2.5 meters higher than the ground level (Bentley et al., 1985). Therefore, the trees of Ali Paşa become one of the important elements of the square. According to literature studies, there are significant ratios about length to width and height to width of a square. Ali Paşa Square's length to width ratio is 3:2 and also its height to width is 1:2. The ideal dimensions of height to width are defined in the textbooks generally between 1:2 and 1:3 and Ali Paşa's height to width ratio is completely adheres to the ideal enclosure dimensions especially it is coherent with Sitte's ideal dimensions. Moreover, Gehl (1987) states different ideal dimensions in order to realizing the activities and behaviors of the users from a certain distance. When people stand or sit in the Ali Paşa Square, everyone can distinguish each other facial expressions in detail because of the close distance of the square.

Square Types According to Plan Shapes:

There are two forms in the Ali Paşa Square (Figure 3.20). The first one is smaller. It is the inner form of the square that is surrounded by trees and plants. The second form is bigger and defined by both the surrounding buildings and trees.

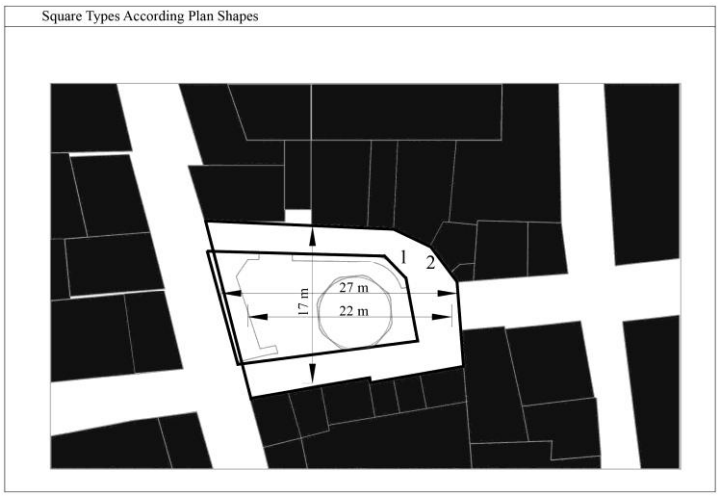


Figure 3.20: Plan shapes of Ali Paşa Square

Ali Paşa's square type is suitable to the closed square of Zucker (1959) because the square is interrupted by only the streets opening to it and it is also surrounded by a group of repeated buildings. The surrounding enclosed buildings and the trees on the edge of the square determine the shape of the square. It could be said based on Hillier's (1984) ideas that the syntax of buildings in the square constitutes the form of the square. In addition, buildings create regular open space and offer a definite shape to the square. So, Ali Paşa square is a positive open space (Alexander, 1977). If we talk about its geometrical shape considering Krier's (1979) typology, its form is the combination of square and rectangular shapes and also it has a regular shape.

Enclosure:

Degrees of Enclosure:

Due to the fact that Ali Paşa is a closed square and positive urban space, it strongly performs an enclosed character. Its height to width ratio is 1:2. According to some normative studies in the literature, this rate is considered to be the best rate of enclosure. When people stand inside the square, they perceive the open space as a small cozy room that physically surrounds them. In addition to this physical enclosure, the square gives the feeling of visual enclosure through the surrounding elements. Therefore, it provides a 'closed vista' (Sitte, 1889; Cullen, 1961) to the users. Furthermore, this outdoor room is bounded by various architectural elements. Surrounding buildings, trees, streets and the fountain constitute the enclosed character of Ali Paşa together. Thus, these elements strengthen the sense of enclosure and boundaries of the square.

According to Trancik's ideas (1986), since this square is a hard space, its boundaries are definite physically. The whereabouts of the square is easily perceived by the users without needing any indicators. Moreover, architectural qualities of buildings' facades and ground floors increase the sense of enclosure within the square. Since most of the buildings in Ali Paşa have 'active ground' floors physically, visually and socially, its enclosure is enhanced. The characteristics of surrounding walls affect the enclosed properties of the square as the buildings' facades have various architectural qualities that allow interact between the square and the buildings. Some surfaces are totally

transparent with windows, some have opaque walls or some are open with doors (Figure 3.24). Hence these surface qualities cause the spread of eating facilities toward the square and increase the interrelation of the square and the surrounding environments.

If we evaluate the corners of the square with regard to degrees of enclosure like Moughtin (1999), it could be said that there are enough close spaces to provide enclosure and enough corners for separating the blocks. Additionally, in order to understand the height of the roof line of buildings in a three dimensional framework, proportions of height to width should be considered for degrees of enclosure. The sections of the square are useful in relations of height to width and one can see the section of Ali Paşa in figure 3.22. There are different degrees at an angle of 24, 45 and 20. The angle of 24 and 20 give the same feeling to the users. When the users stand inside the square, they could easily perceive the environment and surrounding buildings at these angles (Sitte, 1889; Moughtin, 1999). There is only one high building in the square and as we can see the section of the square height to width angle is 45 in this point that is not proper to ideal angle to enclosing relations. Hence it is difficult to see this building and there is no relation between this building and the squares. But other buildings that are lower and the square have very high enclosed relations as visually, physically and socially. Besides, trees and the surrounding planted surfaces contribute to increasing the sense of enclosure in the square.

Enclosing Boundary Elements (Buildings & Structure)

Ali Paşa square has a strong relationship with its surrounding environment. Two and three high buildings enclose the square from the north and south side, the trees higher than four meters surround the square in south side. Additionally, in the west side, it has narrow street openings coming from historical shopping center (Figure 3.21).

As we see figure 3.23, buildings have continuous facades and are not freestanding, they join each other (Sitte, 1889). Surrounding structures, trees and also plants in the square are connected with each other and so the square has an architectural unity.

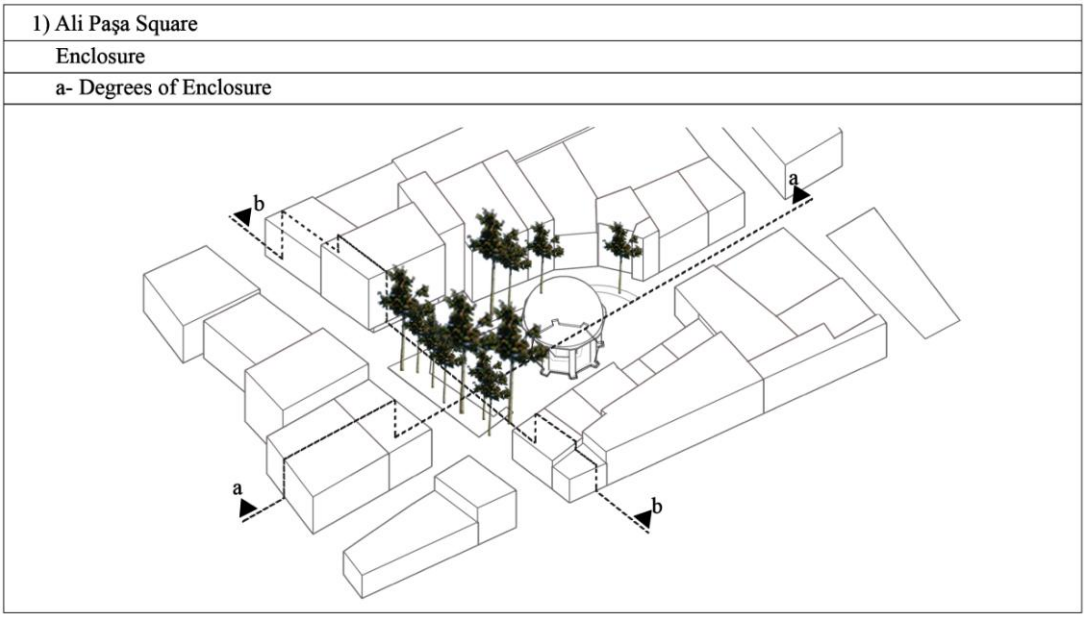


Figure 3.21: Degrees of enclosure in Ali Paşa Square

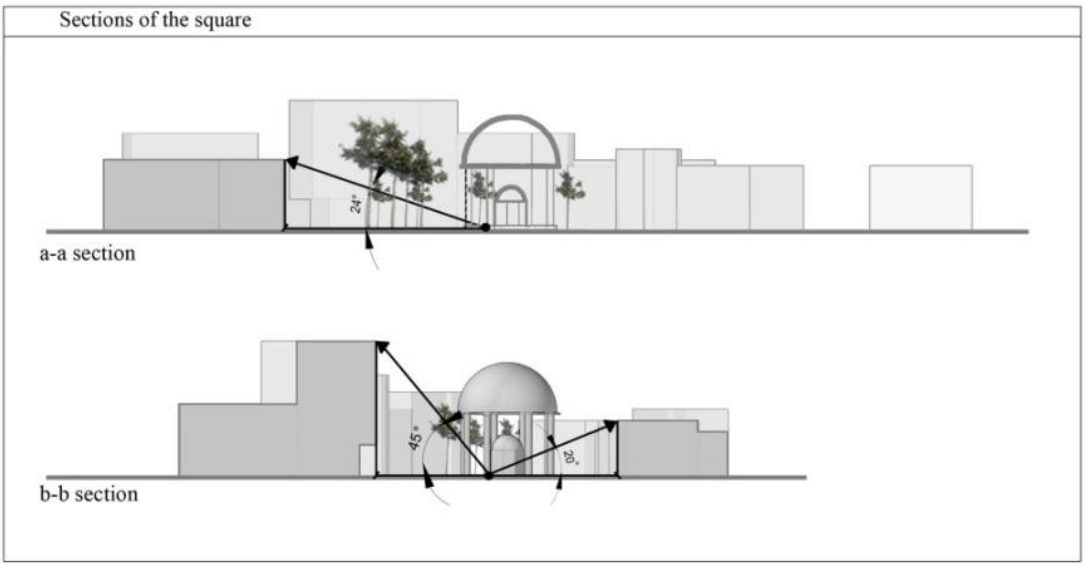
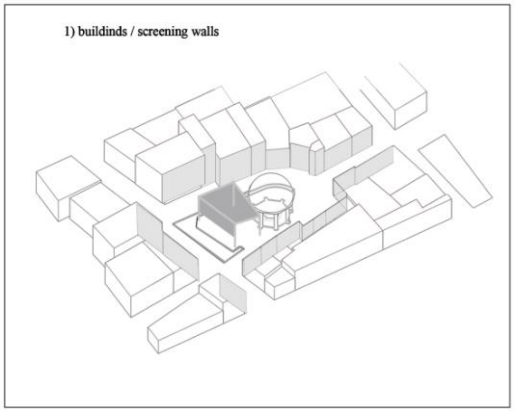
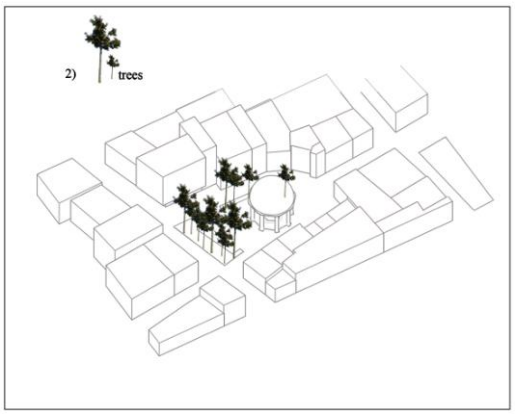


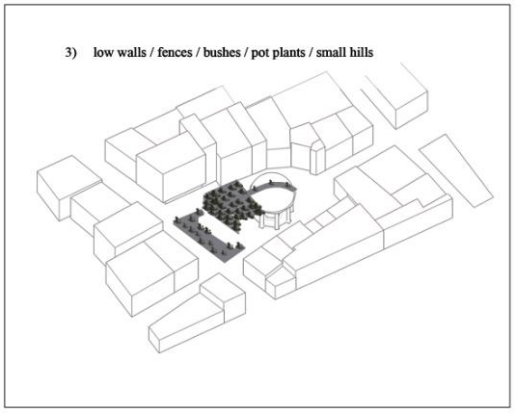
Figure 3.22: Sections of Ali Paşa Square



Initially, we can see enclosed facades of buildings connect to each other offering continuous surface and hence the square is properly enclosed by buildings. Except from buildings, there is a screening wall inside the square that consists of plants. The hanging plants act as ceiling of the square and this planted structure strengthens the enclosure of the square.



The trees enclose the east side of the square; they provide a back to the people who sit in the square. Shades, bodies and densities of trees are efficient all together in enclosure so they divide in and out of the square even visually.



Plants, low fences, and bushes provide a boundary to the square. There is also an aerial structure that consists of plants in Ali Paşa. These climbing plants act as awnings and help the square to be perceived as a room.

Figure 3.23: Enclosing elements of Ali Paşa Square

Edge, Center & Corner

Corners of surrounding buildings could be indicated as the edges of the square. Since the buildings' ground floors have strong relationships with the square, they succeed to attract people inside the square by creating pockets of activity (Alexander et al., 1977). According to Trancik (1986) architectural qualities of surrounding facades are significant to understand the edge of the square. The facade qualities of buildings can be seen in figure 3.24. The solid low walls, transparent and opaque surfaces such as

the windows of the shops are the factors increasing the relationship between the users and the square. Also, the restaurants' tables and chairs increase the interactions at the edge of the square because it creates crowded and integrated spaces (Hillier, 1984). Besides, as it is seen in figure 3.24, the plants and trees in the square act as an edge of the square. Together, they define the borders and edges of the square with the surrounding buildings.

The center is filled with a fountain; 'disturbed by the fountain' as Sitte would describe it. The fountain at Ali Paşa is not actively used. It is rather rarely used by the users and by the shop owners in the surrounding buildings. They tend to use the fountain for supplying the daily water necessities. More importantly, though, the fountain became the symbol of the square in time. Therefore, its center represents the historical facet of the square.

Whyte (1980) considers street corners as 'transfer and junction' spaces. From this point of view, there are some benches out of the square and these are placed toward the street. These benches act as a street corner of the square because people perform certain activities such as waiting for each other, and "prolong goodbye" (1980: 32) in these places. Therefore, the square life starts at the edge.

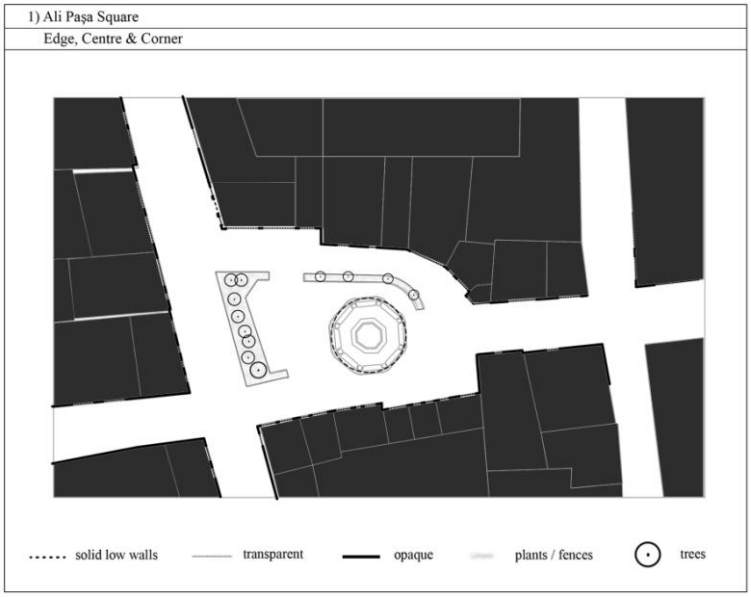


Figure 3.24: Surface qualities of surrounding walls in Ali Paşa Square

View from the Square and View of the Square:

View from the Square / Openings:

The enclosed character of Ali Paşa offers a closed vista to the users that can provide an inner view to watch the life in the midst of the square. People don't easily notice outside of the square since it is surrounded by structures such as buildings, trees, and plants. Therefore, users can feel the square as a private urban space that differs from the street. Although it offers a closed vista, it doesn't provide a great vista because the fountain in the square prevents looking in a larger view. In addition, trees also act as a back protection when the users sit on the benches and watch what goes on in the square (Alexander et al., 1977). Furthermore, this private place creates Cullen's concepts of 'here' and 'there'. When we look out of the enclosed square, people perceive the square as 'here' and out of square is perceived as 'there'. If we stand in the middle of the square and look outside of the square, there would be three important points which are shown in figure 3.25.

View of the Square / Approach:

There is only one street, which directly opens to the square and additionally there are two entrances from the corners of the square (number 5 and 2). People can approach to the square from entrances number 1, 3, 4, or 6 (Figure 3.27). The square isn't perceived while people are walking toward it on the street, which is numbered above as 1. However, the square's canopies continue along the street signaling the walking users that they approach a different atmosphere. These canopies have fabric materials and these are provided by surrounding restaurants since they have their tables out in the square and even towards the streets. When the users turn right on number one, there are continuous pedestrian ways and tables on both sides of this way (number 2). When the users approach the street number 3, the first thing they see is the fountain in the middle of the square. Additionally, the awnings of the square, the stands of the stores, the tables and chairs of the cafés are visible on right and left side. What makes this street especially important for the square is that the historical fountain is perceived at a certain distance directly from this street, thus attracting tourists and citizens to visit the square.

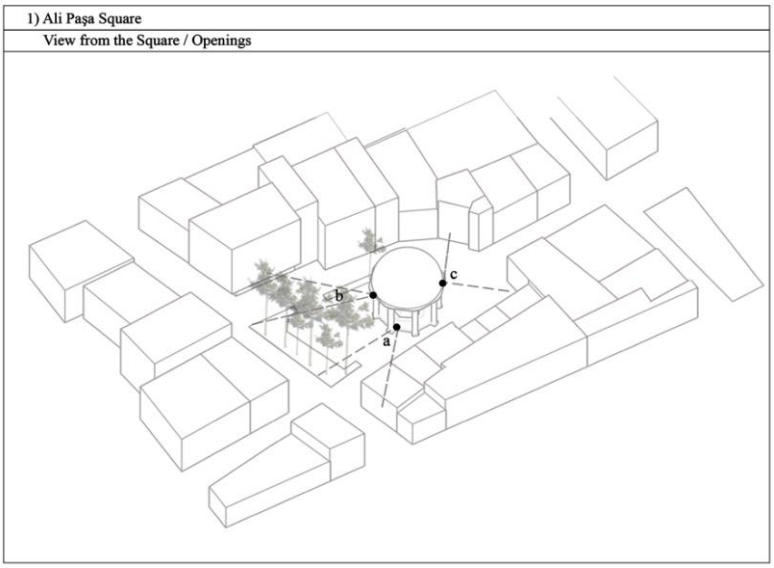


Figure 3.25: Outside views from Ali Paşa Square

a: The tables of restaurants and corners of enclosed buildings are seen. There is a street opening and the most crowded pedestrian artery in this direction.

b: This is directly from inside the square. Benches and also the surrounding buildings are visible in the background.

c: At the first glance, tables of the restaurants and a street opening are visible in the background.

Figure 3.26: Photos of Ali Paşa Square towards the outside

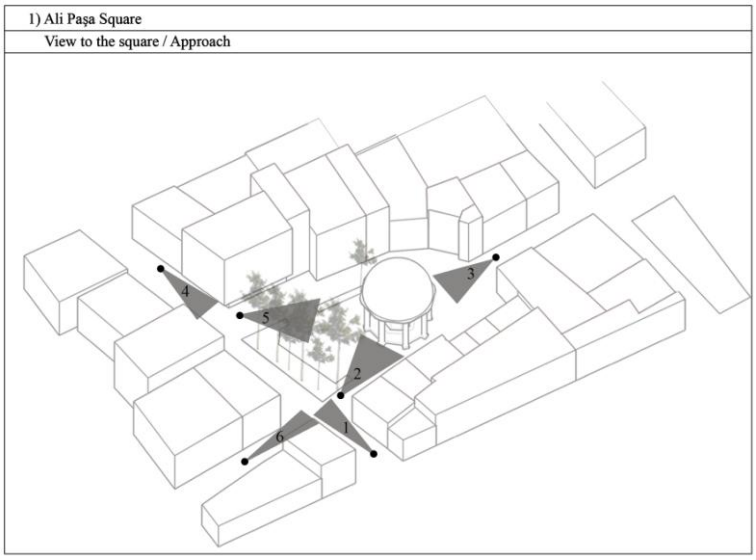


Figure 3.27: Approach to Ali Paşa Square

Therefore, according to Ching's (1979) words, 3rd street has frontal approach. The visual scene is clear on this street because it has linear and axial effects (Hillier, 1984). If the users prefer to approach the square on the fourth street, the first things to be seen are the trees. When users come to the point which is marked as number 5, the fountain is perceived from an angle and thus number 5 can be considered as an oblique approach (Ching, 1979). Furthermore, the square cannot be seen from the number 6, yet, when the users come closer to the square, trees and tables of restaurants start to be visible. Each approaching point is seen in below (Figure 3.28).

Figure 3.28: Photos of Ali Paşa Square from outside

Elements in & Surface of the Square:

Monuments in the Square:

The center of square is filled with a monument so it is not an empty square. There is the historical fountain in the center, which is shown in figure 3.29. It belongs to 19th century thus constantly reminding the users that the square is a historical area. Hacı Salih Paşa and Ahmet Reşit Efendi are the two individuals known as the builders of this square. The fountain is restored in 2005. Besides being a historical attraction, the fountain also creates a focal point providing a visual attraction to the people when they approach the square. It technically consists of three parts as dome, columns and fountain. Its dome is covered with leading material and other parts are covered with stone.

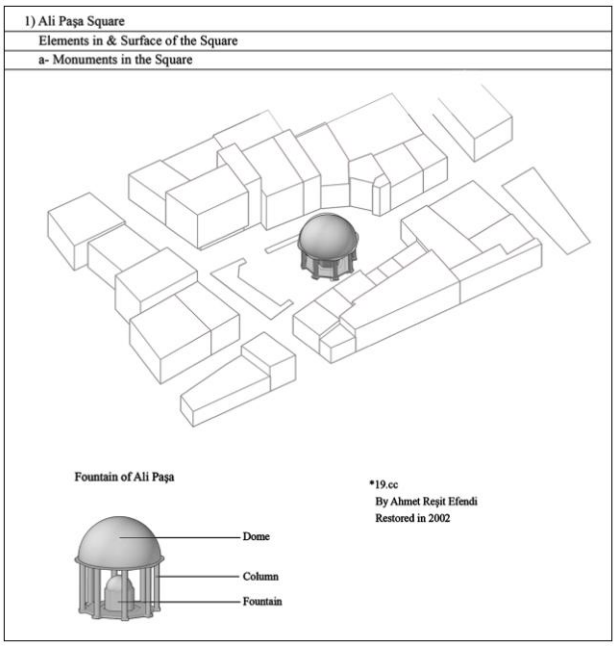


Figure 3.29: Monument of Ali Paşa Square

Figure 3.30: Fountain of Ali Paşa Square

Surface of the Square:

The square has both hard surfaces and soft surfaces (Trancik, 1986); the percentage of hard surfaces is higher than soft surfaces. Hard surfaces contain varying floor materials in the square. The surrounding streets, pedestrian ways and inside of the square are covered with historical cobblestones. The streets outside the square are paved with asphalt. On the other hand, the fountain's floorscape is a mixture of stone and marble. Moreover, there are also soft surfaces in it; all of these are shown below in figure 3.31.

Figure 3.31: Floorscape of Ali Paşa Square

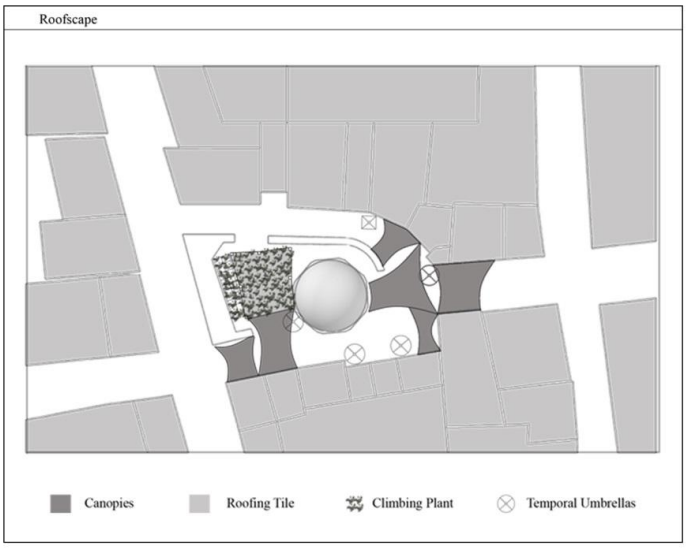


Figure 3.32: Roofscape of Ali Paşa Square

Additionally, figure 3.32 shows the material qualities of the roofscape. The roofs of the surrounding buildings are made of roofing tile and therefore their roofline has the same pattern. Canopies of restaurants, which are made by stretching fabric materials are one of the primary roofscape elements of the square. Temporal umbrellas contribute to the variety of the square's roofscape. There are also climbing plants in front of the trees. The climbing plants are placed on the grid structure of the square that consists of thick columns and beams. As we see in figure 3.32, the planting structure provides diversity in terms of roofing materials of the square.

Location, Comfort, and Flexibility of the Urban Furniture:

Ali Paşa is a furnished square (Figure 3.33). There are seven benches within the square and four benches outside of it, providing a formal seating. In addition to benches, tables of restaurants are urban furniture of Ali Paşa. They are placed every morning except when there is an adverse weather condition. When there is a shortage in most crowded times, tables are added towards the square upon request thus the each side of the square is filled with tables and chairs in those times. Also, the chairs around the fountain are generally used by shopkeepers of surrounding stores when they have a break from their work. Distinctively, there is also informal seating in the square. Users can act freely and create their peculiar seating areas such as on the grass and steps of the monument.

Figure 3.33: Urban furniture in Ali Paşa Square

Users prefer to sit on the benches of the square at different times of the day. Especially elderly people sit and watch everyday life in Ali Paşa while people pass by.

Some people use the benches for sleeping or lying down. Shady benches are more useful for them.

The refugee children, who are paper collectors, prefer to sit between trees and shady areas. It is a kind of informal seating of the square.

People also prefer to sit on the steps of the fountain. As seen in the picture, creating a peculiar place for their privacy is important for some users.

Figure 3.34: Seating styles in Ali Paşa Square

Climatic & Temporal Conditions:

The analyses of Ali Paşa Square are performed between the dates of 09.05.2016 and 15.05.2016. The temperature was nearly 25° C in day time and it is 15° C at night. Trees, canopies and climbing plants provide quite a few shading areas to the users. Morning and evening sun / shade diagrams are shown below (Figure 3.35). Except for the stores on the north side, the centre of the square is mostly shady in the mornings. In the afternoon, the sun comes from the West toward the fountain. It is observed that since the benches on the corner of the square are sunny in the afternoons, people couldn't prefer these benches in these times. In addition, sun shade umbrellas are used in the evenings by the surrounding restaurants in order to create comfortable and cool seating areas for their customers.

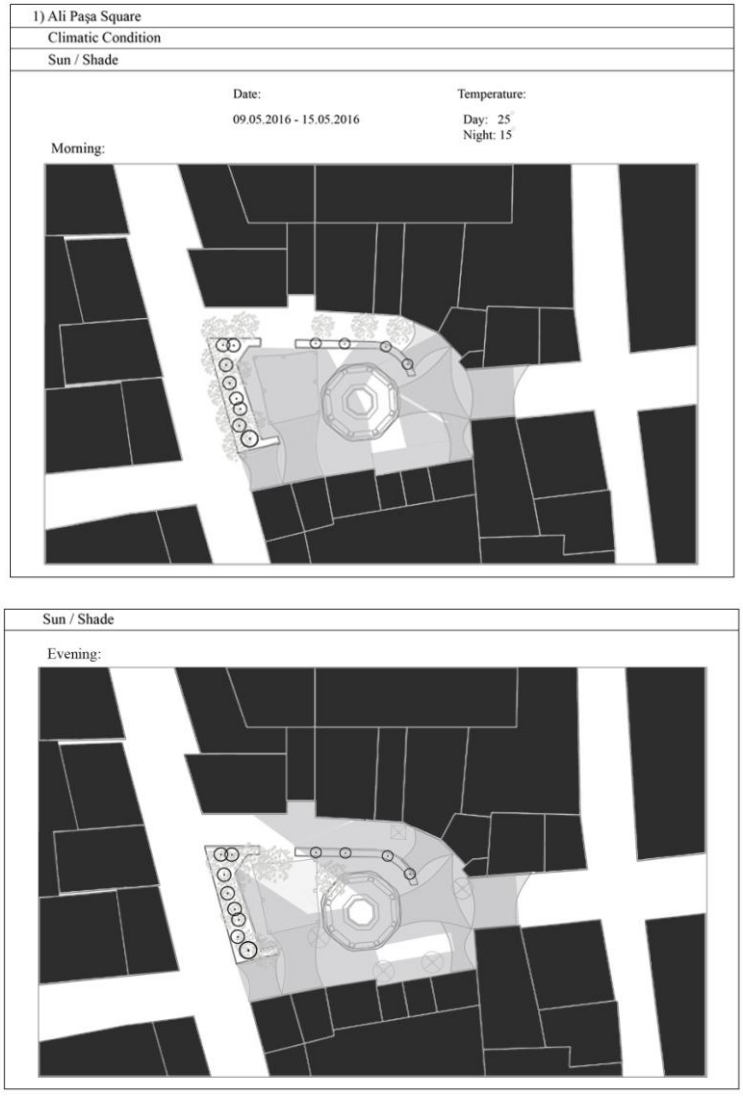


Figure 3.35: Sun/shade diagrams of Ali Paşa Square

It wouldn’t be wrong to say that the owners and employees of the surrounding restaurants keep the square lively by finding temporal solutions such as awnings, umbrellas, and climbing plants. Thanks to these temporal solutions, the square has lots of shady spaces, and hence it provides that a suitable, convenient and comfortable place to users.

Users, Usage & Activity:

Ali Paşa square hosts various kinds of people like shoppers, elderly, students, vendors, shopkeepers and also passer-bys during the day. Tourists rarely visit Ali Paşa square but when they are around the square, the fountain succeeds to attract them towards the square. Additionally, there are famous restaurants on the ground floors of the enclosing buildings as they have a role to animate the square. These stores are mainly Manisa Kebapçısı, Ali Paşa Dönercisi, the small stationery and the hardware store. Shop owners of stores are stationary users of the square.

Vendors walk around between the tables of restaurants as they try to sell their products. Surrounding workers, waiters and vendors sometimes have a kindly relationship but beggars are unwanted users of the square.

Figure 3.36: Vendors in Ali Paşa Square

Moreover, the square starts the day with restaurant owners and workers at 7 am. Every store is generally opened until 9 am. The hardware store is the only store which is opened later. Restaurant employees start preparations with cleaning, sweeping and watering in front of their own stores. As we understand, each store is responsible from their space. This way, they constitute their own territories within the square. If the weather is good, the tables and chairs are put in the square until 9 am then other stores start to place their counters.

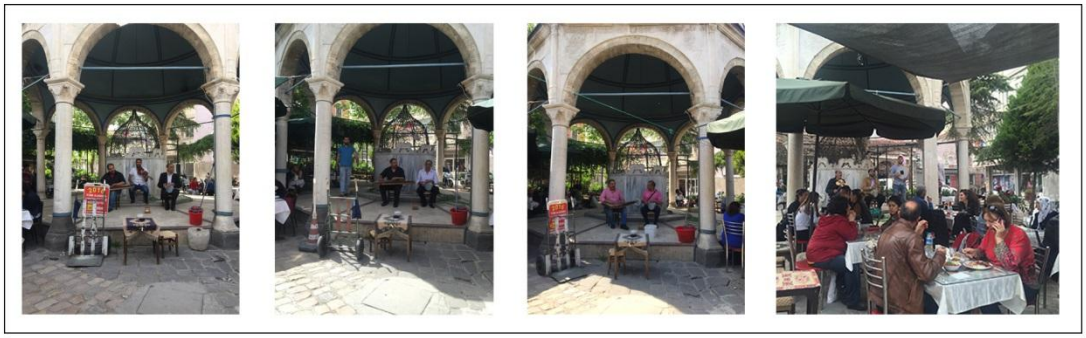
A refugee man and his children are frequent users of Ali Paşa. After they collect papers in Kemeraltı district, they meet at this edge. Therefore, the edge of the square becomes their working space.

Figure 3.37: Paper collectors as constant users

Firstly, restaurant workers clean the square and then they place the tables and chairs for lunch time.

Figure 3.38: Morning usages of Ali Paşa Square

Meanwhile, streets surrounding the square are often used by people going to their work. After preparations of restaurants and stores, the square is generally quiet until the lunch time. The usages of the square increases after 12 pm since many people in Kemeraltı prefer to go to Ali Paşa Square to have lunch. The numbers of passer-bys on the surrounding pavements also increase nearly at 12 pm. After eating at the surrounding restaurants, some people, especially elderly men, want to stay in the square and spent some time by sitting on the benches and observing their surroundings. Although generally there isn't any special activity in the square, musicians contribute to enriching the atmosphere of the square especially in the afternoon after 2 pm, the square is animated by musicians as users of the square. They usually sit inside the fountain and play for people.



Musicians play in order to entertain the people and in return they earn money. They prefer to sit in the fountain for their special activities.

Figure 3.39: Musicians of Ali Paşa Square

The fountain actually doesn't have any active usages but occasionally someone uses it for water needs. Families generally stop in the fountain and wash their children's hands. Also, on Fridays, men often use the fountain for performing ablution for Friday prayers.

Figure 3.40: Usage of Ali Paşa Fountain

Usages of benches are significant for sitting and relaxing activities. The benches are generally used in the afternoon and also generally elderly men sit on the benches. Some people even prefer to lie down on the benches.

Figure 3.41: Usages of benches in Ali Paşa Square

The usage of pedestrian ways again increase after 5 pm because this time is the start of the rush hours for users such as exit times of schools and works. Activities in the square are nearly over by 8 pm on weekdays because surrounding restaurants close at this time. Furthermore, the most crowded day of the square is Saturday if the weather is good. People prefer to go to Kemeraltı on Saturdays, as their free days for shopping; wandering, or eating something out. Many people choose to eat in Manisa Kebapçısı and Ali Paşa Dönercisi in Ali Paşa Square. Also, many people come to the square in order to shop at the hardware store.

These photos are examples of a Saturday usage. All tables and chairs of restaurants are full of people. All benches are also full of people sitting and watching the surrounding activities. Also, some people especially women shop from surrounding stores.

Figure 3.42: Saturday usages of Ali Paşa Square

However, the life in the square pauses on Sundays because all the stores are closed. It is the most stagnant day of Ali Paşa Square. Only the hardware store opens on Sundays at the square.

The square is quiet on Sundays in contrast to other days. A few families with children, single people, and couples prefer to sit on the benches. Children can enjoy the square more on Sundays rather than the crowded days. Also, some vendors can place their counters at the edge since the restaurants close.

Figure 3.43: Sunday usages of Ali Paşa Square

To sum up, Ali Paşa has strong enclosure since it gives the sense of a room to the users (Sitte, 1889). Examining the activities that are performed in this room is therefore quite significant. Most of the buildings in Ali Paşa have active ground floors and their openings, doors and also commodity stands, tables and chairs of restaurants increase the interaction of the square physically and socially.

3.2.2. Analysis of Hatuniye Square

Pedestrian Accessibility:

Hatuniye Square is located in Anafartalar, Basmane district on 945th Street in İzmir. It is in 10-minute-walking distance to Kemeraltı. One can walk in 5 minutes from Çankaya bus station or Basmane metro station to Hatuniye Square (Figure 3.44). There are car parking areas near the Square, but the streets are very cramped for cars.

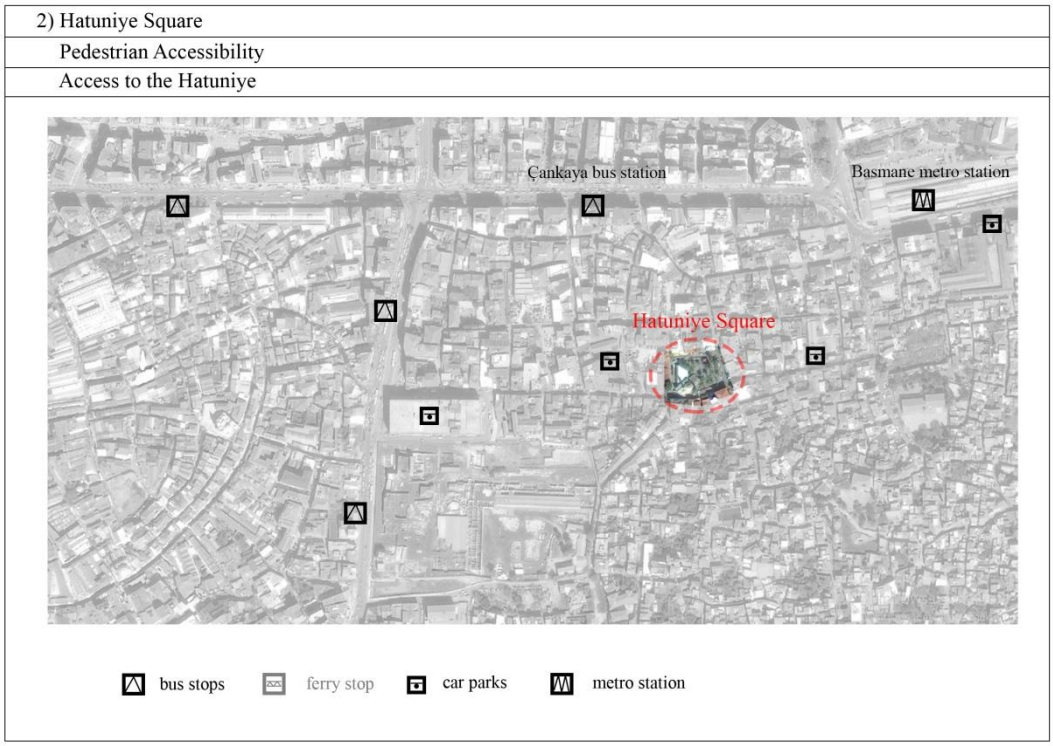


Figure 3.44: Access to Hatuniye Square

Although surrounding streets of the square are open to vehicle traffic, the inside of the square is closed to the vehicle traffic and so it has pedestrian dominance. The four sides of the square are surrounded by streets and people usually enter the square from

the corner of east street, stairs of north street and south edge of the mosque (Figure 3.45). There aren't any connections from west street to the square because there is the mosque's disconnected wall on this side. Due to the fact that there is a level difference between north street and square, there are two entrances with stairs; one consists of 7 steps and the other has 2 steps. As a result, disabled people cannot access from the north side.

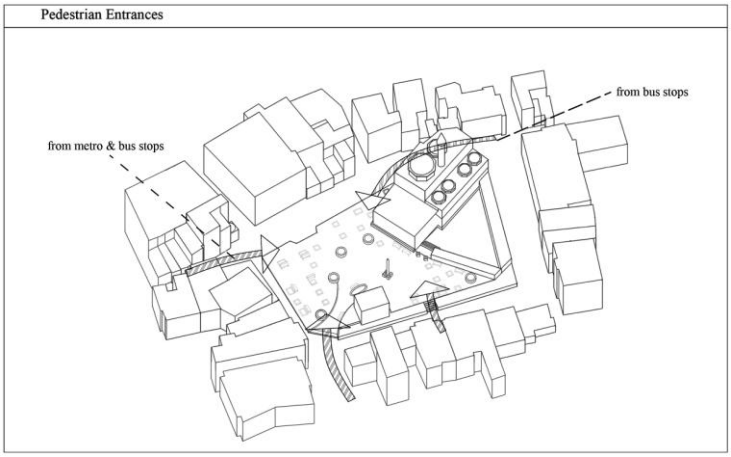


Figure 3.45: Pedestrian Entrances of Hatuniye Square

So, the square isn't a totally strategic place because some surrounding walkways are not accessible directly (Hillier, 1984). Also, it is not visible from all streets, hence, according to Lynch (1960), it is not a totally successful square in terms of visual access.

Size:

According to this study, Hatuniye is a medium sized square. Its dimensions are about 32 meters long and 30 meters wide.

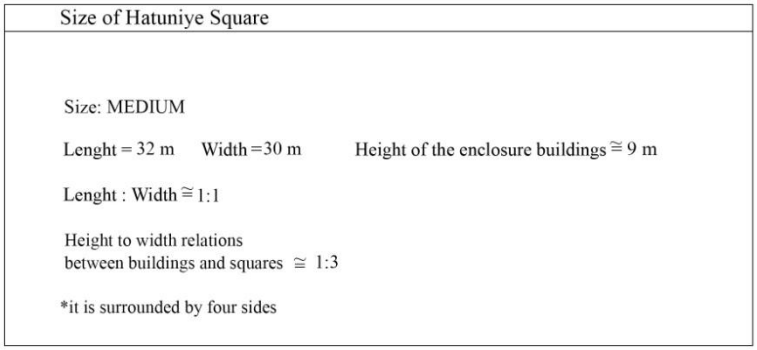


Figure 3.46: Size of Hatuniye Square

Its short side isn't suitable with Alexander et al.' (1977) ideal small square dimensions as discussed in chapter 2.5 because its width is over 18 meters. Lynch's (1981) definition for the small squares is between 12-24 meters, so Hatuniye has critical dimensions as a small square. As it is bigger than Ali Paşa, it is determined as a medium square in this thesis. On the basis of Gehl (1987), the expressions and activities of people in Hatuniye can be understood from one corner to another because the distance from one to another is nearly 30 meters. Also, it has a coherent relationship to the environment; however the mosque is dominant in the place because it has monumental sizes. Considering the size of the trees, they are placed 5 meters away from each other and they are taller than 2.5 meters from the ground floor (Bentley et al., 1985).

Square Types According Plan Shapes:

Hatuniye Square's form is defined by border of Hatuniye Mosque. As it is stated above, there is level difference between the square and the north side street. The spatially difference also has an important role in determining the shape of the square. The square can be observed in three different forms as shown in figure 3.47. If one only perceives the square without the surrounding buildings but only its own borders, shape 1 is one of the forms. If, on the other hand, one wants to evaluate the square with the mosque around, then alternative 2 is another possible form. Lastly, if one observes the square from a greater angle, by taking the surroundings into consideration, shape 3 can be another form.

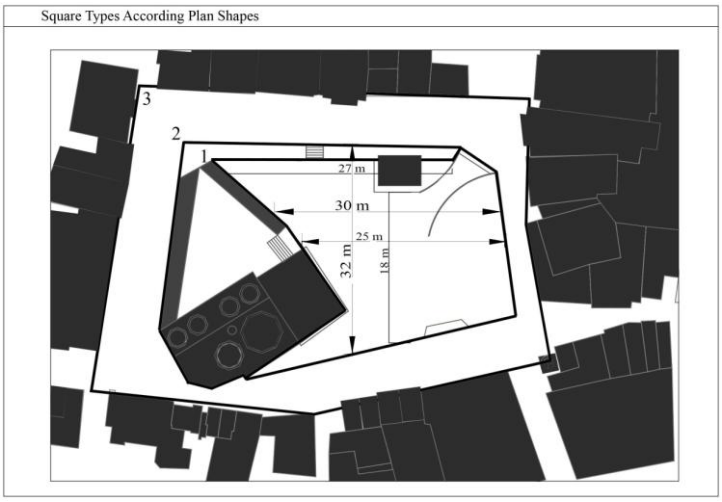


Figure 3.47: The alternative plan shapes of Hatuniye Square

It can be useful to evaluate its form according to examined books. Hatuniye Square is formed by surrounding buildings and its boundaries determine its shape (Sitte, 1889; Hillier, 1984). The space remaining from the buildings has a definite shape and as a result, according to Alexander et al. (1977), it is a positive urban place. As we understand from length to width ratio (1:1) its shape represents nearly 'square' shape that is one of the main types of Krier (1979). Although its dimensions look like a square shape, it doesn't have a regular form because the square is attached to the mosque in an angular way. Furthermore, according to what Zucker's (1959) believed in his study, Hatuniye square doesn't represent only one type of square; it is a closed square because it is placed among adjacent buildings that provide closeness to it and it is also a dominated square because it has a monumental mosque in it.

Enclosure:

Degrees of Enclosure:

Hatuniye Square evokes an outdoor room within urban space and it is an enclosed entity. Owing to its physical closeness, it gives a closed vista to the user inside the square (Sitte, 1889). Additionally, the square is visually perceived as a whole while one is walking around the surrounding buildings (Cullen, 1961). It is located among grouped buildings. So, Hatuniye square is suitable for being a positive place of Alexander et al. (1977). It can be distinguished where the square is in this positive space and then its borders are definite and hence it is a hard space for Trancik (1986). Moreover, the ratio between the height of the surrounding buildings and the square's distance to them is nearly 1 to 3. This rate is still appropriate interval for some scholars (Lynch, 1981; Moughtin, 1999) to be a closed and successful square. The surrounding details are easily understood through its proportional openings. If we evaluate degree of enclosure according to the ground floor usages of buildings, their ground floors' openings and terraces become significant. The surrounding cafés and small markets have active ground floors as a result the usage of them strengthens the square life. These interrelations affect the degree of enclosure positively. Although buildings and the square are separated by a street, the sense of enclosure between buildings and square is quite felt by users because the square is surrounded not only physically but also socially. Distinctively, the surrounding buildings stand alongside to each other, but

they're only divided by four corners so there are enough corners to provide the enclosure (Moughtin, 1999). Furthermore, the sectional drawings should be examined while evaluating the sense of enclosure (Figure 3.48 and 3.49). The degrees of enclosure are 18° and 15° in section a-a and 14° in section b-b. The left side of section a-a has the relation at an angle of 18° with surrounding building. According to Moughtin (1999), more than one building can be 'sensed' at this angle and it is still proper to enclosed square. In this direction, in Hatuniye Square life, this side with an angle of 18° has a strong relation to the surrounding and users mostly prefer to stay at this side. On the other hand, according to Moughtin (1999) other sides at an angle of 15° and 14° start to lose its enclosed character. This statement of Moughtin is verified on Hatuniye Square because this part of the square which is at angle of 15° has level differences with the surrounding and hence this part with low enclosure is not related to surrounding.

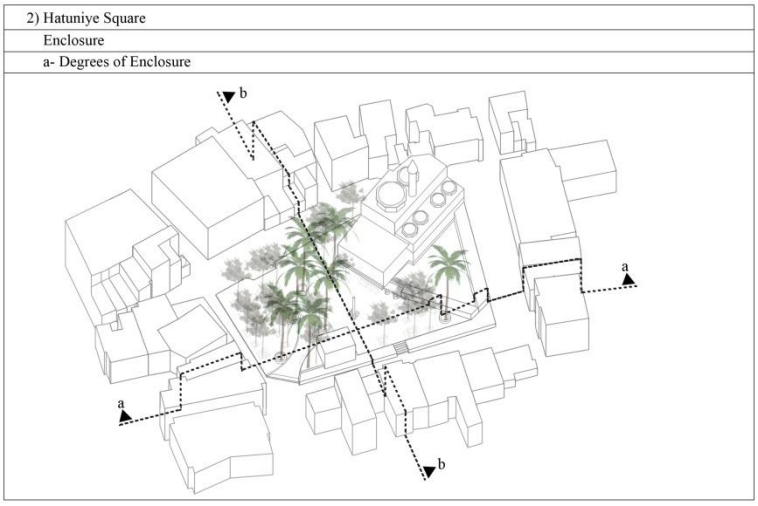


Figure 3.48: Degrees of enclosure in Hatuniye Square

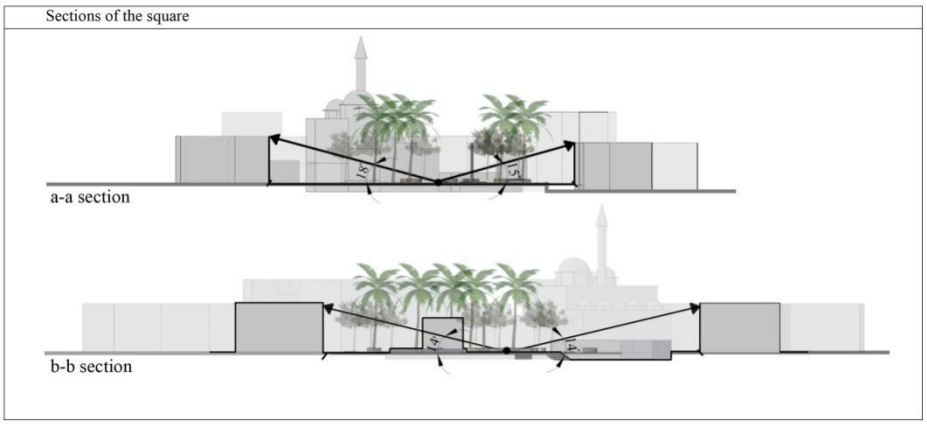
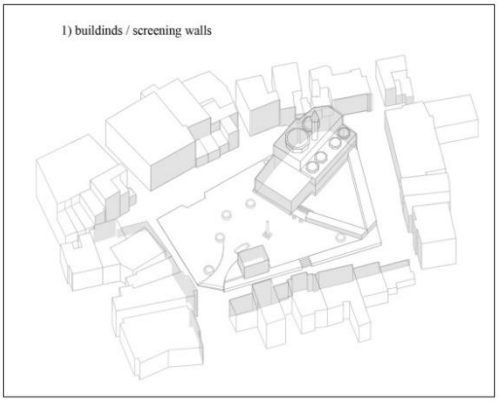


Figure 3.49: Sections of Hatuniye Square

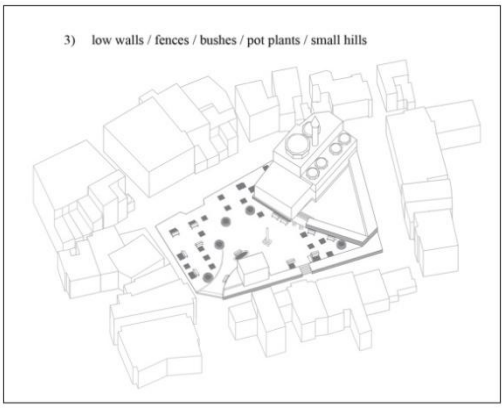
Enclosing Boundary Elements (Buildings& Structure)

There is a religious and monumental structure inside the square which is nearly 12 meters high and it is surrounded by buildings having 2 or 3 stories on four sides and also trees providing strong enclosure (Figure 3.50).



First of all, the buildings are attached to each other and so they aren't freestanding structures (Sitte, 1889). Surrounding structures connect to each other; they are separated only by streets. Their facades have adjoining surfaces (Moughtin, 1999). Also, monumental buildings increase the enclosed character.

Trees are placed at certain intervals all over the square. There are palm trees and also shorter trees. Palm trees have dominant effect because of its height. All of the trees provide strong closeness and shady areas to the square.



The trees surrounded by low brick walls that are nearly 70 cms high. At the same time they act as bases of tree. These low structures provide space for sitting, standing or rest against. Also, low walls in front of the mosque create another surrounded area. So, these small structures support the sense of enclosure.

Figure 3.50: Enclosing elements of Hatuniye Square

As we see in figure 3.50, Hatuniye Mosque has a significant role as a boundary structure. The square acts as the second courtyard of the mosque because its entrance is in the square, thus activities and usages of this side are dense. So it provides physical

and social enclosed character to the square. Also, trees with its shading and basement walls enhance the perception of enclosure (Cullen, 1961). Briefly, the adjoining surfaces of the building, trees, and walls of the mosque contribute its enclosed character.

Edge, Center & Corner:

Edges are surrounded by ‘pockets of activities’ in Hatuniye Square, thus they animate the urban square life. First of all, the mosque’s entrance and its low wall create a different gathering space for people before entering the mosque and hence it is one of the edges of the square. Additionally, electrical transformer building inside the square can be another edge. Its wall and low wall provide a back to the users, thus people usually prefer sitting or standing near this structure. Also, surrounding buildings’ ground floors which especially have transparent facades interact with the entrance of square. Briefly, like Hillier’s (1984) idea, the edges of Hatuniye Square are the most integrated spaces because people usually prefer spending time at the edge. Moreover, these activities at the edge start at the street corner and then they spread towards the square. Also, there is a historical fountain, whose name is Dönertaş, at the corner. Though it has a completely opaque facade, it is a significant historical symbol as the corner of the square.

Figure 3.51: Surface qualities of surrounding walls in Hatuniye Square

The center is vacant because of that there is no central effect on the square. As it is an open center, people can use its each side equally. As there aren't any focal points in the center, the landscape elements are designed throughout the square rather than just being in an area. So, Hatuniye square is appropriate for Sitte's (1889) rule of 'keeping the center open'. If we consider Alexander et al. (1977) and Trancik (1986), according to their ideas on center, although there isn't a specific object in the center, the trees and the mosque can be naturally 'a back' for the users. So, the mosque and palm trees are the focal point of it although they are not located centrally.

Elements in & Surface of the Square:

Monuments in the Square:

Hatuniye Mosque is a monument inside the square. It is known that it belongs to the 17th century and was constructed by Hacı Hüseyin Ağa for his wife. The square actually acts the mosque's open space. Once analyzed from the points of views of Trancik (1986) and Cullen (1961), the square can be memorable for users thanks to the monumental mosque building. Its minaret dominates the space as a vertical object and constitutes the focal point.

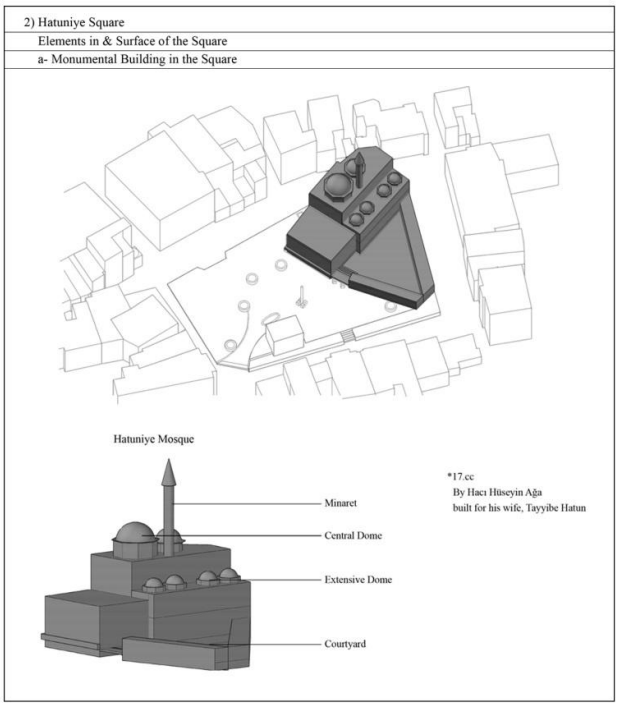


Figure 3.52: Monument of Hatuniye Square

Figure 3.53: Hatuniye Mosque

It has two dome systems; the central dome and the extensive dome (Figure 3.52). The mosque's entrance is through the square and also there is a level difference between square's ground floor and mosque's courtyard. The mosque is one meter lower than the square, thus there is a stairway connecting these two places.

Surface of the Square:

There are both hard surface and soft surface as shown in figure 3.54. Inside of the square is full of cobblestone and surrounding streets' ground floor is covered with key stone as hard surfaces of the square. There is level difference between the street in the north part and the square. Hence the stairs provide transition between these places. Also, the courtyard of the mosque's floorscape is marble and its surface is lower than the square. On the other hand, the basements of each tree are planted areas and so the grass and the planted areas consist of soft surface that is shown below with light gray color.

Furthermore, figure 3.55 indicates the roofscape of the square. There is a canopy in the north side street. The canopy doesn't affect the inner part of the square because it is placed on the lower street, but it creates shady areas at the edge of the square. Although this side lower than the square, people prefer to gather under the canopies in order to drinking tea or chatting. The surrounding buildings' roofs have roofing tile as a

material and also roofline of buildings are nearly same level in terms of its height, whereas Hatuniye Mosque and Dönertaş Fountain solely have a dome on the roof.

Figure 3.54: Floorscape of Hatuniye Square

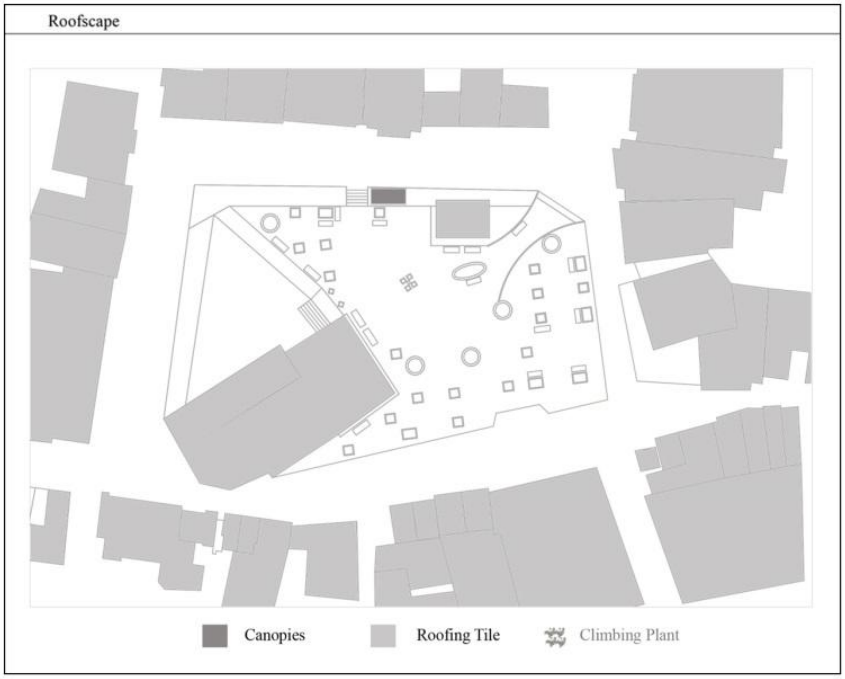


Figure 3.55: Roofscape of Hatuniye Square

Location, Comfort, and Flexibility of the Urban Furniture:

Hatuniye Square is furnished like a park. It has 17 benches and so many trees in it and also trees are placed behind each bench. The benches are often used throughout a day because trees create a comfortable sitting opportunity. In other words trees provide shady places over benches and protect backs of users. So, benches are formal seating objects of Hatuniye Square. Chairs of the café's, low wall of the mosque and the edge of the landscape elements are the examples of informal seating. Users can move the café's chairs to the square. These flexible objects can increase the usage. People generally sit as groups through the flexible objects. Besides, there is a vertical lighting object in the square as urban furniture. All of the urban furniture is shown below in figure 3.56.

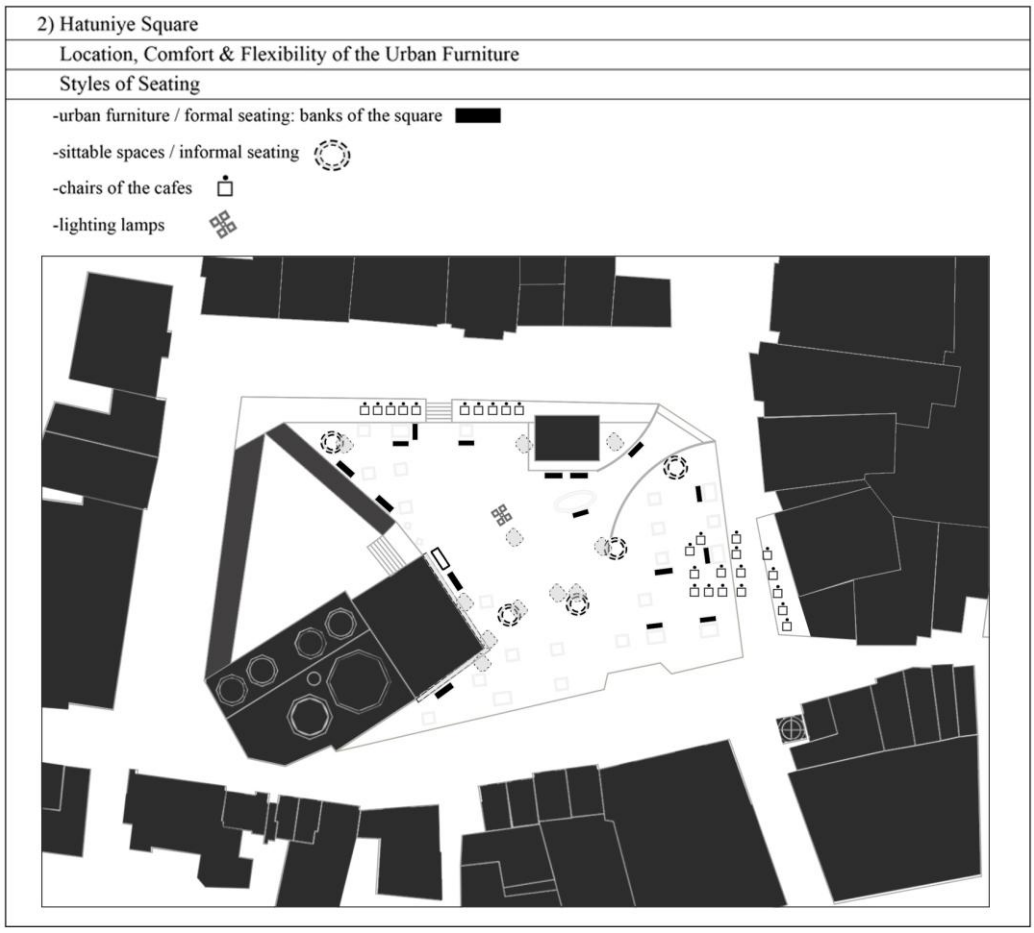


Figure 3.56: Urban furniture in Hatuniye Square

	People especially elder ones, get together around the benches. Some of them bring the café's chairs inside the square.
	The benches are mostly used for sleeping. The homeless refugee people mostly sleep on the square's benches.
	These are café's chairs and tables. They are placed at the edge where the level differs. So, the square is surrounded by the furniture.
	Mosque's low wall and behind of the trees are informal seating places. Women with children generally prefer sitting here.
	It is the lighting object of square. Users can sometimes sit under it.

Figure 3.57: Seating styles in Hatuniye Square

Climatic & Temporal Conditions:

The observations for Hatuniye Square are carried out the dates between 16.05.2016 and 22.05.2016. Temperature is nearly 27° Celcius in day time and is 15° Celcius at night. Trees and the mosque create shady areas, but as the buildings are not in an adequate distance, they don't protect the square from the sun. The diagrams of

sun/shade are shown below in figure 3.58. In the morning only trees provide shady areas and especially only the east and the west sides are protected from the sun and consequently these sides are mostly used in the morning. In the evening, the number of the shady areas increase and the length of the shadows get longer. The mosque provides shadows in the evening that is why people always meet at edge of the mosque. Also, as it can be seen in figure 3.59; in the afternoon people, especially elder people generally move the café's chairs to the east side of the square, under the trees because trees create shade and cool places to sit.

Figure 3.58: Sun/shade diagrams of Hatuniye Square

Figure 3.59: Relations to shading areas and seating in Hatuniye Square

Users, Usage & Activity:

Hatuniye Square has specific users in the recent years. The square and Basmane district are surrounded by refugees. Some of them use the square as their home. So we can see lots of people sleeping on the benches in the square early in the morning with their suitcases.

Homeless people prefer the benches of Hatuniye Square for sleeping and also they prefer shady benches.

Figure 3.60: Morning usages of Hatuniye Square

In addition to sleeping people, the additional way of usage of the square in the mornings; the refugee men start getting together at 10 am at the square and then they chat and watch the other people while sitting on the benches. The density of users increases about the lunch time and pedestrian ways are often used by elder people going to mosque for noon prayer.

Additionally, volunteer people bring food supplies from Hatuniye Mosque for the refugee people on some days. The square is very crowded on these days because people form long queues in front of the mosque entrance in order to get some food.

At the lunch time men come to Hatuniye Square and then they prefer sitting on benches that are under the trees. Also, the edge at the different level is used as a café. So there are shelters in order to create shady sitting place. Chairs of the cafes are also seen at the lunch time since people move café's chairs to shady places of the square.

Figure 3.61: Midday usages of Hatuniye Square

Women come to the square when food is delivered. They wait for the supplies with their children in front of the mosque. Normally women users seldom come to the square; however, the density of women users is too much in these times.

Figure 3.62: Women waiting for food in the square

Elder men get together and talk to each other on the chairs and benches in the afternoon. They drink tea and smoke kalian when they sit. So, they prefer sitting in the square rather than surrounding cafes in the afternoon.

Figure 3.63: Men sitting edge of the square

Furthermore, elder people are dominant in the afternoon usage of the square. They prefer sitting under the shadings of the trees due to the cooler places of the square.

Distinctively, people set up different stands at 4 pm on the floor inside the square and then they try to sell second hand clothes, shoes or bags. Refugee people are interested in these activities because they need these clothes to survive. Also, they mostly exchange their goods with each other since they don't have enough money to buy something.

These are the second hand stands on the floor. People make bargain and exchange their products. Besides, people sometimes fight with each other when they disagree about selling. For that reason they affect comfort of the square negatively.

Figure 3.64: Second hand stands on ground of the square

Refugees and their daily activities dominate to the usage of Hatuniye Square. the square has been home for the newcomers to the city while it was being used as an urban park for local people. Additionally, enclosing mosque building provides different activities to the square.

3.2.3. Analysis of Cumhuriyet Square

Pedestrian Accessibility:

Cumhuriyet square is located on Cumhuriyet Boulevard in Konak district in İzmir. Pasaport ferry station is near the square (Figure 3.65). So it is substantially a convenience to reach from the square to the ferry. If people want to come by bus, the Montrö bus station is in 10 minute distance away from the square. Also, Swiss Hotel, a famous hotel in İzmir, is located across the square and the view of the hotel directly looks out onto Cumhuriyet Square. This district is stuck because of vehicle traffic and parking cars, but surrounding hotels can give service for car parking to the people coming to the square.

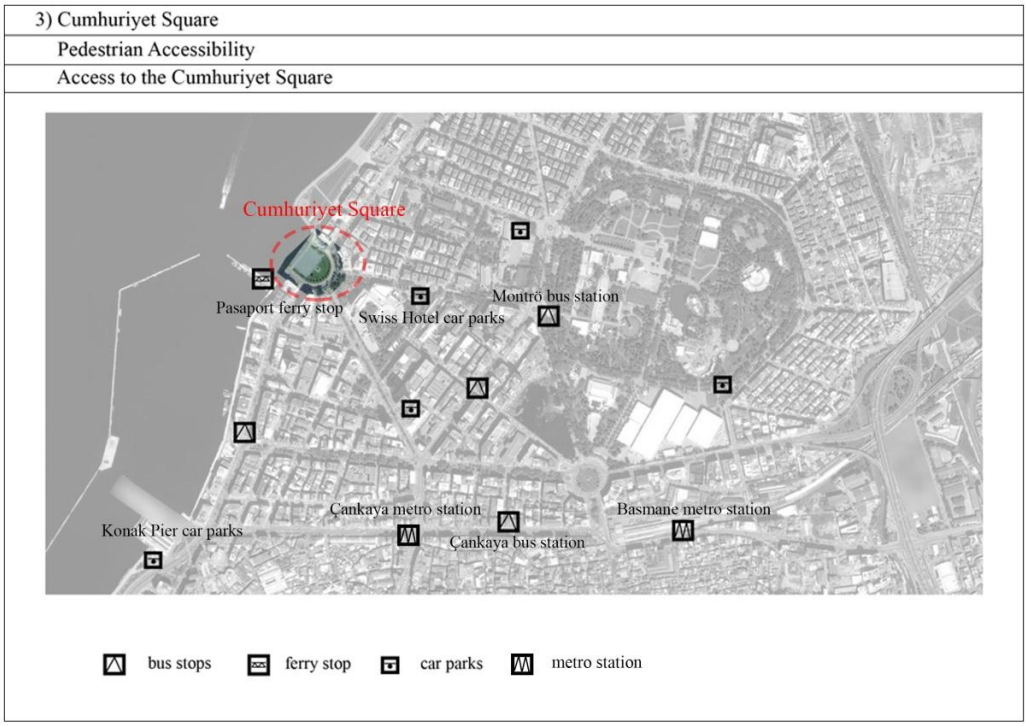


Figure 3.65: Access to Cumhuriyet Square

Although Cumhuriyet Square is located among busy vehicle roads, it achieves to give enough places for the pedestrians as the wide and soft surfaces separate the square and boulevard from each other. People can enter the square from different surrounding roads as shown in figure 3.66 and one can reach the square easily via connected ways. There is no level difference in it by this means disabled people can access it effortlessly. Also, a pedestrian way in front of the square connects with Kordon pedestrian cross that is a significant urban pedestrian access in the city. So, the square is a kind of strategic space for the city because there are both physical and visual accessibility for all people.

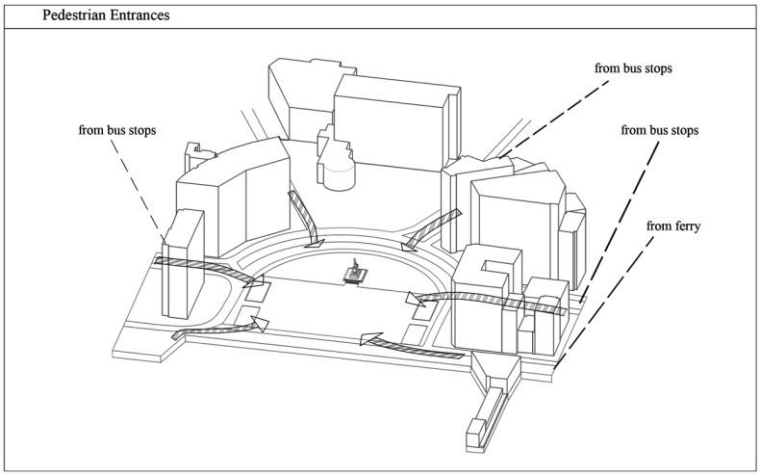


Figure 3.66: Pedestrian Entrances of Cumhuriyet Square

Size:

Cumhuriyet square is a large square of the study. Its length is 82 meters and width is 42 meters.

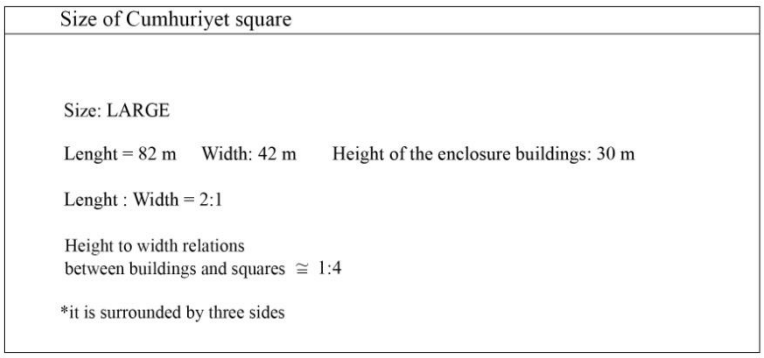


Figure 3.67: Size of Cumhuriyet Square

Its short dimension is bigger than Alexander et al.' (1977) ideal short dimension (22 meter). It is appropriate to Lynch's (1981) large square definition because its short dimension bigger than 24 meters and long size is about 100 meters. According to Gehl's (1987) ideas, the facial expressions cannot be understood from one corner to another because the dimension of distance exceeds 25 meters, but activities in the square can be watched by standing at one corner. Furthermore, the height of the surrounding buildings is nearly 30 meters. So the ratio of height to width is nearly 1:4 which is accepted in ideal size by some scholars. Also, the size of trees in the square is appropriate to Bentley's (1985) ideal sizes. Their roots' height is adequately higher than ground and they are placed regular away from each other thus the trees are one of the fundamental components of Cumhuriyet Square.

Square Types According Plan Shapes:

Trees, green bands and the sea at the edge are the boundary elements of Cumhuriyet Square. Thus these elements give the square its form. There are 2 alternative plan forms of it put forth in this study (Figure 3.68). Form 1 describes hard surfaces inside the square without the soft surfaces. This shape is rectangular. Form 2 is defined by both hard and soft areas. Although number 1 is clearly defined as the hard

surface, the monuments and enclosed trees in the soft space shouldn't be thought apart from the square.

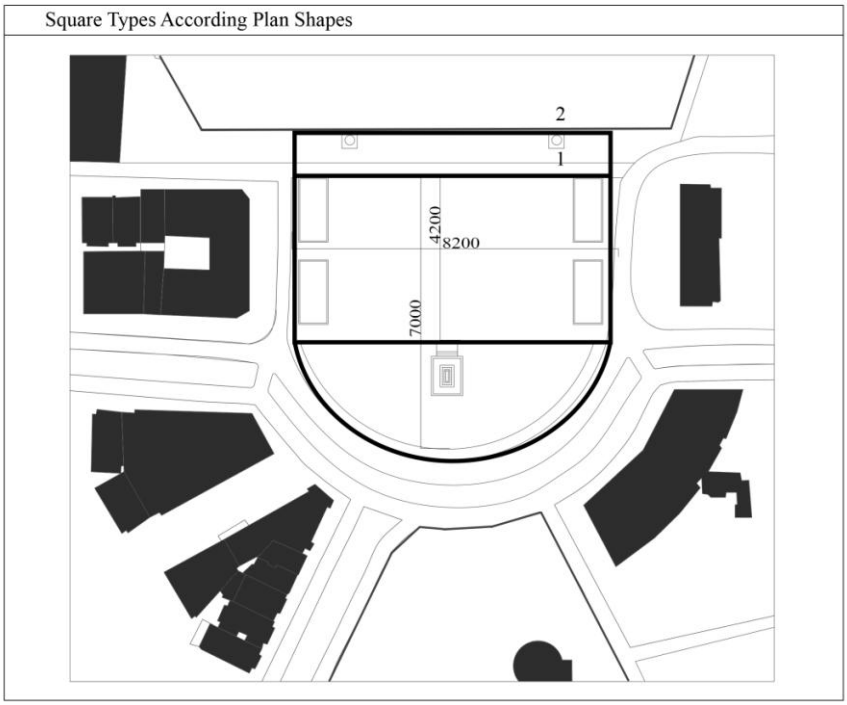


Figure 3.68: The alternative plan shapes of Cumhuriyet Square

If we consider its form according to the examined textbooks, first of all, based on Sitte's ideas, (1889) it can be seen as a wide type because when the visitor stands in front of the sea by looking at the monuments, the looking distance is short. Although it is surrounded by buildings it is not an example of Zucker's (1959) closed square because it is surrounded by three side, its other is open toward the sea and also the square and the surrounding buildings are separated by boulevard. Cumhuriyet Square can be an example of dominated and nuclear square of Zucker (1959). It is dominated by sea, the vertical and also impressive monument gives a nuclear type to the square. As a geometrical shape (Krier, 1979), it is a combination of semi-circle and rectangle. These two shapes are formed by adding them to each other. Due to its regular and definite geometric shape, it is a positive place (Alexander et al., 1977). Also, it is an example of Bentley's concave nodal space because surrounded building is arranged like a concave in perimeter of the square. Hence Cumhuriyet Square has definite formal qualities to being a square.

Enclosure:

Degrees of Enclosure:

Due to the fact that it is an example of Alexander et al.' (1977) positive outdoor space, it ought to be an enclosed entity (Sitte, 1889). It can be considered that Cumhuriyet square is sensed as an urban outdoor room when a user stands in it. The square is surrounded by the buildings from three sides but there is no relationship between the ground floors of the buildings and the square socially thus the square and buildings' facades have related to each other only physically and visually. Also, it doesn't completely have a 'closed vista' (Cullen, 1961) to the user because one side of it isn't surrounded by any three dimensional elements. On the other hand, the sea which is the open side of the square, can also determine the boundaries of the square visually. Furthermore, the square is surrounded by vehicle roads which are located between the buildings and the square, in three sides. Since palm trees and semi-circle greenery soft place surround the square at the edge. Thus in additions to buildings, trees are other important enclosing elements of Cumhuriyet Square.

The ratio between the height of the buildings and the square's distance to them is nearly 1:4. According to some writers in literature, this rate exceeds the ideal enclosed dimensions determined by scholars whereas this rate is appropriate interval by some writers in order to be an enclosed square. In a-a section the angles of height to width are 15° and 6°. According to Moughtin (1999), squares start to lose its enclosed character below the threshold of 18°. The sense of enclosure is more perceivable in b-b section than a-a section because the angle is nearly 30° in b-b section (Figure 3.70).

Enclosing Boundary Elements (Buildings& Structures)

It is surrounded by the structure in three sides and the other side is open towards the sea (Figure 3.71). Although there aren't any structures on the open side, the sea determines the boundary of the square. So, the sea can also be boundary elements of the square and it surrounds the square visually. Its main enclosing boundary elements are palm trees and green bands at the edge rather than the buildings. They succeed in

separating the square from vehicle traffic, thus the square is closed to vehicles and it only belongs to the pedestrians.

Consequently, the trees, buildings, sea and the soft surfaces with bushes and pot plants as the enclosing elements contribute defining the boundaries of Cumhuriyet Square. The surrounding buildings of Cumhuriyet Square encourage the sense of enclosure due to their concave arrangement in and its enclosed character is perceived as it is seen in figure 3.70. As the surrounding buildings are freestanding and facades of them aren't related with each other, there is an only physical relation among them.

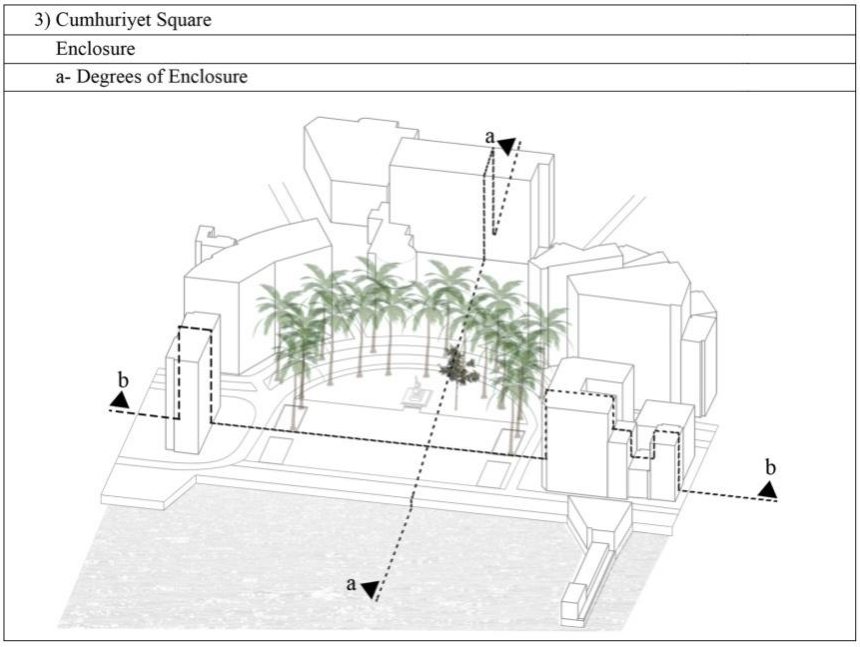


Figure 3.69: Degrees of enclosure in Cumhuriyet Square

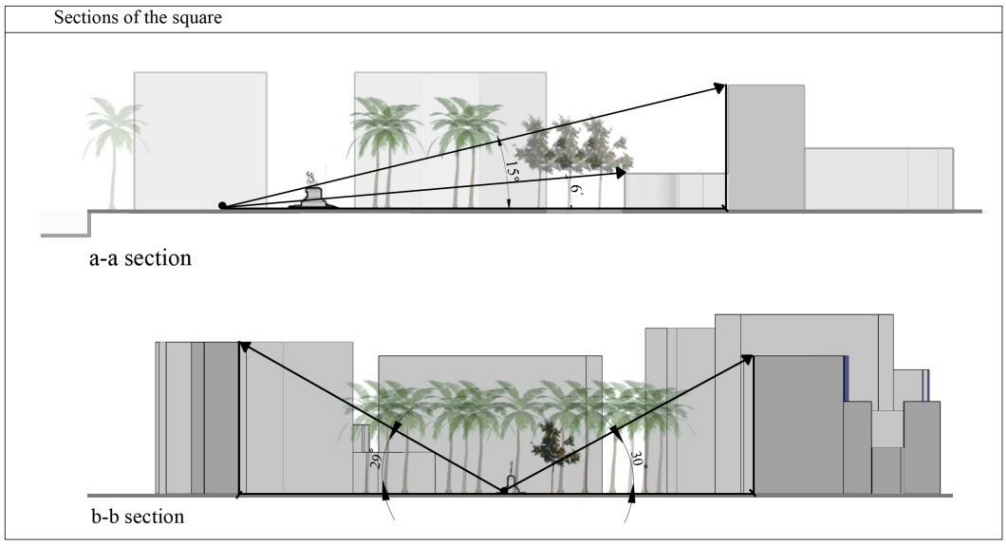
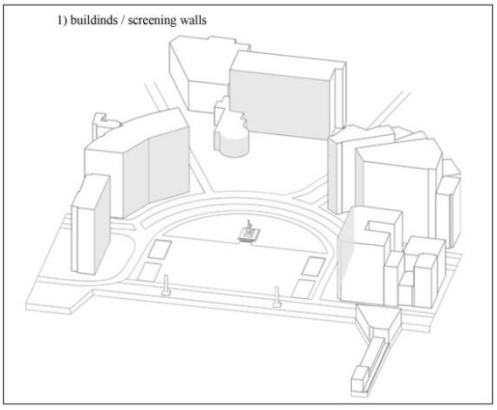
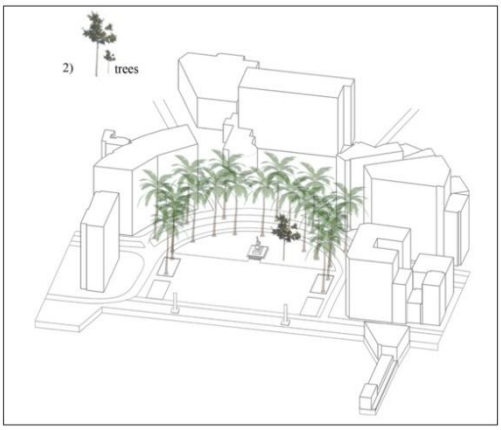


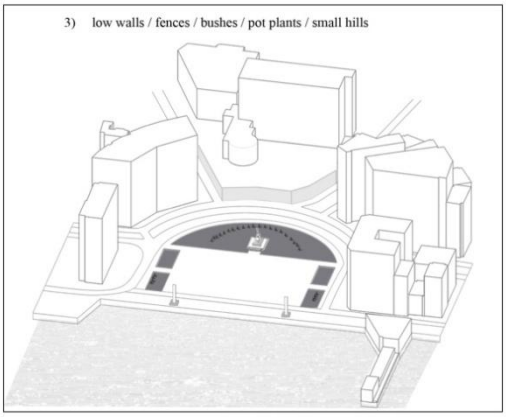
Figure 3.70: Sections of Cumhuriyet Square



Although surrounding buildings give sense of enclosure to the square, they are freestanding (Sitte, 1889). There isn't any social and functional relation among them and also the buildings and square are separated by wide roads.



Palm trees at the edge surround the square concavely. They are certainly the strongest boundary elements. Therefore they succeed to give an enclosed character to square.



Low walls of Swiss Hotel, soft surfaces and the sea are other boundary and surrounding elements of it. Green bands don't have three dimensional effects but it succeeds in separating the boulevard and the square from each other. Also, the sea encircles the square visually. So, bushes, pot plants and the sea support the enclosed character.

Figure 3.71: Enclosing elements of Cumhuriyet Square

Edge, Center & Corner:

Since, the facades of the buildings aren't related with the square there aren't any interaction among them. In other words, even though their facades have transparent surfaces, buildings' corners don't have any relation to the square because of vehicle roads. Also, the trees and soft surfaces are placed at the edge, but there are no pockets of activities around them. Besides, the sea and its low walls are at the other edge of Cumhuriyet Square and some people usually prefer meeting at the edge of the sea. But

the elements and activities near the sea are restricted and also there is no any specific seating area near the sea.

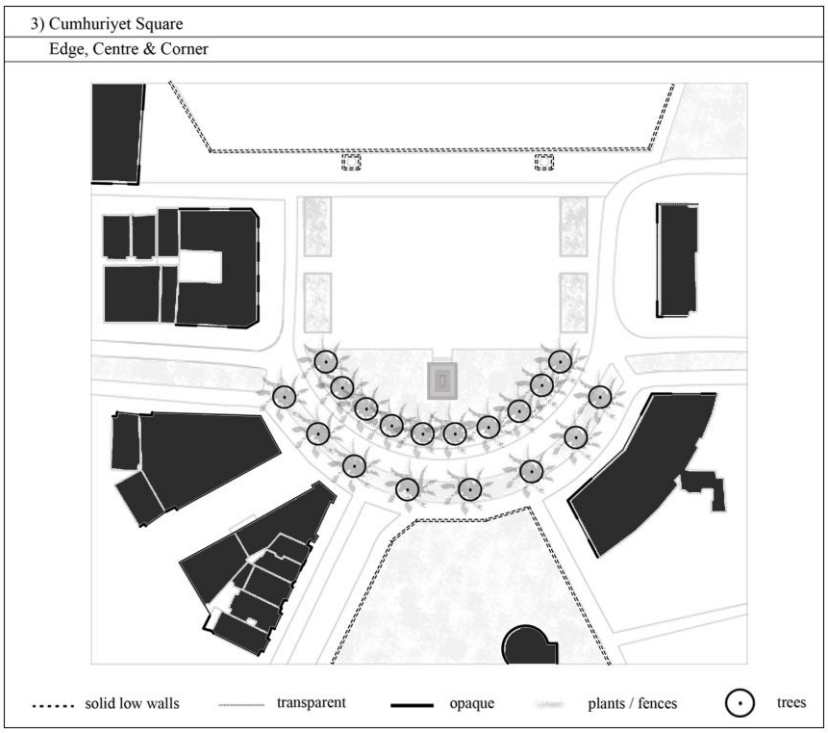


Figure 3.72: Surface qualities of surrounding walls in Cumhuriyet Square

As it can be seen in figure 3.72, its center is open and the monument and trees are placed at the edge. The open center is useful for specific users in the square such as skateboarders and hence Cumhuriyet Square becomes the skating ring for them; if there is an element at the center this might be uncomfortable for the skateboarders. Also, its open center allows the celebrations, protests and ceremonies for the city. So, Sitte's (1889) rule of 'keeping the center open' succeeds in Cumhuriyet Square.

View from the Square and View of the Square:

View from the Square / Openings:

According to Sitte's (1889) considerations on view, vista should be evaluated in terms of enclosure simultaneously. As we know Cumhuriyet Square is surrounded on three sides and it is located through the wide openness. It hasn't totally a closed vista and so it has 'a large open vista' being mentioned in Moughtin's (1999) impressive

square definition. If an observer looks towards the buildings s/he perceives the sense of closeness of the square, but if the viewing angle is towards the sea, the sense of open vista increases. Moreover, palm trees have a big role over the view from the square. Trees and semi-circle soft surface separate the roads and square from each other. Hence they provide an inward looking effect (Cullen, 1961). 'Hereness' and 'thereness' concept of Cullen (1961) comes into the mind when one looks among the trees. So, the square is felt as 'here' and outside of the square give the sense of 'there' to the users. According to Alexander et al.'s (1977) 'back' concept, its back is protected by trees, thus they provide a comfortable feeling to the users. After people' back is protected by the trees, and then the sea gives chance to look at the great vista and large expanse for users. In addition to the trees and the sea, the monument increases the visual quality of the square as it has a visual aura to attract the users. There are different points of views from the square to the outside; all of these are described with photographs in figures below.

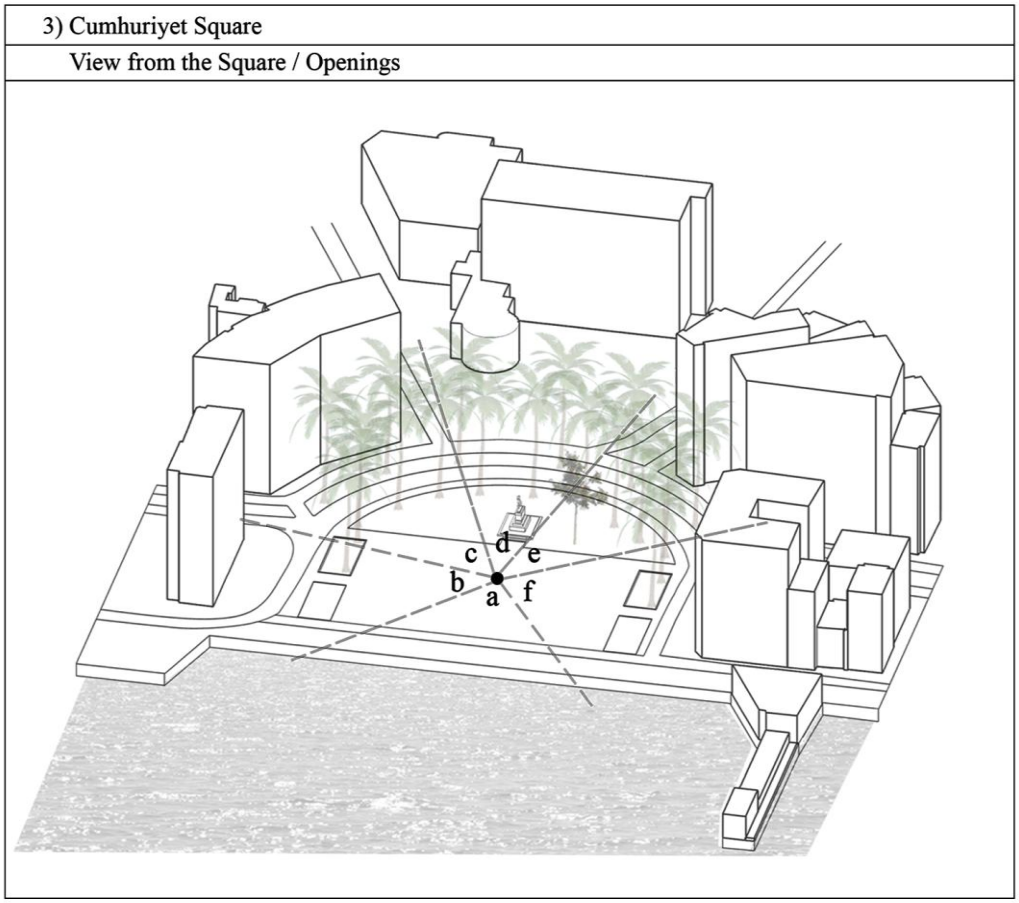


Figure 3.73: Outside views from Cumhuriyet Square

a: It has a direct visual relation with the sea. It provides great seascape to the users and so this side is a completely open vista.

b: There is a corner of a building and pedestrian cross in this point of view. Also, people mostly enter the square from this corner.

c: First trees are seen and then buildings and boulevard in the back ground when we look from this point.

d: The monument and the surrounding trees are mostly perceived. Thus, people cannot easily realize the outside of the square.

e: Buildings and roads are perceived from this point.
f: There is a surrounding office building in that direction. The corner and ferry stop is seen from here and people mostly pass through this corner.

Figure 3.74: Photos of Cumhuriyet Square towards the outside

View of the Square / Approach:

When someone approaches Cumhuriyet square, first of all the wide opening is perceived because there aren't any elements in it. When someone gets closer to the square, the monument in it starts entering field of vision from definite distance. There are significant pedestrian crosses in front of the square near the sea and users can enter from this way, especially they use the corners and the middle of it (point of 1, 2, 6 in figure 3.75). When an observer approaches from number 1, the surrounding buildings and the monument dominate visually, thus it is the frontal approach of Ching (1979) and also if one enters the square from number 2 and number 6, the approach is like an oblique. Due to the fact that the pedestrian way in front of the square is axially formed, the clearest image of the square is obtained from these approaching points that are number 1, 2, 6. Except of the pedestrian way, users can enter the square from the surrounding streets. The points 3 and 5 become axial transition of the square. When people approach from number 3 or 5, they can see the square and its monument, but the sense of enclosure cannot be felt exactly. Besides, when the users approach from number 4, the square and the monument are perceived from behind. Although it is more difficult to enter the square from number 4 due to the busy vehicle road, there is a designed pathway for users through the grass area. All of these approaching points can be seen in the figure 3.75 and also all of approaching photos of the square are seen below.

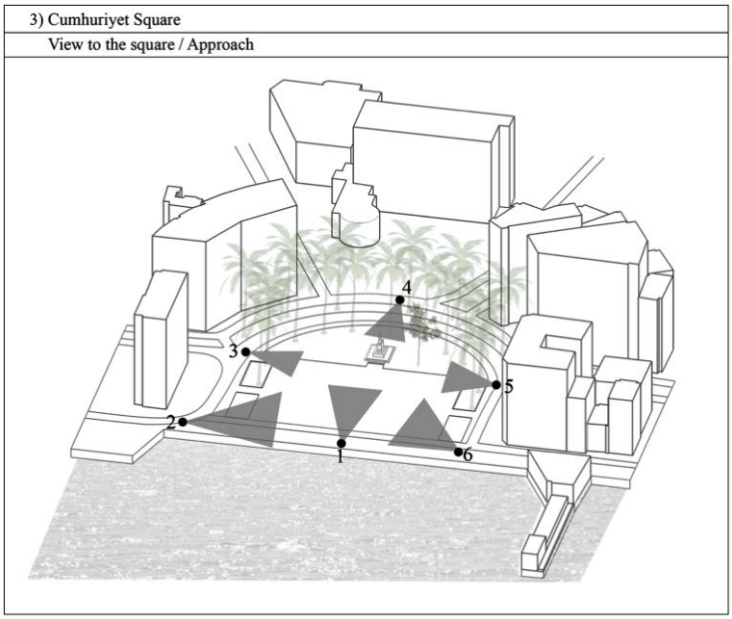


Figure 3.75: Approach to Cumhuriyet Square

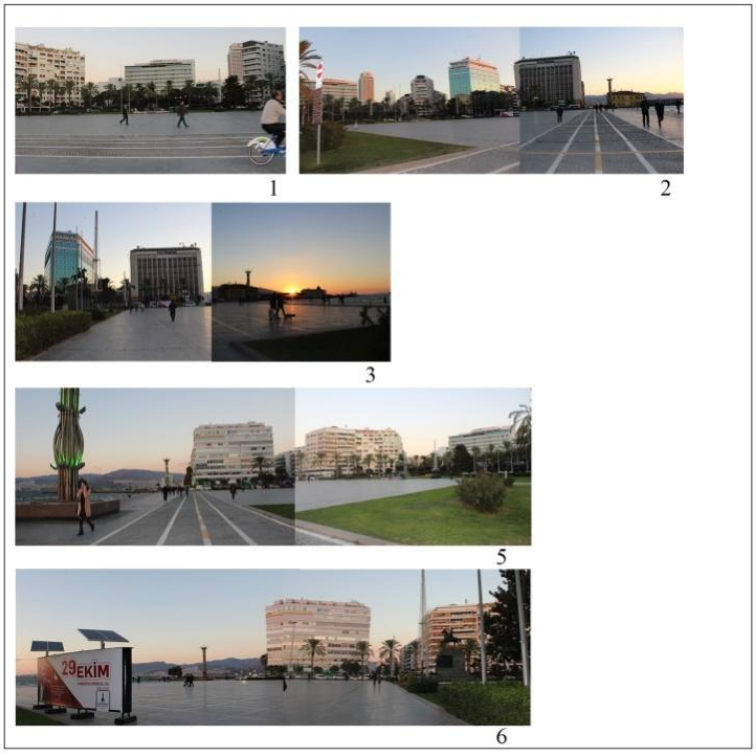


Figure 3.76: Photos of Cumhuriyet Square from outside

Elements in & Surface of the Square:

Monuments in the Square:

The monument of 'Atatürk' is the main element of Cumhuriyet Square. It was constructed in 27th June, 1932 and the sculpture was designed by Pietro Canonica. The monument symbolizes the Independence War. It is placed near the soft surface. It creates focal point and has a good view for the users take photos. It gives a symbolic meaning to the square. Moreover, the monument's steps as 'piece of sculpture' is used by users and people sit and watch on the monument to watch the life going on around the square.

As it is seen in figure 3.77, the monument consists of three main parts as stairs, small relief sculptures and main sculpture. The first part of the monument is stairs and then the monument is placed on the stairs. In order to place the main sculpture to the top there is a gradual basement with steps and small relief sculptures and also black stones are used as materials for the horse and man sculpture.

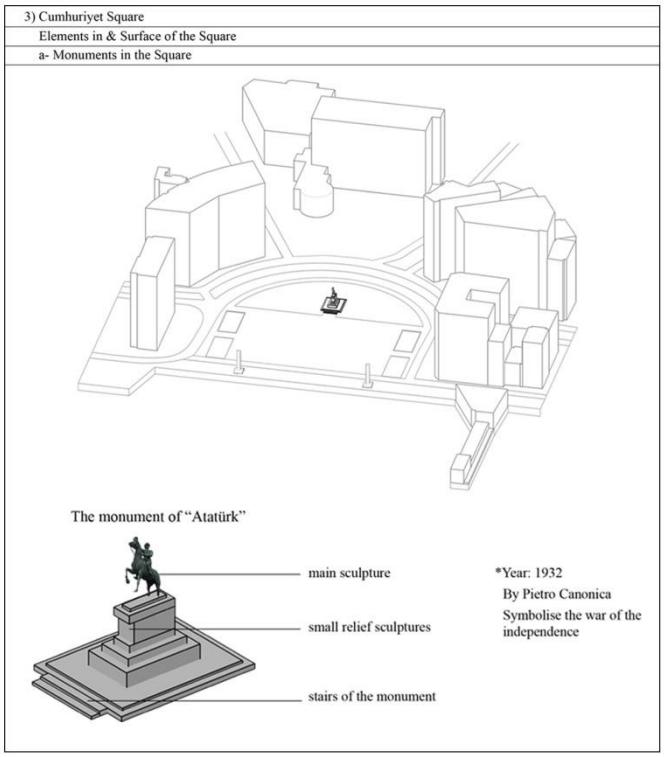


Figure 3.77: Monument of Cumhuriyet Square

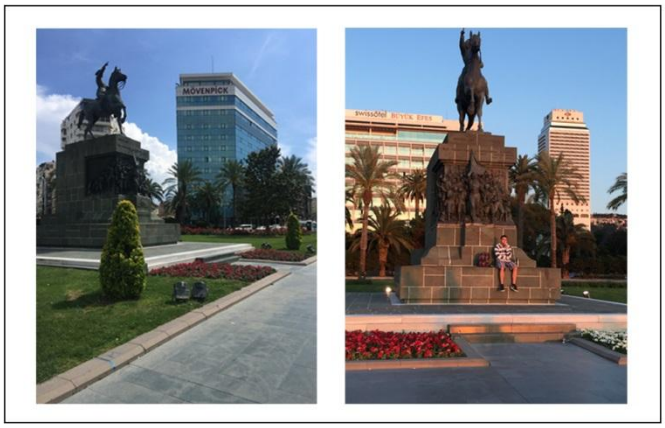


Figure 3.78: The monument of Atatürk

Surface of the Square:

There are hard surface, soft surface and water surface in Cumhuriyet Square. Its ground floor is made up of black stone. It is a flat and smooth surface, thus skateboarders always prefer this square because of its suitable ground for skating. Likewise, floorscape of pedestrian cross near the sea is black stone. Also, surrounding pedestrian crosses are composed of cobblestone. The vehicle roads are made up of asphalt inherently. There are wide grassed surfaces and green bands at the edge and they

are soft surfaces of the square. Different from Ali Paşa and Hatuniye square, there is a water surface in Cumhuriyet Square because it is by the seaside downtown (Figure 3.79).

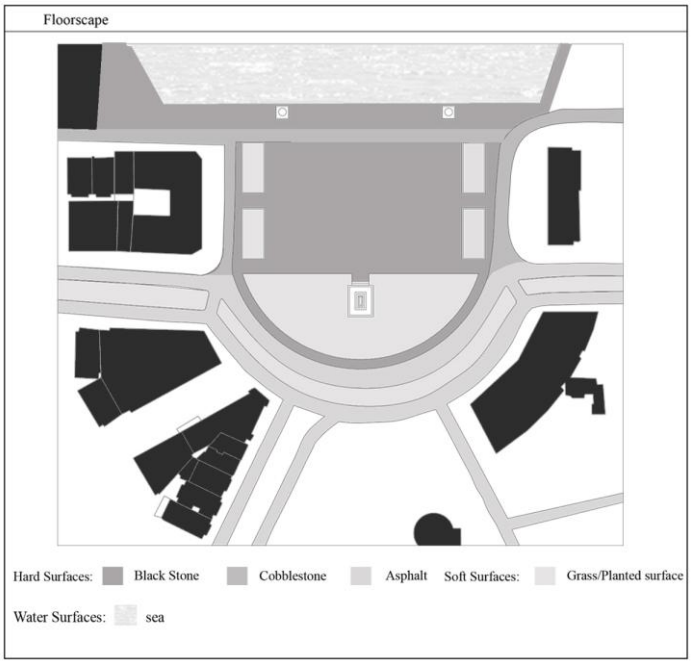


Figure 3.79: Floorscape of Cumhuriyet Square

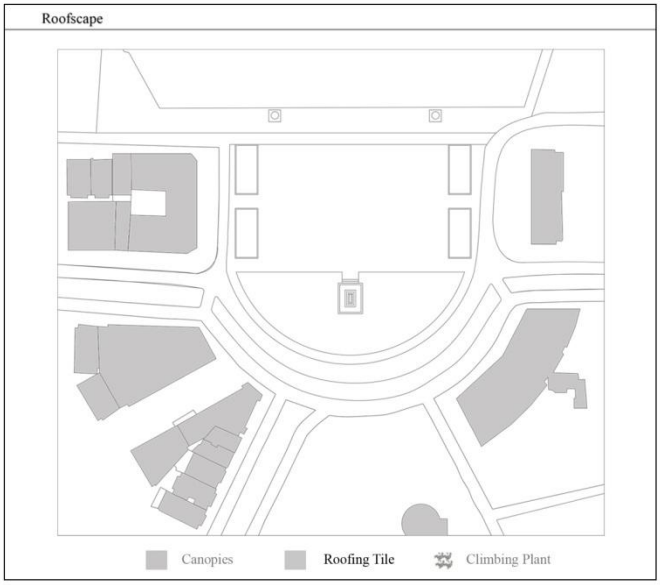


Figure 3.80: Roofscape of Cumhuriyet Square

As we can see in figure 3.80, there aren't any canopies or climbing plants in the square and so it isn't covered with any roofing material. The surrounding buildings' roofscapes are made up of roofing tile.

Location, Comfort, and Flexibility of the Urban Furniture:

There isn't any formal urban furniture at Cumhuriyet Square and so we can't come across any benches, chairs or tables at the square. If people prefer staying at the square, they can only sit on the stairs of the monument or on grass near the monument. These are informal seating facilities. Generally lonely people sit at the front side of the monument, parallel to the pedestrian sidewalk and they watch the life going on. But couples generally prefer sitting behind the monument as its back provide a hidden place for them. In addition to lonely people and couples, skateboarders stand or sit around the monument in groups for resting and chatting with each other. Also, there are two lighting elements by the sea as urban furniture. Those lighting elements work at night and provide to be perceived the square at night. They provide visual and vertical effect to the square and people sometimes sit at edge of these urban furniture. These kinds of urban furniture are called as immoveable objects by Cullen (1961). In this way the square can be memorable by users thanks to these fixed objects. Moreover, one can sometimes come across the temporal objects in the square. For instance, temporal activity stages for public speeches or film shooting are sometimes set up at Cumhuriyet Square. These temporal stages can be visual and flexible urban furniture of the square so that they attract people to the square.

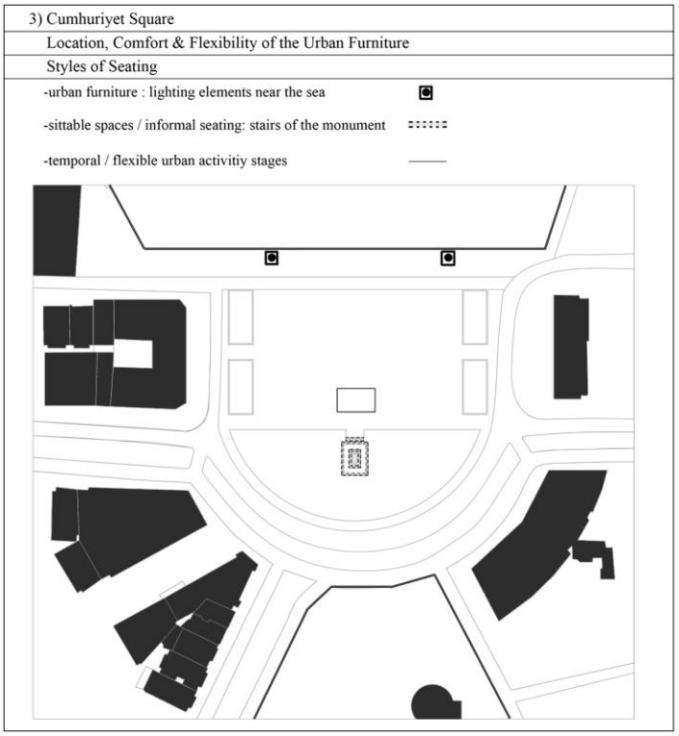


Figure 3.81: Urban furniture in Cumhuriyet Square

	Users generally prefer sitting alone at the front side of the monument. As the front side of the monument dominates the environment visually, people who want to watch everyday life sit in this side.
	If people need to hide, they sit at the backside of the monument. For instance, couples generally sit at the backside of the monument because its back is away from the public life and other people.
	Younger people especially skateboarders sit on soft surfaces and also lie down.
	This is an example of temporal activity stage. This flexible furniture provides instant changing for the life of the square.
	People sometimes bring their collapsible chairs to the square since there isn't any sitting furniture around it. So, users try to find solutions to the lack of furniture for using the square.

Figure 3.82: Seating styles and flexible furniture in Cumhuriyet Square

Climatic & Temporal Conditions:

The analyses of Cumhuriyet Square are made between the dates of 23.05.2016 and 29.05.2016. The weather is commonly 29 centigrade degrees in day and 18 centigrade degrees at night. Sun/shade diagrams are shown below in figure 3.83. There aren't any elements at the square to prevent the effects of negative weather conditions. As a result the hard surface of Cumhuriyet Square is always exposed to sunlight or rain. Trees have a role in creating shady space for the square especially in the afternoon. They provide dense shadow on soft surfaces (Figure 3.84). Additionally, the lighting objects' edges by the sea affect the sun/shade diagram in the evenings. This is why the basements of these objects are preferred sitting by the users in the evenings.

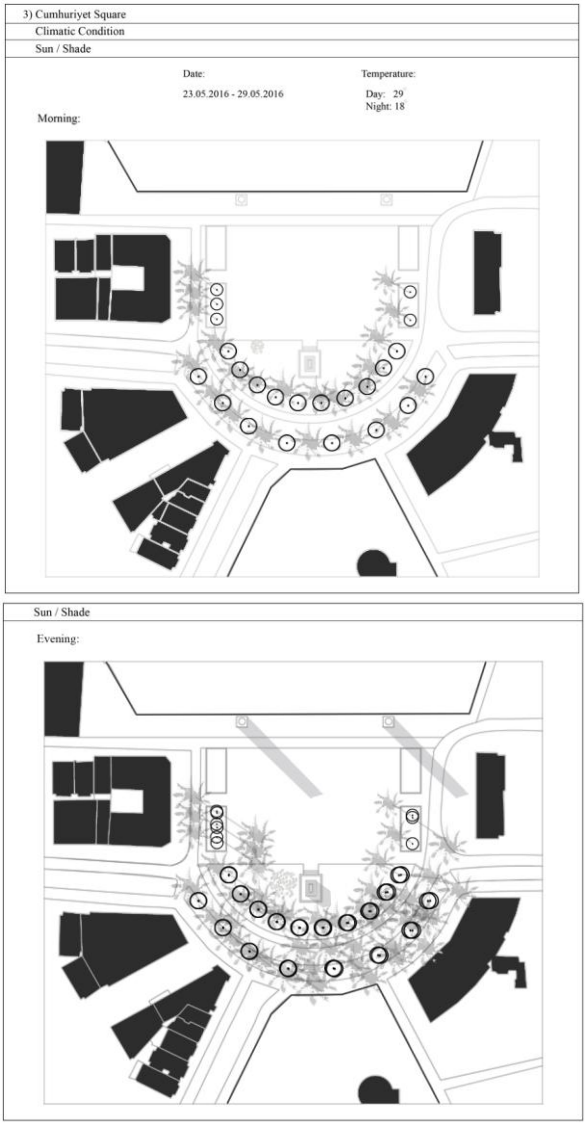


Figure 3.83: Sun/shade diagrams of Cumhuriyet Square

Figure 3.84: Sitting people under shading of trees

Users, Usage & Activity:

Cumhuriyet Square is generally used by people, who only pass through, because the square lacks enough features to create stationary activities, but only the monument attracts some groups. The sidewalk by the sea is used actively because it links Kordon Promenade and Pasaport ferry station to each other. Many people pass through the square in a day for taking the ferry. Hence the number of people passing through the square increase when the ferry comes to the station.

People going to work, pass through the square early in the morning. There aren't any special activities in the morning, but sometimes there can be distinctive activities such as celebration of a special day or more individual activities.

The square is quite silent in the morning hours but some days people do different activities in the morning. For instance, couples bring their collapsible chairs to the square and they prefer having their breakfast on the grass of Cumhuriyet Square.

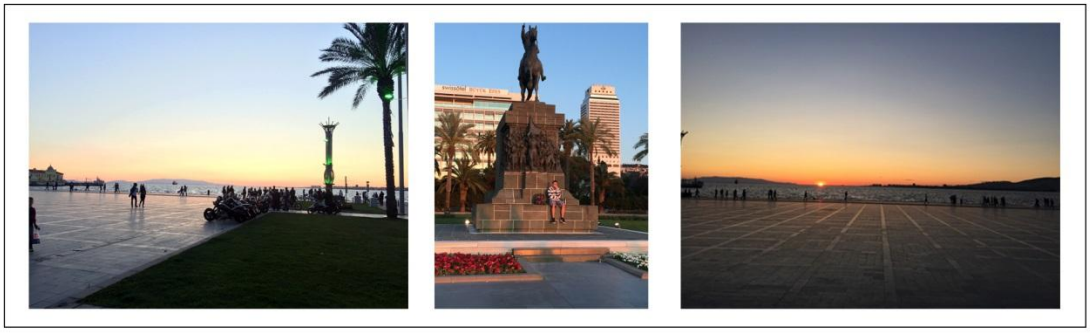
Figure 3.85: A morning in Cumhuriyet Square

Families with children, tourists or photographers can be seen at Cumhuriyet Square about midday. Also, the usage of sidewalks starts increasing at 12 pm.

Families and tourists like taking photos in front of the monument. Families with children also enjoy feeding birds at the square. In addition, the photographers sometimes prefer Cumhuriyet Square to get a good view of the sea.

Figure 3.86: Daily life in Cumhuriyet Square

The usage of the square in the afternoon is no different from the lunch time. A few people and families stay at the square maximum 15 minutes. Except from these users people usually pass through the sidewalks being located near the square. These same activities continue in the square until the sunset. When the sun starts going down, the number of the users around increase. People get together and wander about by the sea. Also, group activities and gatherings increase near the sunset.



Motor bikers generally meet in Cumhuriyet Square and then they perform shows with their motors. Besides, some people prefer sitting on the low walls of the monument and watch the surrounding environment as there is an impressive view of sea and sunset.

Figure 3.87: Types of spending time during the sunset

Motor bikers, roller skaters and cyclists usually prefer Cumhuriyet Square in order to meet. They are specific users of the square. They choose this square because of its convenient and smooth surface for motor and skates.

Roller skaters often appear at Cumhuriyet Square. They generally come in groups and enjoy skating. Also, they constitute skating courses some days.

Figure 3.88: Skaters as specific users of the square

Although the square is closed to the traffic, there are many vehicles at the square for the shooting of the series. Serial teams set up collapsible tents and place their technical equipment at the square. A large number of people surround the set of series as they want to see famous actors.

Figure 3.89: Special activities in the square

People can only sit on grass and surrounding of the monument because there is no another place to sit. In contrast to the weekdays, we could see many people lying on the grass on the weekend.

Figure 3.90: Sitting activities in Cumhuriyet Square

As weekend usages; there are some special activities on some weekends. For instance there is a series shooting on Sunday in the observation week. During this activity, Sunday is the most crowded day of the week. People show great interest in the

set of the shooting and famous actors. Therefore, the square and its surrounding environment are full of people on the weekend.

Consequently, as it can be seen there isn't any relation between surrounding buildings and the square from the point of view of usage. Cumhuriyet Square is located among hotels and office buildings and also is separated by wide roads from the surrounding buildings. Those buildings' functions have no relationship with their environment and the square. Hence there isn't any activity that related ground floor in the square because of this reason. Also, the same reason makes this one an inactive square in terms of ground floor interaction since users, who are in the square, cannot actively use those buildings and even it is hard to see their ground floors. Those affect the character of the square. Additionally, it isn't suitable for socializing adequately because there aren't any fundamental objects to sit at the square. Thus, it is convenient for special celebrations and official ceremonies so that Cumhuriyet Square is a more monumental square for the city. Distinctively, although it isn't designed for skaters or motorbikes, it is frequently used by them by means of its flat and smooth surface.

3.2.4. Analysis of Gündoğdu Square

Pedestrian Accessibility:

Gündoğdu Square is located Alsancak district in İzmir and Ali Çetinkaya Boulevard opens to Gündoğdu Square. Public transportation stations of the square are shown in figure 3.91. Alsancak ferry station is near the square, thus it is easy to access to the square by ferry. The nearest bus station is Hocazade Cami station and it takes 10 minutes on foot to arrive the square from the station. People prefer coming there by metro which takes nearly 15 minutes on foot from Alsancak metro station.

Actually Gündoğdu Square is a recreational urban space, which mostly consists of soft areas and vehicles cannot enter this space. As pedestrians completely dominate the square, they enter the square from every direction. So there are many entrances that people often use; they can enter from the boulevard, hard spaces, and corners of the square (Figure 3.92). Furthermore, there are some spatial level differences. These differences are among the steps of the monument, soft grass areas with low ramps and low walls near the sea, but these level differences doesn't prevent the disabled people

from accessing to the square due to the fact that ramps have low slope. Therefore, the square is accessible for all people. It is a strategic space for citizens with regard to pedestrian accessibility.

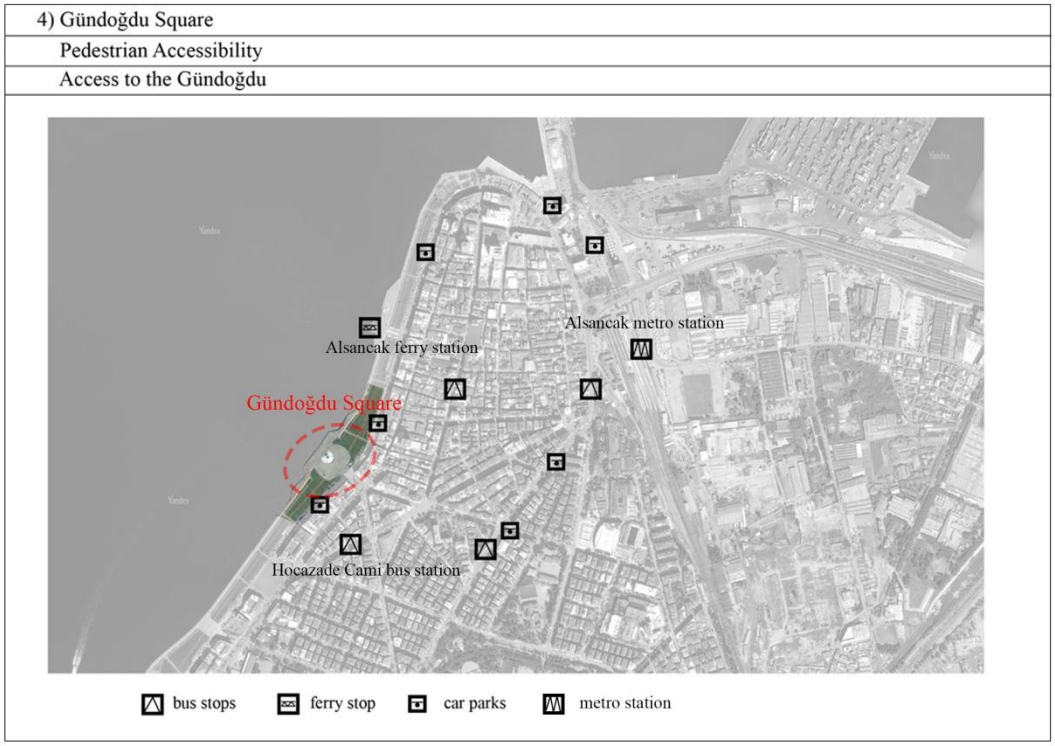


Figure 3.91: Access to Gündoğdu Square

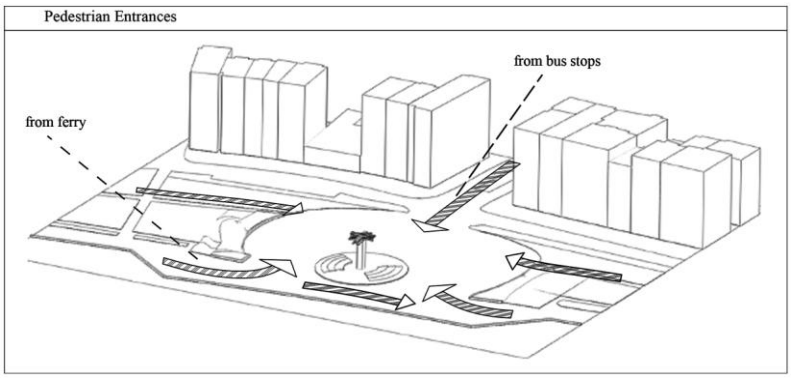


Figure 3.92: Pedestrian Entrances of Gündoğdu Square

Size:

Gündoğdu Square is the largest square of the study. Its length is 97 meters and width is 87 meters.

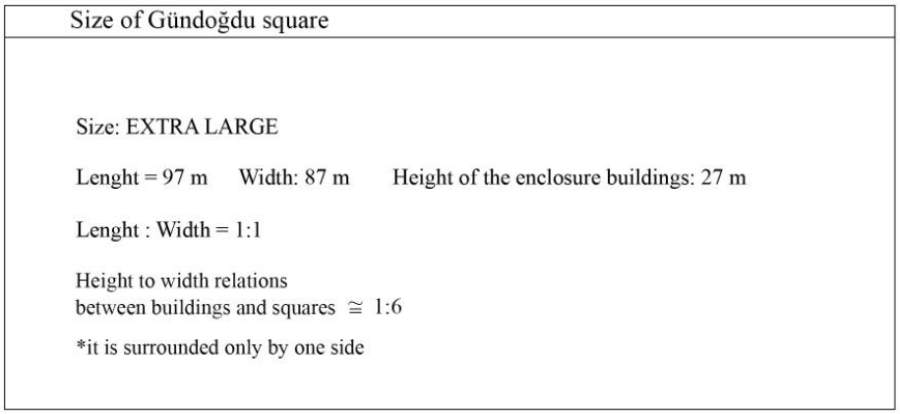


Figure 3.93: Size of Gündoğdu Square

If we evaluate Gündoğdu Square's size, it can be an example of Lynch's (1981) ideal large square because its length is about 100 meters. Gehl's ideas about the size of the square and the ability to observe the activities in the square are also verified in this square. If we consider the size by perceiving the activities in ground floors of surrounding buildings, an observer standing at one corner can perceive the activities that are being performed at the opposite corner of the square. However, the observer cannot see the activities when they are performed on the ground floor of surrounding buildings because this distance exceeds 100 meters in Gündoğdu Square. Distinctively, the numerical relation between height and width is 1:6. This proportion is Alberti's (1955) minimum ratio to being an enclose square. Besides, there are some short trees which are lower than 2.5 meters, on small hills and they are close to each other less than 5 meters. Hence their places are not match with Bentley's (1985) ideal dimensions about trees. Even so, they are harmonized with friendly space of small hills.

Square Types According Plan Shapes:

There are no definite boundary elements for defining the form of the square, but it is possible to state that the low walls, the edge of the sea and buildings provide the form to the square. As shown in figure 3.94 below; form number 1 defines the shape of the square with buildings and as another alternative shape; number 2 represents the shape of hard surface inside the square that is limited by low walls and soft surface.

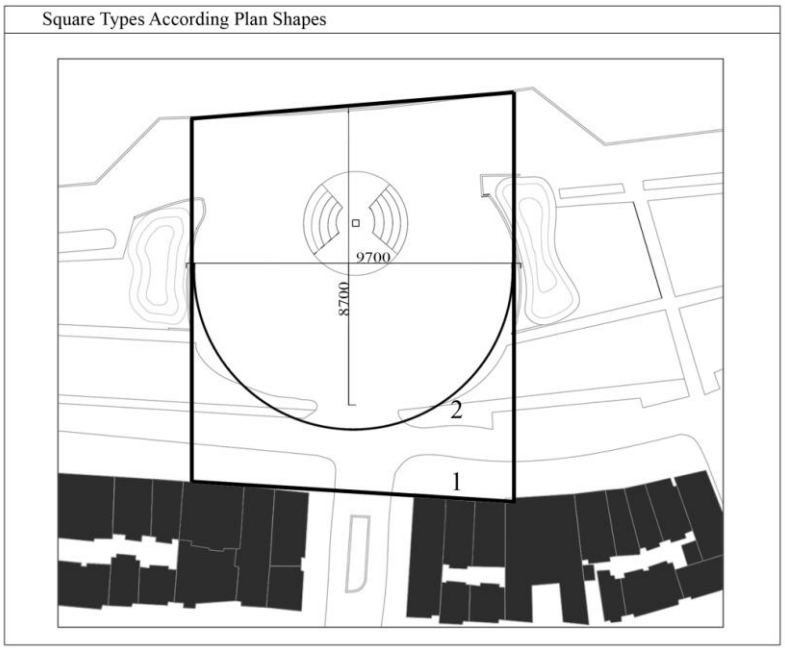


Figure 3.94: The alternative plan shapes of Gündoğdu Square

If we consider Zucker's (1959) archetypes, Gündoğdu Square is a dominating square, because the monument, its stairs and the sea provide dominance to the square and also due to the monument's vertical, central and visual effect, it is a nuclear square. Geometrically, it can be an example of French's (1978) centric square because it includes dominating axes towards the center. Moreover, the ratio of length to width is nearly 1:1 but it is not perceived as a square form because the low walls around the square are oval-shaped, whereas the low wall in front of the sea provides a flattened edge to the square. So its form consists of merging the rectangular and semi-circular forms with each other (Krier, 1979). In addition to its geometry, it is a concave nodal open space (Bentley, 1985) as its oval-shaped low walls sustain this form.

Enclosure:

Degrees of Enclosure:

Sitte's (1889) and Moughtin's (1999) ideas about sense of enclosure in urban squares decreases in Gündoğdu Square because there aren't enough surrounding elements around it (Figure 3.95). Also, there is no definite closed vista, whereas only buildings can give the sense of enclosure visually, but these buildings are far away from the center of the square to provide an enclosed character. Even though its boundaries are

not totally definite and all of the recreation area is presumed as Gündoğdu Square, we suppose that low walls and small hills are the boundaries of the square. There is an obstacle where the square is, and hence Gündoğdu square is an example of negative space of Alexander et al. (1977). Therefore, it isn't compatible with the enclosed square definition as its boundary is hardly perceived without being in need of any signals and not being distinguished easily.

As mentioned in previous chapter by Ching (1979) and Trancik (1986), qualities of the buildings' ground floors affect the degree of enclosure. The surrounding buildings of Gündoğdu Square have opened patterns on their ground floors and they serve as cafes. Although there are no strong relations with the buildings' ground floor and the square physically as the road separates them, the usage of buildings' ground floors enclose Gündoğdu Square socially. So, the activities both on the ground floors and at the square interact with each other. For instance, people who are bored at the cafes or who don't want to be indoors, who want to be outdoors prefer being at the square for social activities such as sitting and drinking on grass instead of at tables of cafes. For this reason, ground floor can provide a 'social enclosure' to the square.

The concept of enclosure is accepted as the primary quality of being a square at the urban space in leading literature studies. If we mention the relation between height and width of Gündoğdu, it is a problematic issue because three dimensional frames are inadequate for surrounding the square and also it has much openness instead of built environment. It has less sense of enclosure since all corners are open (Moughtin, 1999). In addition, as it can be seen from the sections in figure 3.96, enclosed relation between buildings and the square is at an angle of 10°. According to Moughtin (1999) when the ratio of height to width is below the thresholds of 18°, the square starts to lose its enclosed character physically, visually and sensually.

Briefly, it can be noted that its degree of enclosure as the enclosed components,which are essential for being an urban square, is lack in Gündoğdu Square according to leading studies in literature. Even so, it cannot be ignored that Gündoğdu square has a remarkable social life in the city.

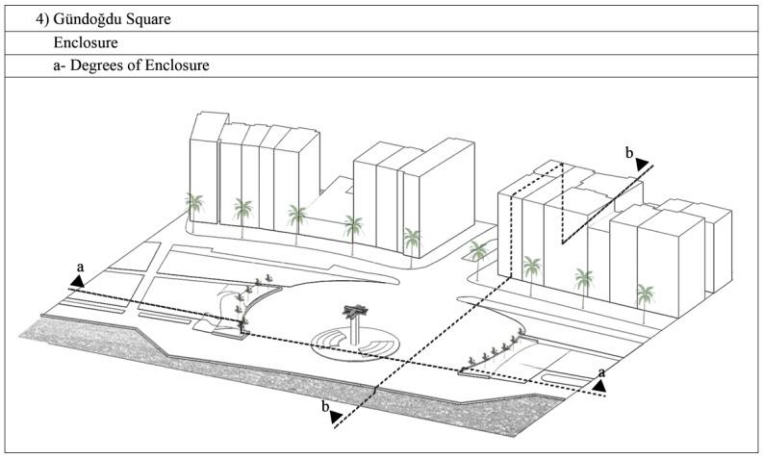


Figure 3.95: Degrees of enclosure in Gündoğdu Square

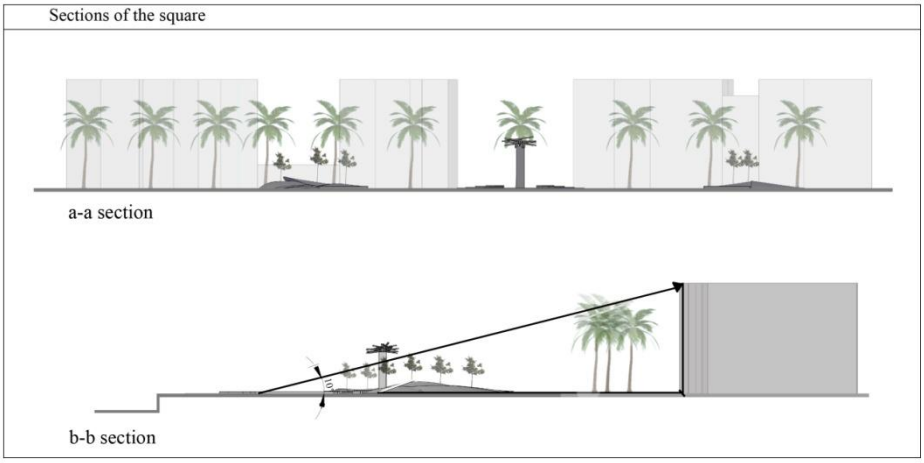
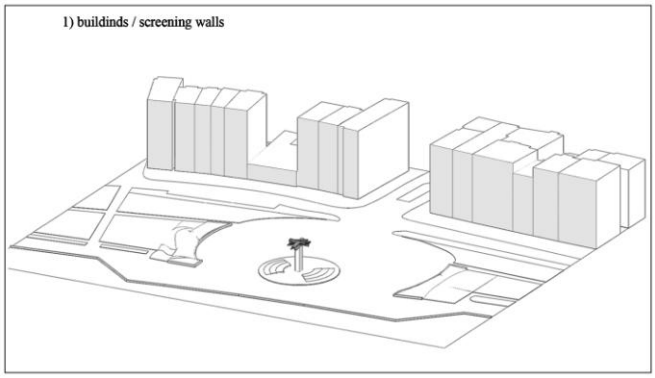


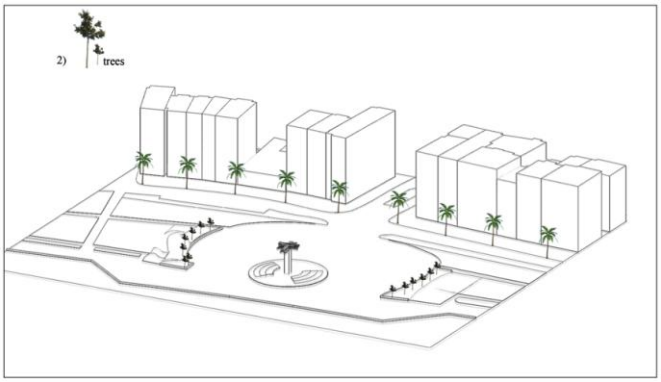
Figure 3.96: Sections of Gündoğdu Square

Enclosing Boundary Elements (Buildings& Structures)

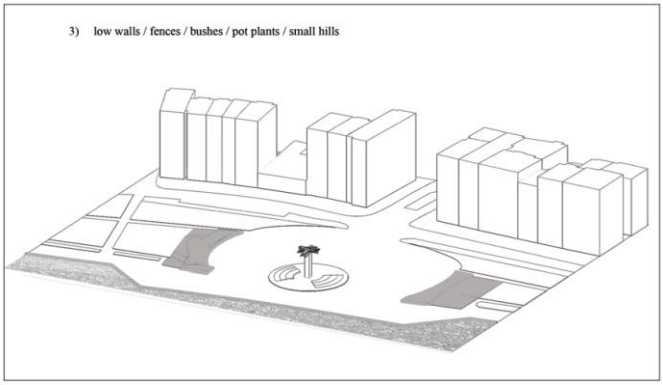
Gündoğdu Square is surrounded on only one side of it which has nearly 27 meters high buildings. They aren't enough to enclose the square completely since they are far from the square and the street separates the square and the buildings. Additionally, there are low walls, which are 0.9 meter high as an enclosed structure. Although the ratio of height to width is below the ideal levels, both low walls and small hills achieve to be enclosing boundary elements of the square. Thanks to low small hills, hard surfaces and soft surfaces are apart from each other and the boundary of square becomes more definite. There are also small trees on the low green hills. They sometimes provide shady areas for users throughout a day, but they are weak elements to enclose the square.



The facades of buildings are adjoined to each other. Although buildings are not freestanding, they are too far away to properly enclose the square.



The palm trees don't surround the square because they are outside of the square. The trees on the small hills provide little sense of enclosure because its size is very small for surrounding the square completely.



These small greenery hills surround the square. For this reason hard surfaces and soft surfaces are separated from each other. Even though height of the small hills don't proper to literature studies, they success to give enclose character to the square.

Figure 3.97: Enclosing elements of Gündoğdu Square

Therefore, small hills strengthen the enclosed character with low walls and they are primary enclosing elements of the square, and the buildings in the background are other enclosing elements of the square yet they are not enough to surround it totally.

Edge, Center & Corner

As we can see in figure 3.98, facade qualities of buildings whether they are transparent or opaque, aren't related with the square physically, because they are separated from each other by a vehicle road. There are solid low walls as the edge of the square. The lower wall in front of the sea is a significant edge as the sea attracts so

many people. These low walls animate the public life because people can sit and meet there. Due to the fact that the wide boulevard directly opens to the square, the intersections of the entrance of the square and the boulevard have critical point of the square. So that this intersection space is the edge of the square since people can easily enter the urban life from the entrance. Also, Hillier (1984) names the most integrated spaces as edges in urban life. Hence the solid low walls near the sea and the entrance are the most integrated places of Gündoğdu Square. In addition, there is a significant monument in the center. Although Sitte (1889) believes that the monuments in the center restrict the activities, people prefer standing near the monument for taking photos, sitting or meeting at Gündoğdu Square. Besides, it is appropriate for Alexander et al' (1977) recommendation about a center, as the monument attracts the users. Moreover, if we consider the corner of Gündoğdu Square in the direction of Whyte (1980); the street corners are crowded because the ground floors of buildings serve as cafes. According to Whyte (1980), a successful square starts with the street corner, thus the users can easily be inclined from the corners to Gündoğdu Square. For instance, firstly people meet at the surrounding café at the corner and then when they are bored, they prefer sitting at the soft surface of the square or want to be near the sea. So, people in the corner are included in the square.

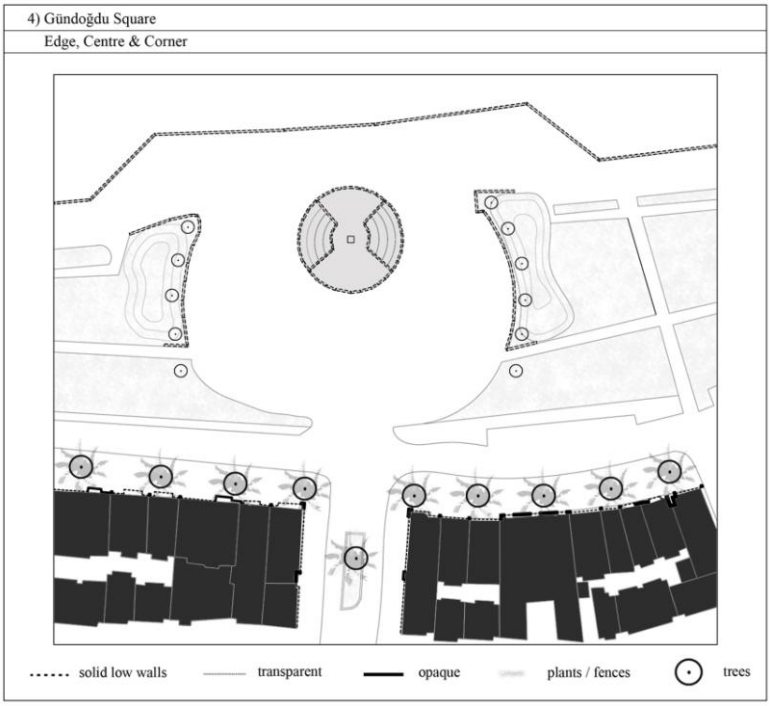


Figure 3.98: Surface qualities of surrounding walls in Gündoğdu Square

View from the Square and View of the Square:

View from the Square / Openings:

Gündoğdu Square is physically open and there aren't enough elements and structures to enclose it completely. If we evaluate vista of it according to Sitte (1889), it isn't appropriate for his principle of enclosure. For this reason it is hard to perceive where the inside and outside of the square. In addition, squares should offers a private world to the users according to Cullen's (1961) visual studies, but Gündoğdu square doesn't offer private vista to users because all sides are open. It's surrounded with low walls, but they cannot provide closed vista because their height is below the eye level. Besides, when the observer looks outside the square, 'here and there' concept of Cullen (1961) cannot be established because the square isn't specifically enclosed. However, if we analyze about the surface materials inside the square, hard surface can be distinguished from all of the recreation areas because only the inside of the square has hard materials. Therefore, an observer looking out of the square can perceive being inside the square as 'here' and outside as 'there' in terms of surface materials. Also, when they sit on low walls, by the sea or on grass they have the chance to see a great open vista and seascape.

When the observer stands near the monument in the center and then looks towards the openings of it there are 4 alternative points of inward view. These are shown below in figure 3.99 and the photos of each one are in figure 3.100.

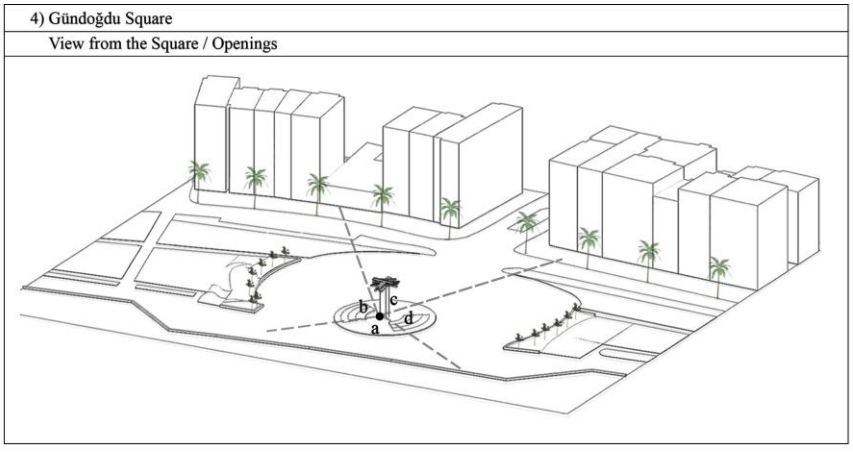


Figure 3.99: Outside views from Gündoğdu Square

a: This point has a great vista by the sea. People sitting near the sea and walking in the pedestrian ways are seen.

b: There are low walls and small hill made of grass in this point of view. Surrounding buildings in Kordon are in the background.

c: The street entrance can be seen directly. This side is intersection point. Also, here is the main entrance of the square.

d: It is the opposite side of the b. There are low walls and sea with large openings. The buildings are blurred in the background.

Figure 3.100: Photos of Gündoğdu Square towards the outside

View of the Square / Approach:

One main street opens to the square, which is number 1 in figure 3.101. When users approach to the square at this point, palm trees are seen first. Then, the square and the monument are perceived in number 2. If we remember Ching's (1979) terms on approach, number 2 is a frontal approach because the image of this space is clear. Other approaching points are represented inside the recreation space. In other words, people approach to the square from wide openness except number 1. Buildings and the monument can be seen while people are walking through number 3. Also, number 7, another approaching point, has a mirrored view of number 3. So the buildings and the monument are again in the field of view. Due to the fact that walking way is axial (Hillier, 1984), when users approach from 3 and 7, viewing fields are clear because everywhere is open. There aren't any inappropriate objects to prevent the vision. Furthermore, approaching points of number 4 and 6 are appropriate for oblique approach of Ching (1979), an approach that is perspective and angled to the square. Lastly, number 5 is a frontal approach to the monument and the street entrance between buildings can be seen from here. The monument can be considered as the visual focus of Gündoğdu Square. It is an impressive object in the square because it has a dominant visuality. Thanks to the monument, the square becomes more specialized space visually. Wherever users approach the square they realize and see the monuments from a certain distance. All of these approaching points are listed with photographs below in figure 3.102.

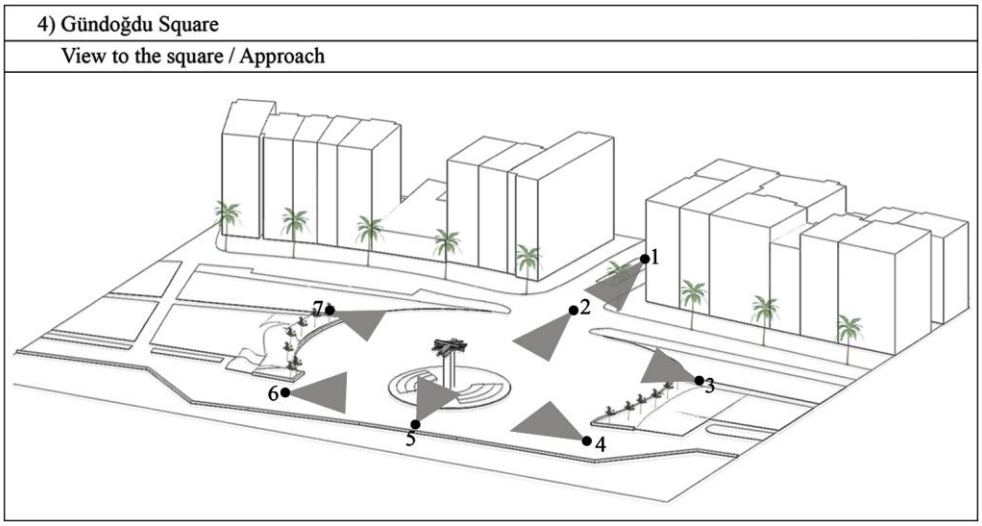


Figure 3.101: Approach to Gündoğdu Square

Figure 3.102: Photos of Gündoğdu Square from outside

Elements in & Surface of the Square:

Monuments in the Square:

Gündoğdu Square has a significant monument at the center so it is not an empty square. The monument is called as 'Cumhuriyet Ağacı'. It was designed by Ersen Gürsel & Ferit Özşen and constructed in 2003. It is not appropriate when Sitte's thought is taken into consideration as the monument is placed at the center of the square. But in contrast with Sitte (1889), it doesn't interrupt the square. It succeeds in attracting the users and users generally want to take a closer look at it because the monument is the focal point of the square. In addition to the monument's dominance, the monument give direction to people such that when people meet each other in Alsancak, they prefer this monument as reference point.

The monument of 'Cumhuriyet Ağacı' has steps at its pedestal; there is a column on the steps and the impressive sculpture of monument is on the top (Figure 3.103). Stairs with low steps allow the users sit, lie and watch the life going on the square. The steps are designed as pieces of the monument. Moreover, the monument's column can protect users' backs and provide shadow when they stand or wait near the monument.

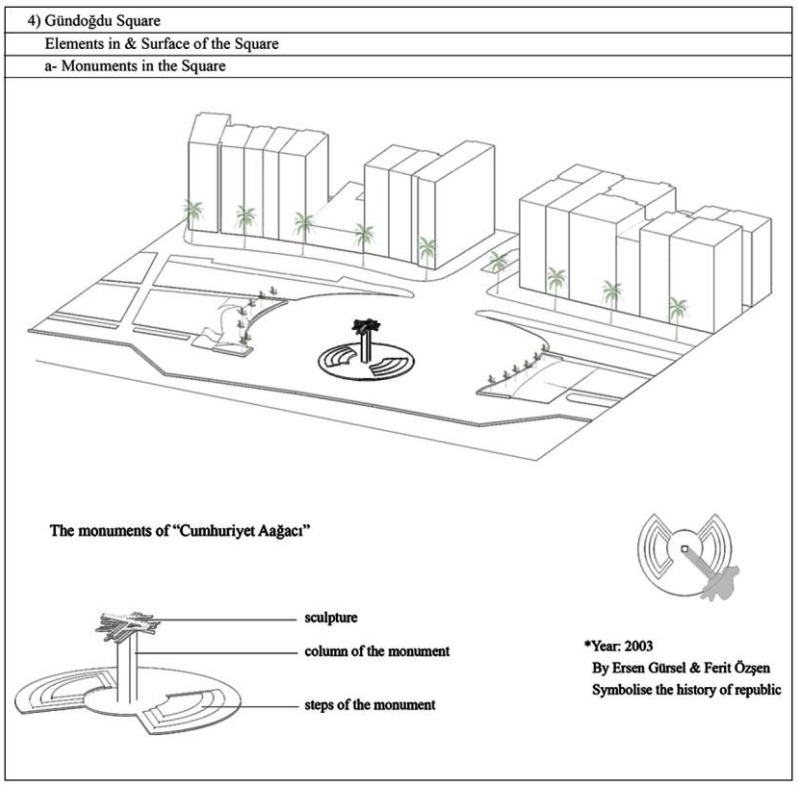


Figure 3.103: Monument of Gündoğdu Square

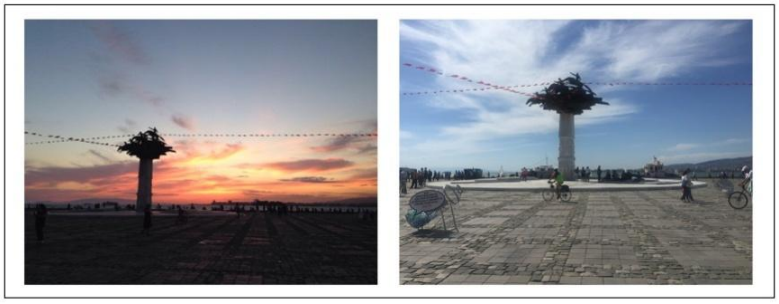


Figure 3.104: The monument of Cumhuriyet Ağacı

Surface of the Square:

The square has a hard surface, soft surface and also water surface (Figure 3.105). Considering Trancik's ideas (1986), floorscape of inner part of the square is classified as hard surface that is made up of two different stones except the surface of the monument. The monument's covering material is white marble. There are mostly soft surfaces out of the hard surface as grassed spaces and rubber/tartan walkways that are linked to the square. Like Cumhuriyet Square, Gündoğdu is also placed by the seaside. Therefore the sea provides water surface to it. Besides, there isn't any roofing material inside the square, only surrounding buildings have roofscape material.

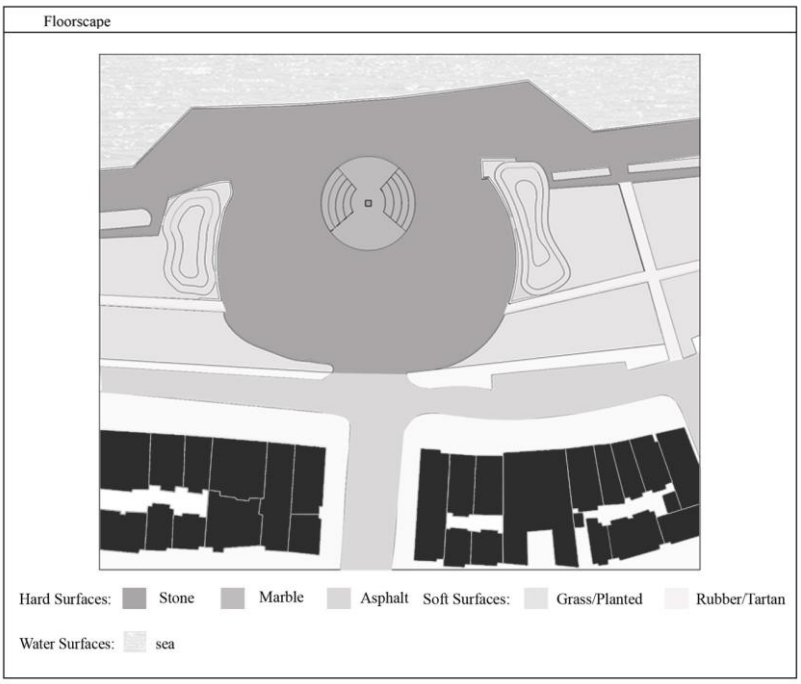


Figure 3.105: Floorscape of Gündoğdu Square

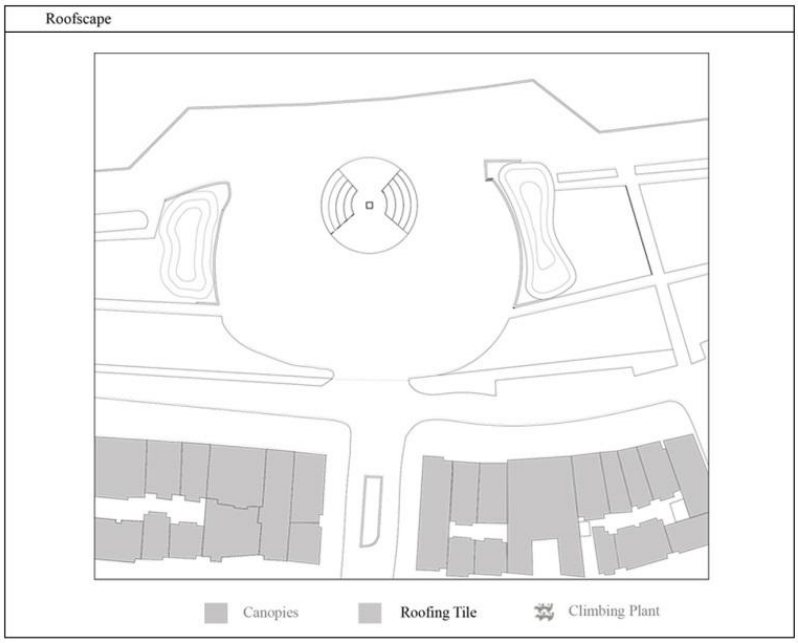


Figure 3.106: Roofscape of Gündoğdu Square

Figure 3.107: Types of surfaces in Gündoğdu Square

Location, Comfort, and Flexibility of the Urban Furniture:

The wooden benches by the sea are a type of urban furniture at Gündoğdu Square and it creates formal seating at the square. People usually prefer sitting on the benches as it offers a good view of the sea. There are other alternatives for seating except formal seating. These are stairs of the monument, on low walls and small hills of the soft surface. In addition, people want to benefit from shading of the monument until the sunset and also prefer sitting on the low walls and small hills for their group meetings, especially after sunset. Both formal and informal styles of seating are shown in figure 3.108. Like Cumhuriyet Square, Gündoğdu has temporarily activity stages for the celebrations of the special days and public speeches. Thus temporarily objects and furniture create different experiences within the square and they animate the public life.

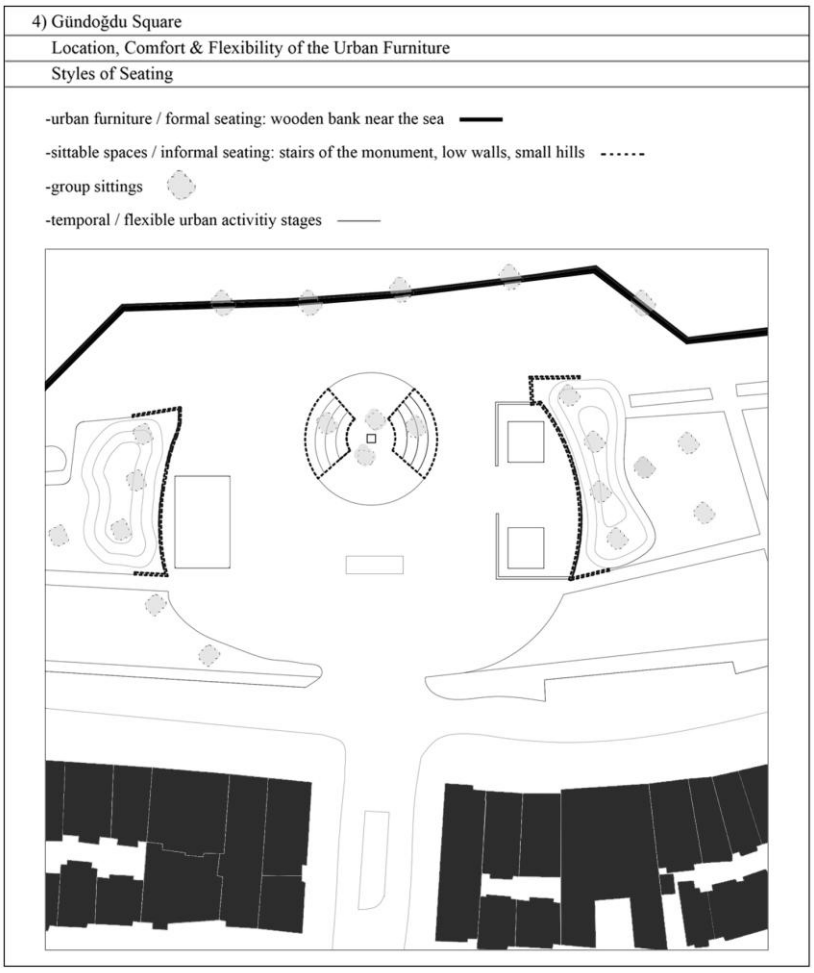
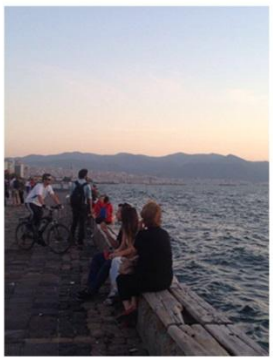


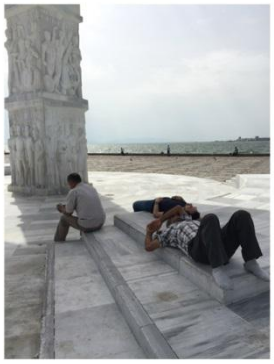
Figure 3.108: Urban furniture in Gündoğdu Square



This is the formal seating in Gündoğdu Square. People usually prefer to the wooden benches because the sea attracts people when they meet somebody. Also, one can comes and sits on the bench alone.

Users can sit on low walls in groups. Someone can sit and another one can join by standing when they chat with each other.

People prefer soft surfaces at the end of the day during the sunset especially on the weekends. They sit or lie on small hills alone or in groups.



Stairs of the monument can be used for informal seating. People usually benefit from its shading. Thus they sit around of it and even lie down on the stairs.

These are the examples of temporary and collapsible urban furniture. These kinds of objects are placed for special days and celebrations.

Figure 3.109: Seating styles and temporarily furniture in Gündoğdu Square

Climatic & Temporal Conditions:

The observation of Gündoğdu Square is performed between the dates 30.05.2016 and 05.06.2016. Its temperature during this week is nearly 30°C in a day and 20°C at night. As we can understand from the sun/shade diagram in figure 3.111, only the monument provides shadow to the square. So, people prefer standing or sitting under the monument at certain times during a day since it creates shady place for the users. In the morning the shadow of the monument is shallow but in the evening it is deep. Also, small trees on soft spaces have little effect to create shady places because they are already very small trees. As it can be seen below on pictures (Figure 3.110), only couples prefer sitting under these small shady places to be close to each other, whereas people usually prefer standing under the monument as it offers more comfortable areas on sunny days.

Figure 3.110: Shading places in Gündoğdu Square

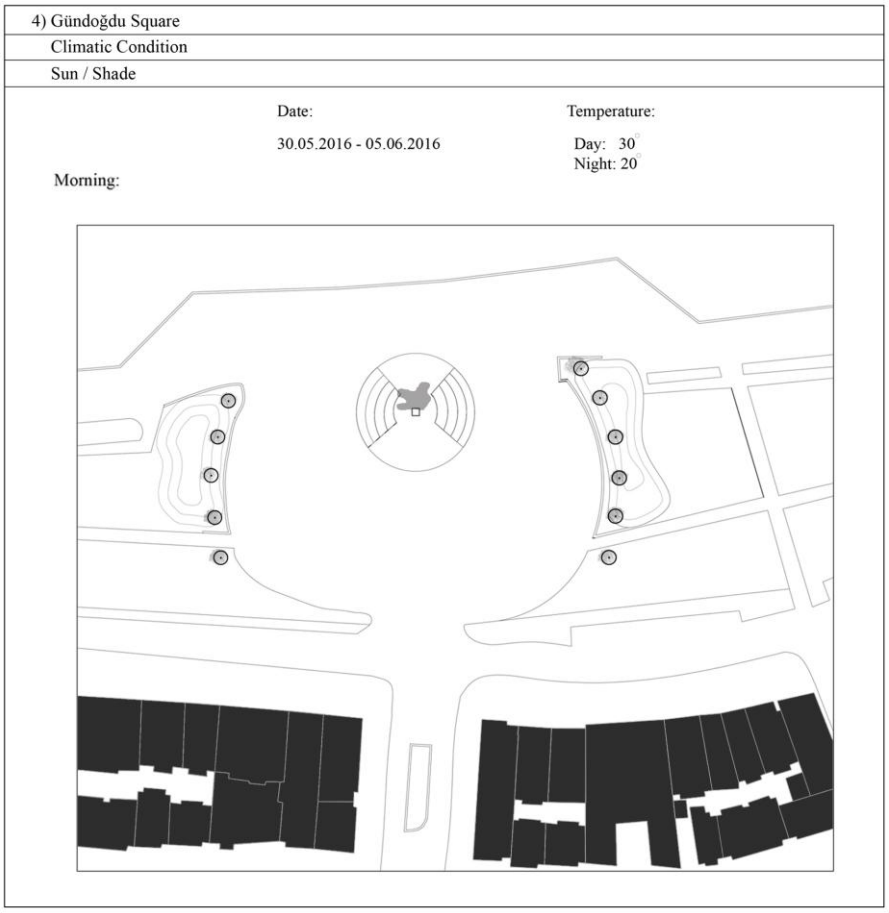


Figure 3.111: Sun/shade diagrams of Gündoğdu Square

Users, Usage & Activity:

Various kinds of people use Gündoğdu Square throughout a day. It usually serves as a central gathering place for people and also many people prefer the monument at the square as a meeting point. It is possible to see different user diversities such as families taking photos in front of the monument, couples and younger people sitting by the sea and on the grass, people as a group or alone walking around. Also fishermen by the sea, carts and their drivers, florists and fortune-tellers are constant users of the square.



Fishermen come to the square early in the morning with their chairs and fishing line. Florists and fortune-tellers often approach to the users who are sitting by the sea and some people are disturbed by them while the others enjoy. Also, there are horse carts at the edge for the users to take a tour and their drivers are also the constant users of the square.

Figure 3.112: Constant users of Gündoğdu Square

In addition to these users, in the morning, pedestrian ways are used by a few people, who go for walking and strolling with their families or alone. Also, people prefer sitting on wooden benches by the sea in the morning. So the square is generally quiet until afternoon. Then, the surrounding of the monument is often used in the afternoon because it offers shady places for the users, especially on sunny days. There are various kinds of activities around the monument and its stairs are used for getting together, taking photos, lying, and sitting.

People take photo in front of the monument every time of a day. Shade of the monument attracts people on sunny days. Some people get together around it for sitting and watching life going on and even some people lie on the stairs of the monument.

Figure 3.113: Usages of the monument

Later, people start getting together and sitting on the grass about the sunset in order to relax and talk at the end of the day. Also, pedestrian ways are often used by people about the sunset. The number of people at Gündoğdu increases in the evening significantly. These usages are examples of a sunny day at Gündoğdu Square in figure 3.114.

Sitting couples, families, younger people can be seen on the grass. Some people drink or eat something, read books, listen to music or only watch the life going on.

Figure 3.114: A view of Gündoğdu Square at sunset

Distinctively, it allows special activities and celebrations. For instance, there was the celebration of World Environment Day on 5 June, in observation week of this study. The aim of the event is to form a plastic elephant model from plastic bottles at the end of the week after accumulating these plastic bottles. There is also a special stage for the event at the square and a variety of entertainments and speeches are performed at this stage. Many tourists from different countries attend to the World Environment Day events at Gündoğdu Square. Tourists generally take photos in front of the sea.

A structure like a door is placed at the entrance of the square to make the event attractive. There are tents and boxes in it to collect plastic bottles. Elephant model is completed end of the week and shown during the closing speech.

Figure 3.115: A Special day celebrations in Gündoğdu Square

The usage of the seaside notably increases due to the environmental day event. People and also some sailor groups support the activities and celebrate it from the seaside. Moreover, tourists who come for the event usually use the seaside for their souvenir photos.

Figure 3.116: Users near the seaside

3.3. Findings & Discussions

All of the case study findings are discussed together in this section. After observational processes, the squares are evaluated by drawing a correlation between the examined books and surveys.

The first underlying feature that an urban open space needs in order to be a square is pedestrian use. As all of the study areas having pedestrian priority, they give a chance to become common sharing places providing the citizens a variety of activities inside the city. Also, the access to these squares are easy because they are close to main transportation systems as each of the four public squares is very close to the central points in the city. Because of these reasons, all of the squares are compatible with the leading literature studies in terms of pedestrian accessibility.

These four squares' sizes are different to each other such as S, M, L, and XL. The squares show physical compatibility to the ideal dimensions, which are determined in literature. In order to evaluate the squares according to their size, the important studies of Alexander, et al.'s (1977) and Gehl's (1987) come to minds; 'the dimensions of the squares should be considered with the number of the people in it'. If we examine Table 3.1 which is the analyses of the general using times of the squares, we can see Ali Paşa Square as the smallest one and Gündoğdu Square as the largest one have approximately the same density of users. Hatuniye Square has a medium scale. Since the density of users is always the same number, it is consistent with its size and the number of people in it. Thus, the users can feel that they are in a neighborhood square in Hatuniye Square. Cumhuriyet Square has the least density of users. It is used by nearly 32 people even at the peak times of the day, except special days, on the contrary, Alexander, et al. (1977) stresses on the large squares which must not have less than 33 people in it. The densities of people are not enough to animate the square so it is generally an empty square. Even though Gündoğdu Square is bigger than Cumhuriyet Square, it is perceived as a much larger place by the users.

While evaluating the size of the squares, it is also noticed that the squares with different sizes contain different scaled activities. Whereas the celebrations of special days, movie shootings, and even meetings occur in Cumhuriyet and Gündoğdu Square which are relatively bigger squares in this study, more daily activities are observed in Ali Paşa and Hatuniye Square, such as eating facilities, chatting and watching. Besides, people prefer Gündoğdu Square for chatting, sitting and watching activities but these kinds of activities cannot be encountered in Cumhuriyet Square. In the light of these findings, it can be said that the qualities of Cumhuriyet and Gündoğdu Square are different for city. Cumhuriyet Square is a place to pass while Gündoğdu Square is a part of Kordon promenade. Therefore, though 'size' is perceived as physical criteria, it exposes different points in terms of the usages and way of life of the squares.

When the squares are examined in terms of 'square types according to plan shape', the surrounding borders of the squares are more important than having a certain geometrical forms. As a result of observations, there are unique elements that determine the shape of each square. Since Ali Paşa Square is enclosed by surrounding buildings, their boundaries define its shape. In addition, Hatuniye Mosque is the strongest element

determining the form of Hatuniye Square and also surrounding streets and buildings affect its shape. Also, in Cumhuriyet Square, the arrangement of trees, greenery surfaces and buildings in the background have an important role on the form of it. The differentiation of floor surfaces provides also definite shape of the square. Since there are no enclosing elements in the surrounds of Gündoğdu Square, it is complicated that what its form is**,** but even so it can be supposed that the surrounding greenery of low hills define the square's borders physically. Therefore, surrounding elements should not be considered only as buildings. As seen in case study results, trees, greenery surfaces, low walls, and also surrounding streets affect the form and border of the square.

As we see in previous sections, there are important normative studies about 'enclosure' of the squares and different height to width ratios are stated in order to be an urban square by many authors. According to these ideal ratios, Ali Paşa Square and Hatuniye Square are ideal enclosed urban square because the users feel like they are in an 'outdoor room' (Moughtin, 1999) in these squares thanks to their height to width ratios. Cumhuriyet Square is surrounded by built environment in three sides and its one side is visually open towards the sea. It still has substantial enclosure rate according to leading literature studies. But the sense of enclosure begins to decrease in Cumhuriyet Square since the surrounding buildings and the square divide to each other by wide vehicle roads. In Gündoğdu Square, we could not find any enclosing elements and also it is not compatible with ideal ratios in the textbooks. According to the results of the study, the sense of enclosure decreases when its size gets bigger. On the other hand, the squares should not be only evaluated with its physical enclosure. The enclosure which is totally supposed as physical criteria, it has to be handled with the usage. We cannot ignore the social life and liveliness of a square which is not suitable to ideal ratios of enclosure. Accordingly, it will be useful to mention the findings on ground floor use of surrounding buildings.

The surrounding environments of the squares have a critical role on characteristics of the squares. Since Ali Paşa Square is located on an extremely used artery, thousands of people go along the surrounding streets. The restaurants and stores provide people to stay in the square. The ground floors give the opportunity for eating and shopping facilities and so these facilities in the squares succeed to attract people. Due to the fact that the restaurants and other stores are closed on Sundays, the square is

completely empty on Sundays on the contrary to the other days. Also, it is not used at night because the stores in Kemeraltı district close at night. Like Ali Paşa Square, Hatuniye Square has strong relationships with the surrounding buildings ground floors. The activities in surrounding cafes are spread to the square and people prefer to drink their tea under the trees of the square instead of indoor space of cafes. Yet, the Mosque's courtyard and the square are not related to each other because they are in different levels. In addition to these two squares, Gündoğdu Square is enclosed by various social activities. The cafes on the ground level of the buildings are popular meeting spots for İzmir city and lots of people come the surrounding cafes prefer to gather in the square. Hence, surrounding usages succeeds to animate the square life. According to these findings, because the surrounding usages spill through the square, the ground floor facades of Ali Paşa, Hatuniye and Gündoğdu Square have strong 'active frontage' (Llewelyn-Davies, 2000). However, Cumhuriyet Square is the most unsuccessful square in terms of the relationship between the surrounding buildings and the square. Since the surrounding offices and hotels are 'freestanding' (Sitte, 1889), there is no any social relations between the surrounding building and the square. All of these findings display the importance of built environment and the squares should be evaluated with the ground floor usage around them.

Moreover, it is observed that as Ali Paşa and Hatuniye Square are enclosed entities, they have a 'closed vista'. Users can easily identify where the square is in these squares. When coming closer to Cumhuriyet Square from outside, it attracts people's attention visually with the palm trees and by great sea view. Therefore, the outside and inside of the square can easily be distinguished visually in Ali Paşa, Hatuniye, and Cumhuriyet Square and hence these three have the sense of 'here' and 'there' concept of Cullen (1969). However, Gündoğdu Square has not got these characteristics qualities in terms of closed vista. Since it has got less sense of enclosure, it is perceived as a continuation of the recreation area by users approaching to the square but the monument which has the dominant effect in it causes to be perceived as a different place from the recreation area in the surrounding. Namely, the vertical monument of Gündoğdu Square gives the feeling of a different place. On the other hand, Gündoğdu Square has great sea view. Even though it is not visually enclosed by sufficient architectural elements, it could attract people through its great open view.

If we evaluate the squares according to the elements in them, every square has monuments in it but their usages are different from each other. Ali Paşa Square contains a historical fountain that has lost its old functions. Nevertheless, the fountain reminds the users the historical meaning of the square. Hatuniye Square has a mosque as a monumental building at the edge and it provides a visual focal point of the square. Cumhuriyet Square has a sculptural monument at the edge. It is observed that this monument attracts few people to take a photo but its steps are used as seats. Gündoğdu Square has a monument in the center. This monument succeeds to attract people toward the center and also its surrounding is constantly filled by people throughout the day. These findings cause us to criticize the Sitte's (1889) rule about center of the squares. As mentioned in the previous chapters, Sitte and some others defend that the centers should be empty because of allowing the activities. In contrast to his discourse, the monument in the center of Gündoğdu Square invites people to the square. But Cumhuriyet Square's empty center does not contribute to the daily life of the square. However, Hatuniye Square as an open center allows placing lots of benches in it and people gather comfortably. As it is understood, the squares both embellished with the object and without any object in the center can be resulted different way. Based on these findings, we cannot apply the open center rule on modern squares because the usages of the centers change according to their location, surroundings, and design.

Location, comfort and flexibility of urban furniture have a major effect on defining the characteristics of the squares. Ali Paşa Square has benches in it but the restaurants' tables and chairs are the main furniture of the square because they are mostly used than the benches and every side of the square is equipped with them. It is observed that those tables and chairs are also flexible furniture of the square. They increase the use of the square as they provide places for food facilities in urban open space. Hatuniye Square has also benches that provide formal sitting. These benches are placed at a regular distance to each other, and so the trees are placed behind each bench. Hence, both the benches and trees create comfortable seating place for gathering and social interaction. Like Ali Paşa, the surrounding café's chairs become flexible objects of the square. Thus people sit where they want and these flexible objects succeed to keep people in the square. On the contrary, there is no any formal bench in Cumhuriyet Square and so it cannot fulfill the seating needs of users. People can only sit on the steps of the monument. Also, the lighting objects near the sea as urban furniture in

Cumhuriyet Square are preferred for sitting but these objects cannot provide a comfortable seating distance to users. Although Cumhuriyet Square and Gündoğdu Square are on the same coastline, in contrast to Cumhuriyet Square, the low wall near the sea is covered with wooden material for comfortable seating in Gündoğdu Square. This difference causes the following significant finding on urban furniture; people especially on the weekends flow to this wooden seating place in Gündoğdu Square whereas the density of sitting people in Cumhuriyet Square is very low. Moreover, Gündoğdu Square also provides different informal seating to users except the formal urban furniture. Its small hills with green surface and steps of the monument give people a chance to gather, sit and relax. Therefore, urban furniture and various informal seating choices increase the social interactions in urban squares.

Climatic and temporal solutions are one of the most remarkable criteria which have a vital role to increase the use of urban square. These kinds of solutions are mostly observed in small scaled squares in this study. The owners of the surrounding restaurants in Ali Paşa Square try to create canopies in order to enhance the shading areas for their 'customers' that are the users of the square. As we see in sun/shade diagrams in the previous chapter, Ali Paşa Square has the most shading areas in this study. Even though these canopies are not well designed, it is seen that they have a positive contribution to use. Besides, the trees act as a shelter in Hatuniye Square and so it is observed that the benches under the trees are full of people especially in afternoon. In the Gündoğdu Square only the monument ensures shading areas to users. However, there is no any climatic solution in big-scaled squares and this situation affects the usage in a negative way. Namely, when the weather is hot, the places which get the sunlight are never preferred so the usage of Gündoğdu square starts to increase with the sunset. As a result, climatic and temporal solutions are one of the leading issues while evaluating squares and also the sun/shade diagrams must be examined in design process in order to design good squares.

All of these different characteristics qualities, such as different locations, surrounding environments and physical features, lead the squares to have different kinds of users, usages and activities. After the observation studies in the cases, the findings about users, usage and activities are analyzed in the light of textbooks especially by considering analyses of Whyte (1980) and Gehl (1987). All of the results of the analyses tables can be seen in the end of this chapter. Briefly, these are the results of the most

frequently used times of the squares, time charts of usings, the numbers of people stay in the square and the numbers of pass through the surrounding ways, the periods of the squares' most active times and how long people stay in the squares. Also, the ratios of men and women in each square are stated in order to evaluate the safety of the squares.

Ali Paşa Square receives the people coming to the historical Kemeraltı bazaar. It responds to the eating needs of people who are generally families with children and elderly people. Most of the users stay in the square until they finish their foods and some people prefer sitting on the benches after eating. These activities take nearly between forty minutes and an hour. The square becomes a very crowded place on Saturday afternoons. Besides, the densities of women are generally more than men. The usage of Ali Paşa Square starts to animate from the lunch time and the activities go on until eight p.m. It is not an active at night. Due to the fact that stores and restaurants are closed on Sundays, the square is not widely used on Sundays. So, we can say that the usage of Ali Paşa Square completely depends on the stores around and the life of Kemeraltı historic bazaar.

Hatuniye Square has specific users for last years and it is observed that this square is used by refugees. It has been observed that those people spend a long time in the square during the day. Besides, the some of the users sometimes converse with each other calmly, while they sometimes fight to each other. As it can be seen from the results in tables, the square is not preferred by women. The women just come over the square when food is distributed. One of the reasons why women do not prefer Hatuniye Square is that the surrounding activities usually addresses to men. If we remember Whyte's (1980) thoughts, in his opinion the success of a square depends on the women users too. It has been understood from the interviews that have been done with the local users who have come to Hatuniye Mosque is that; the local users no longer find the square comfortable and say that they are rarely prefer the square. Accordingly, Hatuniye Square provides interesting results about the public squares. It is mostly used by refugees but it is not a safety place for citizens because of some social problems.

Cumhuriyet Square is a place where people pass through but they do not prefer to stay in the square. Yet, this empty space is sometimes a gathering place for skaters and motorbikers since its flat surface material is strongly suitable for these users. Throughout the day, the skaters usually spend time in the square and the time they

spend is approximately twenty minutes. Teen boys are generally observed as users. On the other hand, it is important to indicate that Cumhuriyet Square is one of the suitable places for special days, celebrations and formal ceremonies in city. In contrast to ordinary days, there are many people in the square at the special days.

Gündoğdu Square is used by many different user types. It is preferred by teenagers, young people, families with children, old couples and also tourists can be seen in the square as well. Despite tourists cannot be encountered a lot in other squares, lots of tourist groups have been observed in Gündoğdu Square and hence, it is the most well-known square in the city. Moreover, because the shading areas are restrict during the daytime, people flow when the sun sets and then spend three-four hours by sitting and chatting to each other on low greenery hills or near the sea especially on weekends. Besides, the safest square in this study is Gündoğdu square since it can be used till late hours in the evening.

The various types of users, different locations and altered surrounding environments of the squares lead to differentiate their progress of the daily lifes. All of the squares usages on weekdays, Saturday and Sunday according to hours of the day are seen end of this chapter (Table 3.3). Ali Paşa Square reaches peak points on Saturday; also the usage of the square goes on weekdays. But, since the stores in Kemeraltı bazaar are close on Sundays, there is almost no use on Sunday in Ali Paşa Square. Besides, we can understand from the chart of Ali Paşa Square that there is no usage in the evening. The usage of Hatuniye Square has consistent with weekdays, Saturday and Sunday. Since some refugees sleep in the square, users can be seen at night in the square. Cumhuriyet Square usually has the least density of users, but when there are special activities and celebrations, the number of the users in the square suddenly increases. As we see in the graphic, there is an unusual density in the square at afternoon on Sunday. This is because the activities of film shooting were performed. When we examine the density chart of Gündoğdu Square, we can clearly see that the usage increases towards the evening.

As a result of all these evaluations, the characteristics of the squares are understood at multiple scales and perspectives by commenting together the findings and leading criteria on urban squares. Besides, some important points have also been

discovered that the real life of the squares not compatible with the some leading studies in the literature.

Ali Paşa Square is the most consistent square with the leading ideas in this study. It has the spatial qualities required to be an urban square. Also, the square has lively social life. It is a small square and an actively used within the historical bazaar. The characteristic identity of the square undoubtedly related to its location in the city. Its liveliness is related to the historic bazaar which is in the center of the city and also its enclosed built environment give people the opportunity to their needs. In addition, some of the missing qualities that related to its design have been noticed by evaluations. The usages of urban furniture need to be increased and also the historic fountain in it has been disconnected from the square so this situation should be revised with the renewal projects.

The characteristic feature of Hatuniye Square is that it is a neighborhood square. It displays a different way of usage with its specific users. While it has got a successful way of usage in itself, it is alienated by the local people. This shows us that squares are affected by social circumstances. However, the presence of different users from other than local users and cultures can be interpreted as allowing Hatuniye Square and its surrounding to create user and usage diversity. The square is dominant with masculine usage since it is surrounded with a habit of ‘coffee’ which is generally used by man, since ancient times.

Cumhuriyet Square is compatible with the leading ideas in terms of spatial qualities, so it has the ideal physical characteristics to be a square. On the other hand, observational analyses led to the discovery of different characteristics related to its way of life and social life. The daily activities do not happen in Cumhuriyet Square whereas it is more suitable space for official ceremonies and celebrations. The most major reason of being not an actively used square in daily life is not having a relation with the built environment. In addition, the lack of any elements to meet people’ needs in the square causes its use negatively. Since the square usually hosts celebrations and ceremonies, it becomes a ‘monumental’ and ‘formal’ square for the city.

The physical qualities of Gündoğdu Square are not consistent with the leading ideas for being an enclosed square. Even though it hasn’t ideal spatial qualities, it is one of the most preferred urban spaces for gathering, meeting, socializing with other people

and also celebrations and demonstrations. The square and its surrounding are enclosed by various activities in different times of the day and citizens enjoy being in the square without looking its physical enclosure ratios. In this regard, the results of Gündoğdu Square disproof the important claim of leading studies on enclosure as the most necessary physical qualities for being a square. These significant results indicate that the physical norms of the squares should be reviewed within the framework of modern usages from different perspectives.

Table 3.1: Average usage times of the squares

Average usage times of the squares		
Urban Sqaures	the most active hours of the squares	maximum time spent in the squares
Ali Paşa Sqaure	8 hours 12 p.m. - 20 p.m.	1 hour
Hatuniye Sqaure	8 hours 13 p.m. - 21 p.m.	4 - 5 hours
Cumhuriyet Sqaure	3 hours 18 p.m. - 21 p.m.	20 minutes
Gündoğdu Sqaure	6 hours 17 p.m. - 23 p.m.	2 - 3 hours

Table 3.2: Densities of users

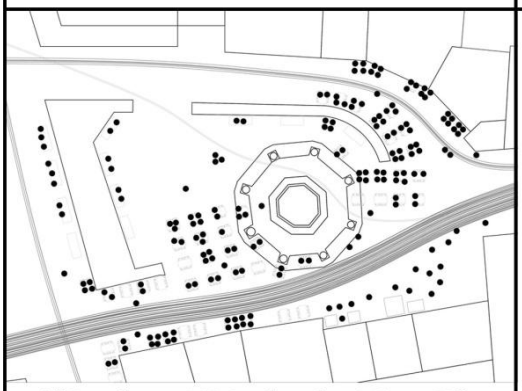
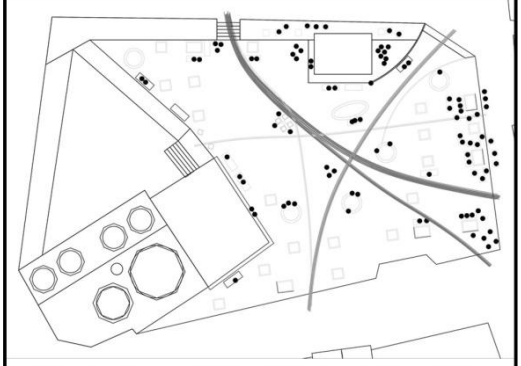
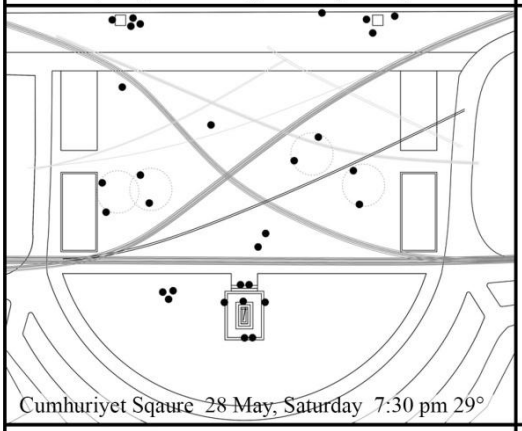
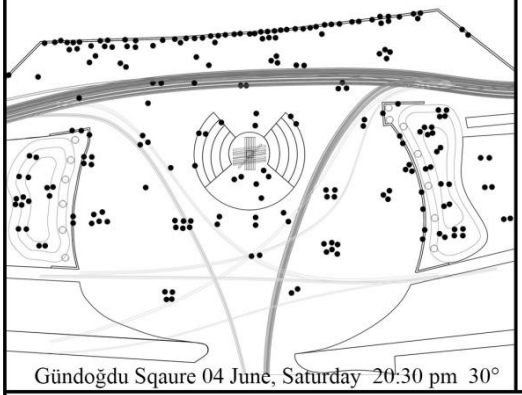
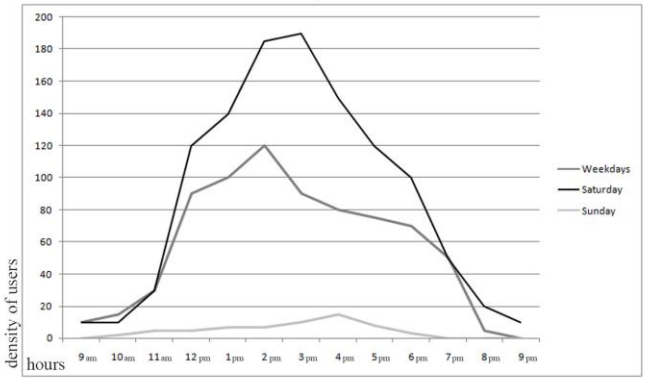
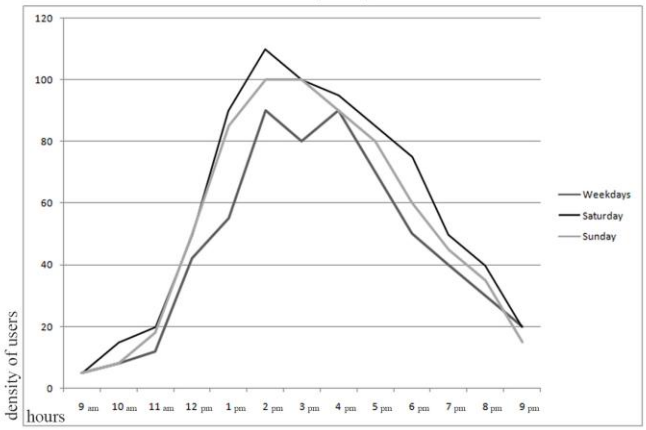
Densities of users	Staying	Passing	Women	Men
 Ali Paşa Square 14 May, Saturday 2:30 pm 25°	190	300		
 Hatuniye Square 21 May, Saturday 4:30 pm 27°	95	55		
 Cumhuriyet Sqaure 28 May, Saturday 7:30 pm 29°	32	120		
 Gündoğdu Sqaure 04 June, Saturday 20:30 pm 30°	200	250		
people staying in the square — people passing through				

Table 3.3: Usage diagrams of the squares

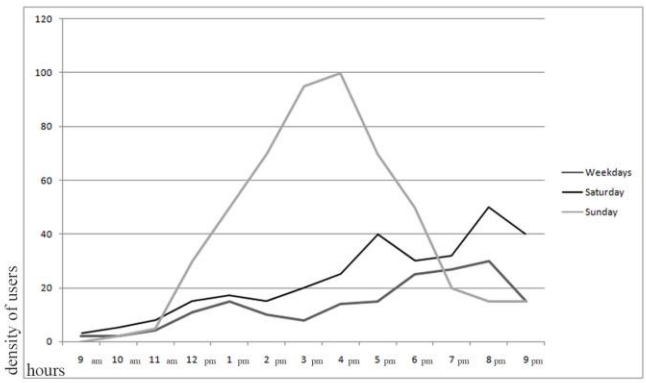
Ali Paşa Sqaure



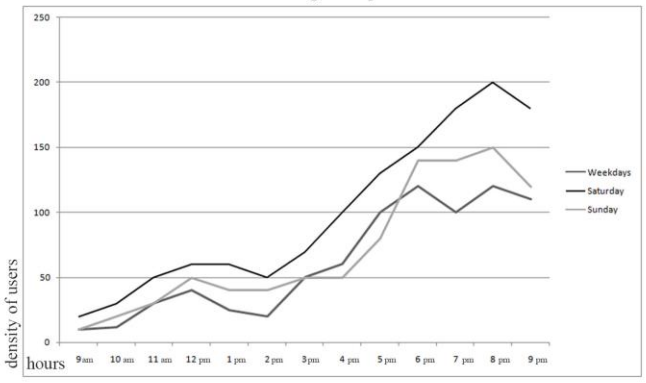
Hatuniye Sqaure



Cumhuriyet Sqaure



Gündoğdu Sqaure



CHAPTER 4

CONCLUSION

This thesis provides us to reexamine the ‘urban squares’ that is crucial for the cities. The study focus on these main questions that relates to the aim of the thesis: which components are necessary for the squares to be defined as a square; which criteria define the squares; and which analysis should be made for evaluating the urban squares. As the first thing that was done to answer these questions, I started with exploring the evaluation criteria according to leading studies on urban square. Accordingly, the aim of the study is to define characteristics of urban square based on leading books about the square of sixteen authors. After examining these normative books, ten criteria are specified and then these criteria are used for the analysis of four cases. It can be claimed that this study brings together fundamental criteria from the urban design literature for defining squares. Thus, which qualities a public square needs to have are stated in detail and then reinforced by case studies. It is hoped that through the identified and classified criteria, this study gives detailed information for the architects and planners while both designing and researching the squares.

The ten different evaluating criteria guide us to understand a square in every aspect. The squares are discussed from different perspectives in the literature. The criteria are based on the physical, functional, spatial and social qualities shaping the squares. They contain the components of a city square and integrated with each other. Also, creating the defining criteria is intended to form a common language for researchers but also is that can be practical and applicable for the survey studies.

This thesis uses observations in order to understand everyday life of the squares. The ten criteria are analyzed through the cases of four squares in İzmir, which are Ali Paşa, Hatuniye, Cumhuriyet and Gündoğdu Square. As a result, detailed information about the four squares’ essential components, physical and functional qualities, surrounding environment, everyday life activities and also social life has been obtained through examination of ten criteria, analysis and observation studies.

The squares are in different sizes, had different users, usages and activities. Also, because their built environment and locations are different, the squares' edges, corners and views from a distance have differed. Because of these differences, each square's daily life progresses in different temporalities. In Ali Paşa square, activity reaches to the peak point at the midday, but stop at night. Because Basmane square hosts immigrants, it is used in different activities during the day. Cumhuriyet Square is generally a quiet square, but it gets more crowded when there are special celebrations. In contrast to Ali Paşa, the life of Gündoğdu Square's life begins at sunset. In addition, the surrounding buildings' ground floor usages are so significant to understand the life of the squares. If the surrounding buildings and the squares are related to each other, these kinds of squares have chance to attract more people. As it is seen, while characterizing the squares 'usage' is always referred even describing the size of them and the squares are evaluated generally through activities, user diversities and densities. In this context, 'users, usage and activities' being the most stated criteria in the literature is not a coincidence; users, their behaviors and activities are the main issues of the squares. However, among the physical studies, the most critical result is about 'enclosure'. As it has been explained previously, many authors have focused on the ideal enclosure dimensions, which are necessary for being an urban square. Recollecting the analysis results, Cumhuriyet Square has a stronger enclosure than Gündoğdu square but their usages, density of users and activities are totally opposite to their closeness. Although Gündoğdu Square does not have the ideal rates so as to be a square physically, it is preferred to gather by lots of people and enclosed by various social activities.

At this point, different questions occur. Are not the spaces, which do not provide some of these criteria considered as urban squares? If not, how can we define these spaces within the city? I think that we should not interpret the squares where the usages, activities, sharing and socializing are intense, as not being an urban square' since they do not have the proper physical norms according to the leading studies. The squares need to ensure ideal physical features but in contrast to some normative ideas, we cannot say these are the most distinctive qualities of the squares. Because the case studies show us the social life of the squares is not compatible with some spatial norms in the leading studies. In this context, locations within the city, surrounding city life,

usage of ground floors are of great importance while evaluating and defining the squares.

Therefore, it is possible to suggest that, if the studies focus only to physical qualities, it could be mislead the researchers. In other words, the studies which define the squares according to their physical features without taking into consideration the square life are not efficient alone. This demonstrates us that there are some issues that need to be reconsidered in the literature.

It is extracted that the meanings, spatial qualities and the usages of 'urban squares' should be questioned again as part of modern city life. The usage of the squares in historyhas been changing with various transformations. Namely, they are not the spaces where the war plans and announcements are made any more. The needs of people have changed with technological, economic, cultural and social progress and the cities have been affected by these changes. It can be claimed that the role, functions and aims of the squares for cities have also changed. In the same line, the expectations of people from a public place have changed because the meaning of social and public life has been transforming so people want to be attracted by different activities and have different needs. In this respect, the re-consideration of some rules, ideal dimensions and essentials especially the ideas on 'enclosure' that have been identified before by many researchers in literature will be helpful in terms of defining today's city squares.

For the further studies, some other findings can be achieved by changing the case study areas and this study can be applied on different squares. For instance, the squares from different countries and cultures in different seasons can be chosen and more various information and results about squares can be obtained with the evaluating criteria and the same analysis method. Another suggestion for further studies is to form an extensive urban guide on squares after extending the study field and analyzing many squares from different cities according to the same criteria. Also, different researchers can contribute to these studies so that a large source can be obtained. Apart from these analyses, a website can be formed so as to make other researchers benefit from it. This kind of work will be a guide for the designers interested in squares so as to create more useful squares. Distinctively, when the studies get bigger, they can also be used to introduce the cities by local governments and also these kinds of introductory documentaries about the squares can be used by tourists as touristic guides. Finally, this

study aims to be a part of the studies ‘making cities livable’ and ‘good urban squares’ in further framework.

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