### CONVIVIAL URBAN SPACES: THE CASE OF SAKARYA STREET, ANKARA

### A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES OF MIDDLE EAST TECHNICAL UNIVERSITY

BY ZEYNEP MURAT ÇOLPA

### IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN URBAN DESIGN IN CITY AND REGIONAL PLANING

SEPTEMBER 2015

Approval of the thesis:

# CONVIVIAL URBAN SPACES: THE CASE OF SAKARYA STREET, ANKARA

### submitted by ZEYNEP MURAT ÇOLPA in partial fulfillment of the requirements for the degree of Master of Science in Urban Design in City and Regional Planning Department, Middle East Technical University by,

Prof. Dr. Gülbin Dural Ünver Dean, Graduate School of <b>Natural and Applied Sciences</b>	
Prof. Dr. Çağatay Keskinok Head of the Department, <b>City and Regional Planning</b>	
Assoc. Prof. Dr. Emine Yetişkul Şenbil Supervisor, City and Regional Planning Dept., METU _	
Examining Committee Members:	
Prof. Dr. Nil Uzun City and Regional Planning Dept., METU	
Assoc. Prof. Dr. Emine Yetişkul Şenbil City and Regional Planning Dept., METU	
Assist. Prof. Dr. Yücel Can Severcan City and Regional Planning Dept., METU	
Assoc. Prof. Dr. Tanyel Özelçi Eceral City and Regional Planning Dept., Gazi University	
Assoc. Prof. Dr. Özge Yalçıner Ercoşkun City and Regional Planning Dept., Gazi University	

Date: 10.09.2015

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name: Zeynep Murat Çolpa

Signature:

#### ABSTRACT

## CONVIVIAL URBAN SPACES: THE CASE OF SAKARYA STREET, ANKARA

Murat Çolpa, Zeynep M.S., Urban Design, Department of City and Regional Planning Supervisor: Assoc. Prof. Dr. Emine Yetişkul Şenbil September 2015, 188 Pages

This study focuses on the necessity of socio-spatial experiences of people which are gained from the streets as a public space that are subject to urban design approaches. Besides analysis of geographical, physical and administrative dimensions of the place, which are related to design and planning processes, it reveals the necessity of including the psychological effects of the place on people via their senses, in other words, the information gathered through experiences to design process. By this way, it tries to explain the content of the relationship between daily experiences of people and spatial formation of a street, and public life and public place. Thus, the study focuses on Convivial Urban Design approach which brings together the emotions and psychology of people along with these kind of urban designs.

In this context, the author investigates Sakarya Street which is located in the center of Kızılay, Ankara. Kızılay has gained importance as a new bureaucratic and politic center after proclamation of the republic, however, the period after 1980, covers the course which is determinant for consumer policy. It became a center for cars rather than pedestrians with car oriented planning approaches physically, which was used by civilians actively for spending time. The Sakarya Street, which has an important position within the city center, has conserved its importance as being one of limited pedestrian streets that appealing to people of various portions of city, age and gender from past to present. This importance is analyzed in terms of conviviality under five different criteria via a questionnaire and the results of this study is examined in detail.

The results give recommendations about conviviality of a place, which can be adopted during design process.

The results of this thesis reveals the indicators that can be used as inputs for design of a living and lively urban space and explains why Sakarya Street still has some characteristics that causes an intensive use. Criteria and findings discovered with this study show that there is more than conventional urban design approaches in space design.

Keywords: Convivial Urban Space, Sakarya Street, cognitive map, senses

## ŞENLİKLİ KENTSEL MEKAN ANKARA SAKARYA CADDESİ ÖRNEĞİ

### Murat Çolpa, Zeynep Yüksek Lisans, Kentsel Tasarım, Şehir ve Bölge Planlama Bölümü, Tez Yöneticisi: Doç. Dr. Emine Yetişkul Şenbil Eylül 2015, 188 Sayfa

Bu çalışma insanların kamusal bir alan olan sokakta yaşadıkları sosyo-mekânsal deneyimlerinin kentsel tasarım yaklaşımlarına konu olması gerekliliğine odaklanmaktadır. Tasarım ve planlama süreçleriyle ilgili olarak mekânın coğrafi, fiziksel ve yönetimsel boyutlarının incelenmesinin yanısıra mekânın bireylerin duyularını etkilemesi yoluyla kişiler üzerinde bıraktığı psikolojik etkilerin yani bireylerin deneyimleriyle ilgili elde edilen verileri de tasarım sürecine dâhil etmenin gerekliliğini ortaya koymaktadır. Bu bakışaçısı ile kamusal hayatın ve kamusal mekânın nasıl karşılıklı etkileşim içinde oluştuğunu ve bir sokağın mekânsal oluşumunun insanların günlük deneyimleriyle nasıl bir ilişkisi olduğunu anlamaya çalışmaktadır. Bu sebeple, bu tür mekânsal tasarımlar ile kişilerin duyuları ve psikolojilerini bütünleştiren bir yaklaşım olan muhabbetli, şenlikli, canlı (convivial) kenstel tasarım kavramı üzerinde durulmuştur.

Bu bağlamda Ankara Kızılay merkezinde bulunan Sakarya Caddesi incelenmiştir. Cumhuriyetin ilanından sonra, yeni bürokratik ve politik merkez olarak önem kazanmaya başlayan Kızılay, 1980 sonrasındaki tüketim politikalarının kentte belirleyici olduğu süreçten ciddi anlamda etkilenmiştir. Fiziksel açıdan taşıt odaklı planlama yaklaşımları ile öncesinde yayaların aktif olarak tercih ettiği, zaman geçirdiği merkez artık yayalardan çok taşıtların merkezi olmuştur. Bu süreç içerisinde karşımıza çıkan kent merkezi içerisinde önemli bir yere sahip olan Sakarya Caddesi tarihten günümüze kadar geçen süreçte kullanıcı kitlesindeki değişim ve dönüşümlere rağmen hala farklı kesimden, yaştan, cinsten vb. insana hitap eden sayılı yaya sokaklarından biri olma özelliğini korumuştur. Caddenin geçmişten günümüze kadar geçen sürede yaşayan ve kullanılan mekân olma özelliği, beş ana kriter altında derlenen etkenler kapsamında bir saha çalışması ile ölçülmekte ve anket çalışması ile de sonuçlar değerlendirilmektedir. Çıkan sonuçlar ile tasarım sürecinde bir mekânın yaşayan mekân (*convivial*) olabilmesi için tavsiyelerde bulunulmuştur.

Bu tezin sonuçları, muhabbetli, şenlikli, canlı (*convivial*) kentsel mekânın tasarlanmasına girdi oluşturabilecek ve Sakarya Caddesinin bu denli yoğun kullanıma sahip olmasının altında yatan özellikleri içermektedir. Bu çalışmada geliştirilen ölçütler ve bulgular, mekân tasarımında geleneksel kentsel tasarım yaklaşımlarından daha fazlası olduğunu göstermektedir

Anahtar Kelimeler: Şenlikli Kentsel Mekan, Sakarya Caddesi, algı haritası, duyular

**To my Husband,** who has always had faith in me and

encouraged me in writing this dissertation...

#### ACKNOWLEDGMENTS

I would like to acknowledge my deepest appreciation to my supervisor Assoc. Prof. Dr. Emine Yetişkul Şenbil, who has enhanced my perspective in my doctorate studies and encouraged me to conduct this study. She made invaluable comments, gave scholarly advice and intellectual guidance kindly; without her support it would be impossible to find out where to begin and how to complete. I would also like to express my gratefulness to my examining committee members Prof. Dr. Nil Uzun, Assoc. Prof. Dr. Özge Yalçıner Ercoşkun, Assoc. Prof. Dr. Tanyel Özelçi Eceral and Assist. Prof. Dr. Yücel Can Severcan for their invaluable comments and supports.

Special thanks are due to Beste Murat for her generous help and support and to all interviewees and questionnaires who helped me understand the daily life of the Sakarya Street, which meant a lot for this dissertation.

I am especially grateful to my parents, Zübeyir and Nermin Murat and my dearest sisters Beste and Sinem Murat. They never let me alone throughout my study. I am deeply indebted to them for their endless love and endurance along my entire life and during my study.

Lastly but most importantly, I would like to thank to my husband, Evren Çolpa, who helped me in all my studies and decisions. Whenever I felt hopeless, he has always supported me to find the light and has encouraged me to continue. This study would not have been completed without his affection and confidence. *I cannot imagine a life without you*.

### TABLE OF CONTENT

ABSTRACT	v
ÖZ	vii
ACKNOWLEDGEMENTS	Х
TABLE OF CONTENTS	xi
LIST OF TABLES	XV
LIST OF FIGURES	xvi
CHAPTERS	
1. INTRODUCTION	1
1.1. Problem Definition	1
1.2. Aim of the Study	
1.3. Method of the Study	
2. THEORETICAL BACKGROUND OF CONVIVIALITY	9
2.1. Perception Theories	9
2.2. Convivial Urban Design Approach	
2.3. Components of Conventional Urban Design	
2.3.1. Geographical Elements of Urban Spaces	
2.3.1.1. Location	
2.3.1.2. Accessibility	
2.3.1.3. Type of Neigbourhood and Surrounding Areas	
2.3.2. Physical Elements of Urban Spaces	
2.3.2.1. Size, Shapes and Types of Public Spaces	
2.3.2.2. Adaptability	
2.3.2.3. Seating Elements	
2.3.2.4. Good Quality and Robustness	

2.3.2.5. Variety and Distinctiveness	33
2.3.3. Managerial Elements of Urban Spaces	34
2.3.3.1. Mixed Use	34
2.3.3.2. Inclusiveness	35
2.3.3.3. Providing Optimum Security	36
2.3.3.4. Maintenance	36
2.3.3.5. Vehicular/ Pedestrian Circulation	37
2.3.3.6. Animation	37
2.4. Components of Convivial Urban Design	39
2.4.1. Sensing Environments	39
2.4.1.1. Auditory Sense (Soundscape)	43
2.4.1.2. Gustatory Sense	45
2.4.1.3. Olfactory Sense	46
2.4.1.4. Tactile Sense (Skinscape)	49
2.4.1.5. Visual Sense	52
2.4.2. The Psychology of Public Spaces	55
2.4.2.1. Sense of Safety	56
2.4.2.2. Territoriality (Sectionalism)	57
2.4.2.3. Interpersonal Distance	58
2.4.2.4. Different Types of Observation and Communication	60
2.4.2.5. Individuality and Uniqueness	61
2.4.2.6. Legibility	61
3. INTRODUCING THE CASE STUDY: SAKARYA STREET	65
3.1. The Methodology of the Analyses	65
3.1.1. The Reasons Why Sakarya Street is Chosen as the Case Study A	rea in
Ankara	68

3.1.2. Methodology of the Analyses for Conventional Urban Design Elements 70
3.1.3. Methodology of the Analyses for Convivial Urban Design Elements 72
3.2 History of Sakarya Street and Its Surroundings74
3.2.1. Introduction
3.2.2. First Planning Period of Ankara (1924-1930)
3.2.3. The Period Between 1930- 1955
3.2.4. The Period Between 1955-1970
3.2.5. The Period Between 1970- 2000
3.2.6. The Period After 2000 until Today96
3.2.7. Structural - Functional Transformation in Sakarya Street
3.3. Conclusion
4. CASE STUDY: SAKARYA STREET105
4.1. Geographical 105
4.1.1. Location
4.1.2. Land-use
4.1.3. Accessibility111
4.2. Physical
4.2.1. Adaptability
4.2.2. Seating Places
4.2.3. Pyhsical Quality and Robustness
4.2.4. Variety and Distinctiveness
4.3. Managerial
4.3.1. Mixed use
4.3.2. Inclusiveness
4.3.3. Providing Optimum Security
4.3.4. Maintenance

4.3.5. Vehicular/ Pedestrian Circulation	
4.3.6. Animation on the Street	
4.4. Evaluation of Questionnaire for Convivial Urban Design Elements .	125
4.5. Sensual	138
4.5.1. Auditory Sense	
4.5.2. Gustatory Sense	138
4.5.3. Olfactory Sense	139
4.5.4. Tactile Sense	140
4.5.5. Visual Sense	142
4.6. Psychological	145
4.6.1. Sense of Safety	145
4.6.2. Territoriality	145
4.6.3. Interpersonal Distance	146
4.6.4. Observation and Communication	146
4.6.5. Individuality and Uniqueness	147
4.6.6. Legibility	147
4.7. Results from the Field Research	148
4.8. Conclusion	
4.8.1. Findings of the Research on Sakarya Street	
4.8.2. Findings of the Research on Convivial Urban Spaces	
5. CONCLUSION	
REFERENCES	
APPENDIX	177
A. QUESTIONNARIE	177
B. COGNITIVE MAPS	181

### LIST OF TABLES

### TABLES

Table 3. 1 Age Range of the Number of the Participants in the Questionnaires	66
Table 3. 2 Profile of the Participants	. 67
Table 3. 3 Education Level of the Participants	67
Table 3. 4 Geographical, physical and managerial elements	71
Table 3. 5 Senses and psychological elements	.73
Table 3. 6 Population Distribution of Ankara	.79

Table 4. 1 Analysis of Transportation Street	108
Table 4. 2 Physical findings from the research	152
Table 4. 3 Geographical findings of the research	152
Table 4. 4 Managerial findings of the research	153
Table 4. 5 Psychological findings of the research	154
Table 4. 6 Sensual findings of the research	154
Table 4. 7 Findings of the in-depth interviews	156

### LIST OF FIGURES

### FIGURES

Figure 1. 1 The Location of Sakarya Street	2
Figure 1. 2 Criteria of a Convivial Urban Space	5
Figure 1. 3 Field of Study	6
Figure 1. 4 The Scope of the Thesis	7

Figure 2. 1 Justin Herman Plaza in San Francisco	
Figure 2. 2 Fences of Jardin Botanic Park, Belgium	
Figure 2. 3 Pedestrian Priority Regulations in Delft, Holland	
Figure 2. 4 Plaza de la Revolución in Havana	25
Figure 2. 5 Red Square in Moscow	25
Figure 2. 6 Guggenheim Museum, Bilbao	
Figure 2. 7 Sydney Opera House	
Figure 2. 8 Plaça Reial, Barcelona	
Figure 2. 9 Winter Garden in Sheffield	
Figure 2. 10 Gezi Park in Taksim, Istanbul	
Figure 2. 11 Çırağan Street in Istanbul	
Figure 2. 12 Istiklal Street and Galata Tower's Street in Istanbul, Turkey	
Figure 2. 13 St Mark's Square in Venice	
Figure 2. 14 A bench in the middle of the green fields in Piacenza, Italy	
Figure 2. 15 Chopina Park in Gliwice, Poland	
Figure 2. 16 Munich's pedestrian zone	
Figure 2. 17 Examples of movable seating in Bryant Park, New York	
Figure 2. 18 Piazza Di Spagna in Rome, Italy	
Figure 2. 19 Duomo Di Milano Square, Italy	
Figure 2. 20 Examples of mixed use in Brugge, Brussel	
Figure 2. 21 Local Buses and Tram in Germany	

Figure 2. 22 Market Square in Brugge, Brussel	38
Figure 2. 23 Grand Place Square, Brussels	38
Figure 2. 24 Taşkın Street in Yenimahalle, Ankara (Conversation Street)	39
Figure 2. 25 Burano Island in Venice, Italy	53
Figure 2. 26 Painted apartment buildings, Tirana, Albania	54
Figure 2. 27 Colorful stairs in Atatürk park, Ankara	55
Figure 2. 28 Colorful stairs in Karaköy, Istanbul	55
Figure 2. 29 Hall's Personal Reaction Bubbles (1966)	58
Figure 2. 30 METU Campus	59
Figure 2. 31 Center of Gliwice, Poland	60
Figure 2. 32 Movable 'Union Bench' Design	60

Figure 3. 1 Location of Sakarya Street in the City Center
Figure 3. 2 (1925) Lörcher New Town Plan75
Figure 3. 3 Satellite image from New town in Ankara, 193077
Figure 3. 4 'Havuzbaşı' (Poolside) in Cumhuriyet Square (Kızılay Square today) 77
Figure 3. 5 Satellite image from New town in Ankara, 1940s78
Figure 3. 6 Green System in Jansen Plan
Figure 3. 7 Sakarya Street in Jansen's Plan
Figure 3. 8 Lozan Square- Ankara, 2015
Figure 3. 9 Lozan Square- Ankara, 2007
Figure 3. 10 Zafer Square in Ankara, 1940s
Figure 3. 11 Atatürk Boulevard in Ankara, 1930s
Figure 3. 12 The entrance of Sakarya Street from Atatürk Boulevard in 1966
Figure 3. 13 Satellite image from New town in Ankara, 1966
Figure 3. 14 Satellite image from Kızılay in Ankara, 1971
Figure 3. 15 The project of Ates about Sakarya Pedestrian Zone, before
implementation and today's condition
Figure 3. 16 Kızılay Pedestrian Zones Plan (Ateş' Project 1/1000, 1987)91
Figure 3. 17 Kızılay Pedestrian Zones Plan (Ateş' Project 1/200, 1987)
Figure 3. 18 Satellite image from Kızılay in Ankara, 1990s
Figure 3. 19 Satellite image from Kızılay in Ankara, 2015

Figure 3. 20 Burhan Akar Atilim Sculpture, Sakarya Pedestrian Zone 197898
Figure 3. 21 The point of Tasankara Sculpture in the project of Ates
Figure 3. 22 Tasankara Sculpture Implementation Process and Current Situation99
Figure 3. 23 Design of Amphitheatre with Pool and Implemented Condition in Sakarya
Street
Figure 3. 24 Current Situation of Pool in Sakarya Street
Figure 3. 25 Business Center Before and After101
Figure 3. 26 Ground Pavements for Visually Handicapped People102
Figure 3. 27 Six Wooden Sculpture from Symposium124

Figure 4. 1 The Location of Sakarya Street in Ankara1	.06
Figure 4. 2 Land-use of the Sakarya Street (07.07.2015)1	.07
Figure 4. 3 Analysis of Social Sustainability1	.09
Figure 4. 4 The Number of Floors of the Existing Buildings (07.07.2015)1	10
Figure 4. 5 Visual Access and Relation to Transport in Sakarya Street 1	.11
Figure 4. 6 Access Points of Sakarya Street and Surrounding Area (15.07.2015) 1	.12
Figure 4. 7 Ankara Transportation Map (07.07.2015)1	.12
Figure 4. 8 Sakarya Street Entry from Atatürk Boulevard1	.13
Figure 4. 9 Variety of Seating Areas between Ataturk Boulevard and Inkılap Stro	eet
	.14
Figure 4. 10 Variety of Seating Areas between Inkılap Street and Mithatpaşa Stre	eet
	.14
Figure 4. 11 Variety of Seating Areas in Sakarya Street	15
Figure 4. 12 Seating Elements of the Sakarya Street (15.07.2015) 1	16
Figure 4. 13 Physical Condition in Sakarya Street1	17
Figure 4. 14 Sakarya Street 20151	18
Figure 4. 15 People with Disabilities in Sakarya Street	20
Figure 4. 16 Security Situation of Sakarya Street1	.21
Figure 4. 17 General Situation of Sakarya Street1	.22
Figure 4. 18 Vehicle Restriction of Sakarya Street 1	.22
Figure 4. 19 Vehicles do not comply with Restrictions in Sakarya Street (midday)1	.23
Figure 4. 20 Entertainment Activities in Sakarya Street	.23

Figure 4. 21 Animations from Sakarya Street	125
Figure 4. 22 Borders of Working Areas	126
Figure 4. 23 Lynch Analysis (15.07.2015)	128
Figure 4. 24 Transportation Type and Usage Rate of Sakarya Street	129
Figure 4. 25 The distribution of odors in the first zone	131
Figure 4. 26 The distribution of odors in the second zone	131
Figure 4. 27 Smell Analysis of Sakarya Street (11.07.2015)	132
Figure 4. 28 The colors of the buildings in Sakarya Street (07.07.2015)	134
Figure 4. 29 The Places Applied the Questionnaire and the Colors of the S	paces
(11.07.2015)	135
Figure 4. 30 Lighting of the Sakarya Street (15.07.2015)	136
Figure 4. 31 Sakarya Street is referred as the stomach of Ankara	138
Figure 4. 32 Fish and Doner Smell	140
Figure 4. 33 Flooring of Sakarya Street (11.07.2015)	141
Figure 4. 34 Lighting in the section 1	142
Figure 4. 35 Lighting in the section 2	142
Figure 4. 36 Street furniture map of the area (15.07.2015)	143
Figure 4. 37 Red Signboards in Section 1	144
Figure 4. 38 Old Buildings and Huge Grey textures in Section 2	144
Figure 4. 39 People Communicate and Observations in Sakarya Street	146
Figure 4. 40 Sample of landmarks, nodes, districts and paths in Sakarya Street	147
Figure 4. 41 Physical Situation in Sakarya Street	152
Figure 4. 42 Geographical Situation in Sakarya Street	152
Figure 4. 43 Managerial Situation in Sakarya Street	153
Figure 4. 44 Psychological Situation in Sakarya Street	154
Figure 4. 45 Sensorial Situation in Sakarya Street	154

#### **CHAPTER 1**

#### **INTRODUCTION**

### **1.1. Problem Definition**

An Urban Space having features of living organisms, becomes a living place if it is able to adopt changes and has a structure to be modified. Urban spaces provide opportunities such as clean air, fields for socializing and exercising for citizens and workers making them healthy individuals. These places have critical importance for citizens and workers because of the increase in obesity and heart disease arising from sedentary lifestyle. Moreover, urban public places ensure a healthy life both mentally and physically (Shaftoe, 2008).

Human being inherently should be in interaction with each other and its environment for its physical and mental health, which is provided by Convivial Urban Spaces (CUS). These spaces are considered to be hearths of the democratic living places. Without this kind of space, cities would be brimmed over with buildings without positive interaction between people and environment.

When radio, TV, computer and the Internet were developed, people abandoned their rituals, which consist of social and entertaining events. After shopping malls, skyscrapers and corporate offices were introduced, the majority of the natural urban space were lost (Rabinowitz, 2014). Without CUS, it is likely to drag into a polarized and personalized society with these troubles.

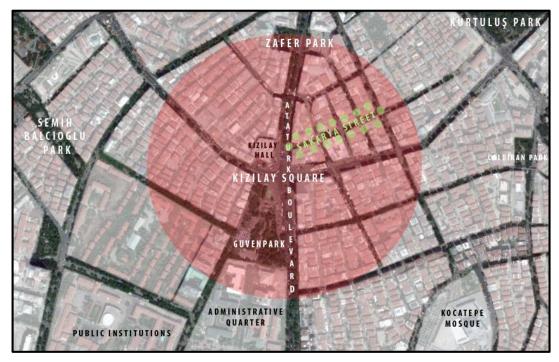


Figure 1. 1 The Location of Sakarya Street (Source: Author's Archive, 2015)

Sakarya Street, located in Kızılay, is the previous city center of Ankara. The street was rather a prestigious street before the city center shift to Tunali. But Sakarya Street is still a public place on which a number of pedestrian activities are carried out. In addition, the activities such as public institutions, various cafes, bars, banks, florist shops, restaurants and fishmongers, help the street keeping some important commercial business areas. In addition, there are residential quarters of upper-middle and middle income groups around the city center which increase the street usage. Although Kızılay has lost its importance, the Sakarya Street maintains its importance as a convivial area. From this point forth, requirements of a convivial urban space will be examined based upon the example of Sakarya Street.

#### **1.2.** Aim of the Study

The main target of this thesis is to examine the conviviality of Sakarya Street and identify common elements for a convivial space. Case study area is analyzed with every factor and sub criteria about Convivial Urban Design with observations, in-depth interviews, questionnaires, photographs and cognitive maps. Because of researching the point of view of users and importance, they attribute to place with examining problems and potentials of place.

Sakarya Street has different meanings for different people. To some, it is a place for chilling out, a meeting point for friends and social activities with its restaurants, cafes and bars while for others it is a place of employment. The number of pubs and clubs, especially opened in the last decade, made here an entertainment center. There are also many citizens who frequently pass through this street just because it is located near a public transportation center. The changing life styles of the residents of Ankara lead to rapid changes the dynamics of this area.

Urban design disciplines gained a different dimension and a new role led with requirements of economic, social, political, and spatial changes both in local and global scale. With its increasing importance, urban design discipline has become the form of description of innovation, movement and trend, especially after 1980s.

According to Madanipour (1996), in order to have a multi-dimensional and effective perspective, urban design should be seen as a large part of urban development process and the importance of it should be analyzed from the perspective of urban space organizers, producers, and users. In this way, analyses can focus on the economic, politic, and cultural role of urban design in the process of conversion and lend assistance to understand new comprehensions and movements emerging.

This thesis aims to search how places become convivial, allowing better quality urban environments be planned, designed and managed. The main questions in this thesis:

• What kind of public places do people prefer?

• What should be done for a convivial urban space?

Other questions and sub-questions:

- Are there any common elements or formulas for convivial public places?
- Are there any factors contributing the conviviality of a public space in addition to geographical, physical and managerial elements?
- What is the level of Sakarya Street in terms of 'conviviality' regarding the criteria of conviviality?
- What are the elements that make Sakarya Street a convivial urban space?
- How does Sakarya Street directly affect our five senses?
- How does Sakarya Street affect our mind?

Based upon these research questions, this thesis will, in general, contribute to the existing literature related to social life and conviviality, put forward an alternative approach to evaluation of the social configuration on pedestrian area, based on a case study.

#### **1.3.** Method of the Study

This thesis uses a case study method which consists of observations, photographs, indepth interviews, cognitive maps and questionnaires at the place. Sakarya Street, as a part of one of the most important and crowded pedestrian zone of Ankara, is selected as the sample area for the analysis of the field research. Main reason for choosing Sakarya Street for this study is that the historical and social background of Sakarya Street has a great importance for citizens of Ankara. The thesis' methodology of research is explained in detail in Chapter 3.

In the second chapter of this paper, theoretical background of conviviality and the components of the Convivial Urban Design approach which has been increasingly referred are examined. The main topics created based on the results of study are as follows: Geographical, Physical, Managerial, Psychological and Sensual indicators (see Figure 1.2). From past to present, it has been recognized that usually the physical size of a place is the most important component of urban design which are

Geographical, Physical and Managerial indicators. Nowadays, even though most of the urban spaces are designed considering these main topics, every day unused, abandoned and empty urban spaces are increasing. In addition, Peattie (1998) and Shaftoe (2008) claim the idea that besides the physical size of urban space, social and emotional size should be taken into account. In addition to other criteria, there are two main topics that should be taken up seriously: Psychological and Sensual indicators.

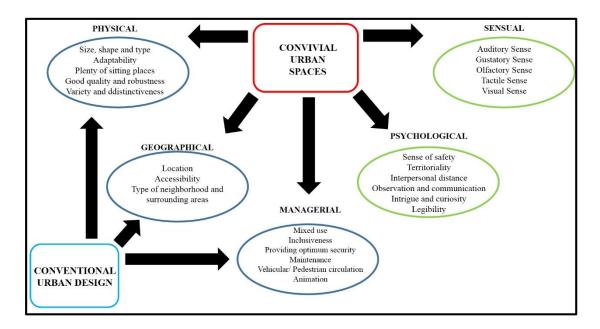


Figure 1. 2 Criteria of a Convivial Urban Space

Chapter 3 firstly explains; the methodology of the analyses, the reasons why Sakarya Street is chosen for the case study. Chapter 3 also involves; planning process is analyzed starting with 1924 Lörcher Plan, which was the first Plan of Ankara, to 2023 targeted Master Plan of Capital. Physical, functional and social importance of Sakarya Street and its surroundings in these chapter are also examined. Furthermore, the other research subjects are about;

- Historical and social background of Sakarya Street
- Sakarya Street's location in Ankara,
- Importance of location in terms of transportation,
- Small scale projects designed for Sakarya Street,

- > Process of change of Sakarya Street from the past to present,
- > Activities and animations in the street.

Chapter 4 explains the results of the analysis, and main criteria for a place to be convivial, such as Geographical, Physical, Managerial, Psychological and Sensual as mentioned before, in terms of Sakarya Street with previous explanations in chapter 2.



Figure 1. 3 Field of Study

Sakarya Street is analyzed in two sections (see Figure 1.3) to examine the perceptions of people with observations, questionnaires, in-depth interviews, photographs and cognitive maps. For each section, 60 citizens of different age, gender, and profession are asked to fill out a questionnaire. Detailed information about questionnaire participants can be seen at Table 3.1, Table 3.2 and Table 3.3.

In 5<sup>th</sup> chapter of this thesis, case is examined under five topics and two sections in terms of Convivial Urban Design (CUD) criteria, which are Geographical, Physical, Managerial, Psychological and Sensual. This chapter comprises a brief statement of the results of the research.

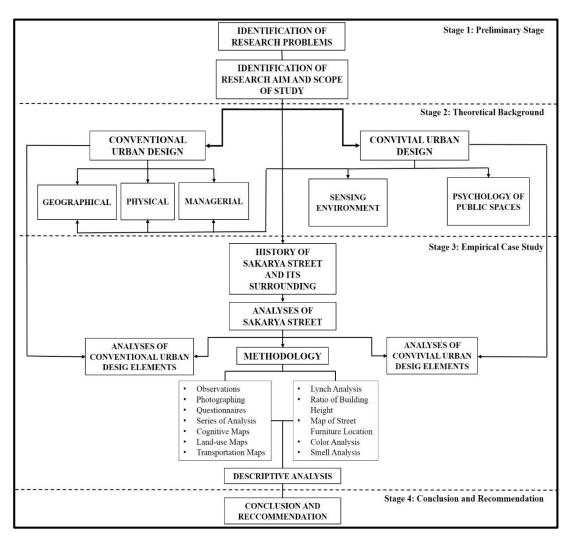


Figure 1. 4 The Scope of the Thesis

#### **CHAPTER 2**

### THEORETICAL BACKGROUND OF CONVIVIALITY

#### 2.1. Perception Theories

Urban experience forms the basics of many theoretical and analytical studies. This is because the experiences people gained are generated by their five senses and the cultural experiences they have. The most important type of perception is visual. According to Koffka (1935, as cited in Guy, 2002: 6), there are four non-hierarchical Gestalt principles which claims that there is a pattern of mind in terms of perception (Guy, 2002: 6) regarding the perception of built environment.

*Law of Simplicity*: Different visual stimulus are integrated into a meaningful whole. These visual stimulus are organized in a large and simple form by perception for adjacent spatial forms.

*Law of Proximity*: Forms are brought together and thus they are tend to be perceived as harmonious groups. This law can be regarded as the extension of Law of Simplicity since bringing parts together is more effective then approaching each part separately.

*Law of Equality*: Similarities and equalities are noticed instantly, especially if they have a pattern.

*Law of Continuity*: A shape continues as it begins, i.e. no new data is added. Only points at which information is concentrated are angles, in other words, changes in direction.

According to Landry (2006), space is needed to be understood and commented by sensory, instead of technical since our psychological landscape is formed by the sensors which are feeling and emotion. But visual qualities take priority for supporting social activities in the greater part of the practice and theory of urban design. However, urban spaces need basic design elements and features for providing input in multi-sensory approach (Barros, 2010). According to Henry Lefebvre (1996), the form and design of a city are not just visible and physical but also felt by our body and all our senses. Basically, material of the built environment is experienced via multisensory. Therefore, we should consider various discriminating approaches to research involving different senses in our methodological framework to stimulate the effective space experience. Experiences of people in the urban space result from the interaction between environment and human body. Therefore, sense of touch, smell, hearing and taste are as important as the visual sense in the perception process (Nye, 2012).

As a matter of fact, that visual sense has a priority in the urban design process. The second sense in this process is hearing, but it is frequently comprehended and reviewed, and it is seldom shown and designed. Additionally, other senses such as chemical senses (taste and smell senses) and tactile sense are rarely taken into consideration in the design process (Lucas and Romice, 2008). For example, while it feels windy weather, it moves the leaves which are due to the complete sense of each other. For these reasons, the urban environment is clearly an experience with all the senses.

The sufficiency of urban design is completed if there exists complexity or variety. This relation is explained as "Variety is composed in form by opposing simplicity. Complexity is achieved by creating contrasts in form, dimension, materials, and scale etc." (Guy, 2002: 7). On the other hand, the space will not be perceived as a whole if there are too much variety. Thus, the equilibrium between simplicity and complexity should be provided (Guy, 2002).

The urban form theory of Lynch is concentrated on five components: Paths, edges, districts, nodes and landmarks; and relationships between them. The mental image in people's mind about the urban space is shaped with these five elements. Below are the definitions made by Lynch (1960: 47-48):

*"Paths*: The dominant elements of city images, which are channels along with the observer moves around.

*Edges*: The boundaries between two phases, which are linear breaks in continuity.

*Districts*: The medium-to-large sections of the city, which are recognizable as having some common, identifying character.

*Nodes*: The strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which she/he is travelling.

*Landmarks*: The point-references, which are external, a simply defined physical object building, sign, store or mountain."

The complex relations between these five components are defined and established by themselves. Urban space's visual characteristics are defined according to factors that are non-cognitive and cognitive (Lynch, 1981). The latter is related to "well-built environmental image-legibility" which is defined by Lynch (1981: 8) as:

"...the quality in a physical object which gives it a high probability of evoking a strong image in any given observer. It is that shape, colour or arrangement, which facilities the making of vividly identified, powerfully structured, highly useful mental images of the environment. It might also be called legibility, or perhaps visibility..."

Meaning, structure and identity are the components of legibility (Lynch, 1981). The meaning stands for the emotional or practical relation with the observer. Structure defines the relations between the components of an urban space and their adoption to each other. Identity means the recognizability of a place. Identity of an urban space is shaped with its distinction from others.

These three components should be satisfied in order to be imageable. This depends on legibility, meaning an urban space with symbols such as identifiable streets, edges, signs, which are recognizable. A recognizable environment form has a great importance in urban image shaping, as well as a favorable environment (Montgomery, 1998). Lynch (1981) defines the characteristics of a recognizable urban environment as accessibility, adequacy, diversity, adaptability and comfort, which are non-cognitive factors.

Gestalt School firstly published a theory similar to "Affordance Theory". Jon Von Uexküll (1920) (functional coloring of objects) discusses how organizms perceive the world in the context of possible actions. After Von Uexküll Kaffka (1935) defines the perceived meaning of objects under similar circumstances, such as perceived affordances. These beginning approaches restricted because they were in tendency of defining affordance as necessitating perception and were related an agent to an object. In "The Theory of Affordances", J. J. Gibson described the "affordance" as a relation between an agent and its environment which is more comprehensive than relation of an agent to an object.

Gibson's affordance theory describes how agent's perceptivities can be arranged to lead an agent's behavior without needing conscious results of an "inner world." Ecological perception can be analyzed by affordance perspective, which clarifies it in an evolutionary and agent-based framework. From this aspect, perception has a duty of supporting favorable action. According to Gibson (1979), agents' ability to recognize beneficial affordance determines its competitive advantages. With evolutionary perspective, when a stimuli exist, organism reacts to it with the help of their perception and this leads to survival. Moreover, how an actor could have an affordance to act (for example eating bananas) and how it is perceptual capabilities catch these affordance by the way of constant characteristics. Gibson focuses on the assumption of that an organism could detect behaviors by its senses, i.e. direct perception, then, what the advantage of a psychological model is, which twins the sensual information into a new set of non-action set up (indirect perception). By this way, direct perception of Gibson is supported, nevertheless, indirect perception is not dismissed, it is still a complementary process.

Social systems of small-scale and actions matters in its indigenous environment was tried to be explained by Behavior Setting Theory which was proposed by Roger Barker (1968). The behavior setting can be explained with a single body comprises of environment and behavior. This behavior setting theory has a key element of steady, recurrently happening space-activity. Each body complying with criteria of a behavior setting creates a place and people executes molar, purposive or goal-targeted behaviors in this place. Molar human activities such as a dentist's clinic consists of useful and close conditions.

Behavior settings are defined as having;

- (1) two section of elements, humans behaving and no psychological substances, and
- (2) distinct borders of time and place, such that the elements of a given setting are readily discriminable from the adjacent settings.

Furthermore, components of behavior setting are internally formulated and arranged in a stable, distinctive transitory/spatial pattern. In addition, individual human components are considered to be largely convertible and inter-changeable, such that even with a complete turnover in human components the setting operates more or less as before (Barker & Schoggen, 1973: 9-11).

Since perception depends on people's background and cultural, social and historical background of the place, a good urban image cannot be defined with common, stable boundaries. In other words, imaging a space is a complex, unique matter and cannot be formulated. Thus, perceptual theories should be considered as useful tools for the relationships between an individual and spatial qualities of an urban space. Convivial

urban space concept is a deal with the newly emerged for searching solution of this kind of problems. It also aims to examine the social, cultural and historical dimension of the place.

#### 2.2. Convivial Urban Design Approach

According to Childs (2004), word of 'convivial' comes from the Latin and consists of 'com' meaning together and 'vivere' meaning 'to live'. It is consolidated as a 'convivium' in the Latin, which means 'banquet or feast'. According to Childs "conviviality may be used to speak of the enjoyment of festive society, as means of living together." Convivial urban design, due to the nature of human beings, supports the needs of public life. Certainly this needs vary from one person and situation to another (Childs, 2004).

Illich (1973: 24) used the word 'conviviality' to describe the human quality that forms the basis of any society: "I choose the term 'conviviality' to designate the opposite of industrial productivity. I intend it to mean autonomous and creative intercourse between persons, and the intercourse of persons with their environment and this in contrast with the conditioned response of persons to the demands made upon them by others and by a man-made environment."

Convivial means stands for tools which provides every individual a great opportunity of creating a richer environment covered with fruits according to their own way. On the other hand, industrial means resembles the decisions of their designers who usually try to understand the needs of others. Using these tools in order to provide a goal which was determined by the user obtained as desired encourages conviviality (Illich, 1973).

In a report (London Development of Strategy) presented by Gardner et al. (1996), inferences of which public space should be comprised, with at least five requirements to be functional for walking and spending time, were suggested. These five requirements are conviviality, convenience, connectivity, conspicuousness and comfort. Conviviality is associated with two features, which are "livability" and

"together." Convivial Urban Space makes pedestrians feel safe and inviting due to other citizens in space.

Borbridge (2009), Fincher (2003), Fincher and Iveson (2008), Douglass (2013) and many more authors gave references to Paettie (1998). Peattie expands Illich's idea (1973), and defines 'convivial communities' as follows: "democratic conviviality that bonds people in communal public actions from small-group rituals and social bonding to serious collective action, from barn raisings and neighborhood cleanups to civil disobedience that blocks the streets or invades the missile site." (Paettie, 1998: 246).

According to Peattie In human happiness, creative activity and a sense of community count for at least as much and maybe more than material standards of living. Conviviality cannot be coerced, but it can be encouraged by the right rules, the right props, and the right places and spaces (Peattie, 1998: 247).

Urban public places provide opportunities like clean air, areas for exercising and socializing for citizens and workers to make them be healthy individuals. These needs started to have critical importance for citizens and workers because of the increase in obesity and heart disease arising from sedentary lifestyle. Moreover, urban public places underlie a healthy life both mentally and physically. As a result of human being's evolutionary heredity, humans tend to interact both with people and his/her environment. These interactions can be provided by public spaces (Shaftoe, 2008).

Furthermore, Shaftoe (2008: 5) claims that ... convivial public spaces are more than just arenas in which people can have a jolly good time; they are at the heart of democratic living and are one of the few remaining loci where we can encounter difference and learn to understand and tolerate other people.

Finbarr Brereton and his colleagues from University of Dublin came up with an idea that environmental and urban situations have critical importance in a human sense of well-being. For this reason, well-designed and well-managed urban places contribute people's welfare levels. Effective public spaces offer remarkable social learning opportunities. For instance, public spaces provide a couple of opportunities for directly meet with other people of different cultures, norms and behaviors. Furthermore, being ecumenically accessible, these public spaces create opportunities for interdependency sense with members of the public via shows and festivals (Shaftoe, 2008).

#### Urban Activity

The economic, social, cultural activities and their interactions constitutes the base of the complex set of city life, which are in relation with physio-spatial, socio-cultural and economic structure of urban space dialectically. Since urban space is basically a social-spatial matter, activity is one of the most important constituents of urban public spaces and, thus, compositions of activities are the tools for sufficient urban places (Montgomery, 1998).

Montgomery (1998: 96) states the place of activity in urban place as: "Without activity, there can be no urbanity". Activity creates diversity, and vitality which depends on diversity, i.e. mixture of events, meeting and activities (Montgomery, 1998). In formation of sense and image of urban public places, meeting places have a great importance since they materialize the memories and society in terms of its customs and conventions (Montgomery, 1998). Another concept which is introduced by Montgomery (1995: 15) is "cultural animation". "The idea is to actively programme events and spectacles to encourage people to visit, use and linger in urban places. Using cultural animation, special programmes activate the public realm and urban vitality can be achieved." (Montgomery, 1995: 15). Jacobs (1961) defines four main factor for activity's condition: usage mixture, permeability, mixture of building types and intensity.

*Mixed use*: Important urban spaces provide at least two primary functions such as working, shopping, living, etc. This mixture comprises different types of peoples, purposes, paths and so on (Jacobs, 1961).

*Permeability and accessibility*: According to Jacobs (1961), city blocks should be as short as possible for creating more walkways, and generating more street life for active use (Montgomery, 1998). The degree of accessibility of an urban environment generates choices of interaction and the more the number of options, the more economic and social efficiency is developed. Through streets with shorter city blocks, sustained social and economic activity flow is achieved, providing a better accessibility (Jacobs, 1961).

*Mixture of building types*: Another important factor for urban activity in public places is buildings and their characteristics. For instance, there should be a mixture of new and old buildings in the public area due to their dissimilar contribution to the economy (Jacobs, 1961). If there are only new buildings, then the enterprises in these buildings will be the only ones who can afford the cost of these new buildings, limiting the commercial variety.

*Intensity*: Intensity refers to the set of reasons for visiting an urban space (Jacobs, 1961). For successful generation of activities, there should be a dense composition of these reasons.

Ray Oldenburg propounded Third-Place concept in 1999 with his book named "The Great Good". This concept was emerged because of settlements out of the city in America.

According to Oldenburg, First Place is the place that we live in, namely home, which is domestic. The Second Place is working area that is productive spent big part of the day in. Third Place is the assembling area for socialization, which is important for, democracy, civic engagement, and civil society. Some examples from the world can be; Pubs belonging to England, cafés belonging to France, coffee houses belonging to Austria. Country stores, barber shops, hair salons, taverns, post offices and soda shops were accustomed third places in the United States at one time (Peterson, 2012). Essential specialties of true "Third Place" propounded by Oldenburg (1999);

- Cheap or free,
- Beverages and food (important even though not basic)
- High accessibility (in walking distance)
- Hosting neat people assembling habitually there
- Welcoming and comfortable
- A place for finding old and new friends together.

Other scientists sum up third place of Oldenburg with similar eight typical features.

*Neutral ground*: Occupants of third places do not have any compulsion to be in the place. They have no connection with the place politically, financially, legally, or in any other way.

*Leveler (a leveling place)*: Individual's status is not important in third places. Economic or social position is also allowing the perception of commonality. There is nothing to prevent participation or accession in third place, moreover, no need for demand or precondition.

*Conversation is main activity*: Cheerful conversation is the essential focus in third place as activity, but it is not the only one. Blithe and humorous conversations, joy always takes place.

Accessibility and accommodation: Third places should be open and reachable for people who are friends with them. They must be helpful which they must meet the needs of inhabitants.

*The regulars*: Third places host some regulars, based on which features and mood of an area is determined. Moreover, regulars help newcomers to make them feel safe and welcome.

*A low profile*: Third places are typically beneficial. There is no exaggeration or grandiosity. They accept any individuals from any society.

*The mood is playful*: Moreover, These places never carry the feature of hostility and tension. They have playful, banter; happy conversations valued high.

*A home away from home*: Occupants feel sincerity and possession in third places. They gain mental regeneration by spending their time in such places.

According to J. Gehl (1996), there are three outdoor activity types: necessary, optional and social. The necessary activities, in other words everyday activities, consist of compulsory activities, e.g. going to work, shopping for cooking and so on. These are the activities that can be observed almost in every environments (Gehl, 1996). Optimal activities, on the other hand, can take place if only exterior physical conditions are favorable (Gehl, 1996). Social activities are in connection with other activities (Gehl, 1996).

Gehl (1996: 13) explains the relation between these activities as follows: When outdoor areas are of poor quality, only strictly necessary activities occur. When outdoor areas are of high quality, necessary activities take place with approximately the same frequency-though they clearly tend to take a longer time, because the physical conditions are better. In addition, however, a wide range of optional activities will also occur because place and situation now invite people to stop, sit, eat, play, and so on. In streets and city spaces of poor quality, only the bare minimum of activities takes place. People hurry home. In good environment, a completely different, broad spectrum of human activities is possible.

The conditions and properties of urban spaces defines the activity schemes of people (Gehl, 1996). There are mainly four planning principles introduced by Gehl (1996) for activity patterns: assembling-dispersing, integrating-segregating, inviting-repelling and opening up-closing in. According to Gehl (1996), combining activities and people may create a domino effect, motivating other activities and people, or vice versa. In order to provide a safe environment for citizens, high-speed traffic should be segregated from pedestrian ways. In addition, the limiting characteristics forming the line between private and public activities can affect the repellency or attractiveness of a public space (Gehl, 1996).

A percentage of activity should be carried out in "the public realm", namely squares, streets in the city (Montgomery, 2003: 10). The social interaction occurs in areas provided by this public realm and related semi-public realms and a major portion of transaction base of an area such as shopping mall, street vendor, fast-food restaurant (Montgomery, 2003). The driving quality of satisfactory urban spaces and cultural intersections are provided by these activities (Montgomery, 2003). Indeed, meeting places are not the only functions provided by public realm. It has other functions such as spaces for activities regarding traditions and customs defining the built environment.

Buildings and activities, as indicated before, are connected via public spaces which provide durable and unstable relations and thus, they have important role in cities. Since they are accessible for all, all kinds of people can visit these places. Bringing all kind of people in one common place creates diversity in activities and people and by this way, social life is generated.

As a result, the activities occurred within a public realm, which is one of the ingredients of urban place, can create a life-sustaining field. Urban places may gain an identity by the specific atmosphere provided by public activities. A sustained life may form one of the factors of this identity, increasing the feeling of place. The urban place may be embraced due to these various activities via which common experiences are shared, increasing the attraction of the public realm of city. In this manner, it can be said that the composition of activities and people can be enhanced by the environment of the urban space, which is determined by the vitality and variety of activities.

In order to maintain social limits and harmony between people, a successful urban should be constituted for which a dynamic public realm is required. This dynamic public realm is supported by a set of spaces at which different types of interactions, such as meeting and exchange, occurs (Montgomery, 1998). In an urban space, public experience is constituted by relationships between form, image and activity and thus, in order to establish successful urban places through which the people can meet their needs, the form, image and activity should comply with each other. This unity can be achieved by interaction of spatial and physical forms that contains both simplicity and variety. The present research demonstrates an approach to the convivial design of urban open spaces responsive to user needs, and preferences which are feasible and hold the promise of guiding best practice in the creation of high quality gathering urban open spaces. Analyzing the criteria required for a place being convivial in this manner, the necessity for addressing to emotions and psychology of the users in in addition to geographic, physical and managerial dimensions of the place comes into prominence in conventional urban design approaches.

## 2.3. Components of Conventional Urban Design

"Generally in western urban design theories, the physical aspect of the city are typically addressed first, which is followed by the spatial or the spiritual dynamics." (Liu, 2014: 53).

Today, conventional urban design approaches addresses the geographic, physical and managerial dimensions of a place rather than the interaction between people and the place. The geographic location, accessibility of the place and the variety of neighborhood units around it are in the focus. The physical dimension, on the other hand, addresses the shape, size and type, accordance to conditions, variety and distinguishability, quality and durableness of the place and existence of residences. The administrative dimension covers encouragement of activities for mixed-use, providing security, creation of an appealing scheme, good organization and cleanliness, limitation or prohibition of traffic.

## 2.3.1. Geographical Elements of Urban Spaces

## 2.3.1.1. Location

The best location for and urban space should attract people. For example, Justin Herman Plaza in San Francisco, has a variety of usage such as hotels, luxury apartments, and office buildings. Moreover, it has a number of outdoor cafes and peddlers which the settings attract tourists, families and workers. Other examples of such places are around Pulitzer Fountain and Grand Army Plaza in Manhattan (Marcus and Francis, 1997).



Figure 2. 1 Justin Herman Plaza in San Francisco (Source: nerdist.com, 13.06.2015)

Even if urban spaces are in the correct position on the plan, if they are designed in lowdensity areas, they can take the form of abandoned spaces in the real life. Additionally, "If a public space is in an isolated, under-populated or difficult-to-access location, however, well-designed and managed it may be; it will not thrive" (Shaftoe, 2008: 72).

While the designer is deciding a location of the urban space, the following factors should be taken into account;

- Immediate vicinity of public space should be examined as to whether demand for use.

- Urban space should be in a position accessible to alternative transport.
- Assembly area's size should be approximately nine hundred feet (275 meters).

- Urban space should involve a wide variety of activities such as shops, hotels, apartments, restaurants and offices.

- Urban space should be located in a convenient location in terms of local weather conditions. For example, air circulation, sun's angle of incidence should be taken into account. If weather conditions are unsuitable for outdoor activities, there should be alternative indoor public spaces (Marcus and Francis, 1997).

## 2.3.1.2. Accessibility

Accessibility of service means should provide all individuals living in urban have access to all services offered by the city. This is the natural right of every individual who shares the city. Sense of belonging to space and participating decisions about the city are indispensable components of urbanization (Istanbul Metropolitan Municipality, 2008).

A well-designed urban space should be easily accessed on foot or by bicycle. (Shaftoe, 2008). It is important that all transportation types should be related to each other (from car, bus, subway to bicycle, walkways for pedestrians). In addition to this, all citizens, whether they are young, old or with disabilities, should have access to such places.

Accessibility is not just about transportation; also Carr et al (1992) examined accessibility under three headings:

Visual access: Before entering the area, when people see the place, they should feel, safe, inviting, or comfortable. For example, Jardin Botanic Park, Belgium. This park has an exceptional landscape and opportunity to various seating places. However, the park is visually separated from sidewalk of the street with huge wire fences around the park.



Figure 2. 2 Fences of Jardin Botanic Park, Belgium (Source: Author' Archive, 2012)

Symbolic access: It is about existence of cues in the form of people or design elements. Cues can be alive or inactive. Such as, people can perceive either insecure, menacing or relaxing, inviting.

Physical access: Pedestrian's act of walking should continue uninterrupted without any disturbance from problematic elements of the physical environment (such as damaged floors, traffic, etc.). For example, Woonerven in Delft, Holland has pedestrian priority policies. You can easily walk without interference from vehicle traffic in there.



Figure 2. 3 Pedestrian Priority Regulations in Delft, Holland (Source: Author' Archive, 2012)

#### 2.3.1.3. Type of Neigbourhood and Surrounding Areas

New urban spaces are sometimes regenerating the formerly troubled places. But if the surroundings is still perceived as insecure and neglected, people can still be dissatisfied with going or spending time in there (Shaftoe, 2008). Therefore, if a space is not considered along with its surroundings, it can be a lifeless and abandoned, no matter how perfect the design.

#### **2.3.2.** Physical Elements of Urban Spaces

## 2.3.2.1. Size, Shapes and Types of Public Spaces

There are some key points to create a convivial place. If the space have an enormous size, such as Red Square in Moskow and Plaza de la Revolución in Havana, it gives a feeling of fear and insecurity (Shaftoe, 2008).



Figure 2. 4 Plaza de la Revolución in Havana (Source: commons.wikimedia.com, 22.06.2015)

Figure 2. 5 Red Square in Moscow (Source: allcountries.com, 14.06.2015)

These places are created usually as a symbol of power, not for human interaction. These kind of places are usually used for purposes of demonstration and mass assembly. On the other side, if the place is very small, it can make one feel stuck, uncomfortable and the space will be insufficient for convivial activities. The size of the convivial space should be optimal, not too big too small. "Medieval squares had average dimensions of 57 x 140 meters, which indicate that we previously designed

public spaces based on 'social distances' but have lost these design skills over time" (Shaftoe, 2008: 74).

Some examples of very famous architectural structures are curvaceous, such as Guggenheim Museum in Bilbao, Sydney Opera House, The Sage, a center for the performing arts, music education, and conferences in Gateshead, England, The Gherkin in London and The Dancing House in Prague, Czech Republic. Curves and bends in buildings attract people's attention (Cullen, 1961).



Figure 2. 6 Guggenheim Museum, Bilbao (Source: commons.wikimedia.com, 14.06.2015)

Figure 2. 7 Sydney Opera House (Source: archdaily.com, 14.06.2015)

There are various types of public spaces used for different purposes. Some of these;

- Open squares



**Figure 2. 8** Plaça Reial, Barcelona (Source: barcelonayellow.com, 22.06.2015)

# - Enclosed and/or covered spaces



**Figure 2. 9** Winter Garden in Sheffield (Source: openbuildings.com, 22.06.2015)

- Pocket parks and green spaces



**Figure 2. 10** Gezi Park in Taksim, Istanbul (Source: hutopia.net - geziparki.org, 03.09.2015)

- Boulevards and linear parks



**Figure 2. 11** Çırağan Street in Istanbul (Source: besiktas.bel.tr - mehmetakinci.com, 03.09.2015)

- Reclaimed streets and linked spaces



Figure 2. 12 Istiklal Street and Galata Tower's Street in Istanbul, Turkey (Source: fotokritik.com, 03.09.2015)

## 2.3.2.2. Adaptability

As with other forms of developments in economic, social and environmental changes in unexpected situations, urban spaces should be adaptable. The urban designers and planners should design a space with a flexible approach considering possible changes in place in time.

"If you just provide one facility without providing for adaptable use or dedicated locations for other groups, you may find that there is a conflict over space, and the intended target group is edged out" (Shaftoe, 2008: 44).

A well-designed city resembles a healthy living organism (Lennard and Lennard, 1995). Individualistic cells take over a task in order to maintain the continuity of the organism, which is modifying the relevant part of the organism and adapting to the changes. Similarly, when adaption to changes fails due to a fixed master plan approach to urban design, built environment becomes an unhealthy place for a living community.

Being human means willingness to adopt and personalize their sites, thereupon more typical, usable and vital environments emerge organically, such as St Mark's Square

in Venice, which has improved over hundreds of years. Though more uniform and artificial places are still being produced by using blueprints, top-down approaches (Shaftoe, 2008).



Figure 2. 13 St Mark's Square in Venice (Source: europeanstoryteller.com, 13.06.2015 and Author' Archive, 2010)

## 2.3.2.3. Seating Elements

Eating, drinking, chatting, and sitting are some of the elements, which make a public space feel comfortable. Most of these activities take place on the basis of seating units. If the selections of location, material and type of the seating units are inappropriate, it will cause these seating units be used less (Shaftoe, 2008). This problem can be seen in Turkey as well as in many other places in the world. For example, they put fixed seating in an inaccurate location in which people want to interact with others.



**Figure 2. 14** A bench in the middle of the green fields in Piacenza, Italy (Source: Author' Archive, 2014)

Figure 2. 15 Chopina Park in Gliwice, Poland (Source: Author' Archive, 2010)

Each person needs different types of seating and different situation in public space. So public space needs the possibility of different seating schemes and seats should be customizable and changeable (Shaftoe, 2008). According to Shaftoe, Munich's pedestrian zone has been succeeding with the contributions of favorite chairs.



**Figure 2. 16** Munich's pedestrian zone (Source: commons.wikimedia.com, 13.06.2015)



Figure 2. 17 Examples of movable seating in Bryant Park, New York (Source: theagilelandscape.com, 14.06.2015)

In some instances, it is not the best solution designing bench or chair. Any horizontal surface can be used multi-functional, such as wide steps (Shaftoe, 2008).



Figure 2. 18 Piazza Di Spagna in Rome, Italy (Source: Author' Archive, 2014)

**Figure 2. 19** Duomo Di Milano Square, Italy (Source: Author' Archive, 2014)

Observing the environment and other people is one of the primary activities carried out in the urban space because of that vantage points are significant when deciding a position and surrounding of the fixed seating (Shaftoe, 2008).

Seats can be made of iron, concrete, stone or wooden. Although wooden benches are the most preferred in terms of comfort, it is not too much preferable in terms of robustness. In addition, it is important to use the element such as a canopy or awning according to weather conditions with seats (Rubenstein, 1992).

In addition, food & beverage attract people to the public spaces. These can be contained in refreshment places such as cafes, bars, kiosk and restaurants with flexible seating in the outdoors (Shaftoe, 2008).

#### 2.3.2.4. Good Quality and Robustness

CABE (2000), Carmona (2003) and Tsong (2011) argued that robustness has the similar meaning with adaptability and flexibility. These two features will increase the capacity of the physical pattern, being open to changes in certain areas.

According to Tsong (2011: 33) "Qualities of adaptability and flexibility for accommodating the changing circumstance is the key to the emergence of a great diversity or 'mixed use' of activities; hence it creates the robust urban environment."

The quality of urban places affects the quality of our lives. Regardless of the ages of people, wherever we are living in, all of us, as users of the city, use the urban places at the moment we step out of our homes.

Rapoport (1977) approaches the spatial quality of the design as conspicuous differences. The variety in perceptions or observations is also elements of this.

Van der Voordt and Van Wegen (2005) examine the quality in design under four main headings;

**1. Functional Quality or the Degree of Utility:** Practically utility of a place is the convenience of a place for the activities take place inside.

**2.** Aesthetic Quality: is related with the perception of a building or a place of how beautiful, to a degree, how much encourages or original and how experienced it is.

**3. Technical Quality:** is the physical quality of the buildings and the structure carrying these buildings, which carry the load, cover the inner material, and of tools that are used for technical services to maintain the physical characteristics of these buildings and structures such as power, durability, stillness, consistency, stableness, maintainability.

**4. Economic Quality:** is how much of financial sources are efficient and productive (e.g. wage rate according to performance). If the building is observed as an investment object, its economic value depends on the degree of its obtained profit (Voordt, 2005). The important thing, in any situation, is the perception concept of the environment quality of the audience. The qualities are turned into the top level generalized preferences by Nasar (1989).

**Naturalness:** natural environments or places having higher naturalness than artificial elements.

Maintenance: well-maintained or cared environments.

**Openness and Described Place:** combination of described open places with the panorama and landscapes of pleased elements.

**Historical Importance and Content:** the environment convincing to appropriate togetherness.

**Organization:** it contains legibility, convenience, consistency, precision as meaning of organization.

Gehl (2010) defines a quality of public places, offers an approach other than pedestrian centered approach which is of a quality in physical environment connected to activities in public places in his book: 'Cities for People'. Three different activities are given by Gehl for public places. These three distinctive actives are as follows:

- 1. Necessary Activities
- 2. Optional Activities
- 3. Social Activities.

Optional and social activities are important for city quality. He improved a pedestrian centered approach to make analyses of public places. Yard is the scale (which a pedestrian can walk 5 km in an hour).

The quality parameters used in this approach are as follows:

-Protection

-Comfort

-Entertainment

### 2.3.2.5. Variety and Distinctiveness

Variety of shape are the key characteristics which contribute to creation of idiosyncratic urban space. When designing an urban space, standards should be avoided.

Elevations being specially designed to provide focal points at the ends of vistas or on corner sites. The use of appropriate materials and detailing can act as unifying elements within the design and will help to create coherence, distinctiveness and local identity (Jenks, Noble, and Pattacini, 2000: 37).

According to Jenks, Noble, and Pattacini (2000) there are some elements that will allow the differences in space, such as;

- The forms and ratios of elements
- The colors and textures of the surrounding elements
- Location of the bushes and trees
- Variety of floor covering and façade

Even petty details such as small differences in level and pavement, the position of landscape elements such as trees, flowers is used to create a focal point in good design which produce a distinctive urban space.

# 2.3.3. Managerial Elements of Urban Spaces

# 2.3.3.1. Mixed Use

The new planning approach which is the concept of discrimination and zoning, firstly, emerged after the Second World War in Europe and North America. Each region has a different function in zoning approach such as commercial area, residential area and industrial area, etc. Most part of the day or days of the week, urban centers were abandoned places, and all zones were getting unsafe areas with this approach (Shaftoe, 2008).



Figure 2. 20 Examples of mixed use in Brugge, Brussel (Source: Author' Archive, 2012)

The aim of the resolution for this problem emerged New Urbanism in the USA and 'urban village' concept in the UK. These approaches were put forward to safer and livable environment with the mixed use. Designing the lower-level with commercial use and the upper floor with housing, units aimed to create 24-hour living spaces for safer and convivial public places (Carmona et. al, 2003; Shaftoe, 2008).

## 2.3.3.2. Inclusiveness

Built environment generally is designed for a young, mentally and physically healthy man of average age. While there are a lot of people with disabilities in our environment, we have to ask if this approach is true. There are a lot of people with cognitive, aural, neurological, physical, visual, speech impairments, or of old age and temporary disabilities (such as broken leg, temporarily paralyzed, etc.) or have a family with children in our environment. We should think all kinds of people in designing process, because every human being has the right to access to urban services equally. Inclusive design aims these approaches. According to Burton and Mitchell (2006: 5) "Inclusive design means designing products, services and environments that as many people as possible can use, regardless of age or ability."

A law, which is accepted 2002 in Germany, offers equal opportunities for people with disabilities. Moreover, it commands the barrier-free public spaces (sidewalks, roads and places) with barrier-free transportation so that people with physical disabilities can use public infrastructure services without help of others (Fessl, 2012).



Figure 2. 21 Local Buses and Tram in Germany (Source: germany.travel.com, 13.06.2015)

### 2.3.3.3. Providing Optimum Security

According to researches, there are at least three ways to reduce crime in cities (Childs, 2004). The first one is 'Broken Window Theory',' which is suggested by James Q. Wilson and George L. Kelling in 1982. They argue that if a broken window is not repaired, it gives a signal of being ignored by everyone. Therefore, broken windows become unimportant and people do not avoid damaging more windows. The second one is 'Natural Surveillance' by Jane Jacobs in 1961. According to her, mixed use and dense pedestrian circulation increase are 'Natural Surveillance'. These approach, that places are controlled by its users, argue that providing security is safer than other ways. She supports 'Eyes on the street' conception. According to this concept, the more people are in the street and the more windows are facing the street, the safer streets are. The last one is lighting. According to many researchers, it is believed that the crime rate can be reduced by well-lighting (Childs, 2004). A research is conducted to trials for the energy efficiency in some parts of England by switching off street lights late at night. As a result of trials, significant increase was observed in crime rates in times when the lights were switched off (Marchant, 2010). As it can be understood from this research, proper lighting has a great importance in the urban space for making users feel safe.

Considering these approaches which are designed or regulated by administrations will emerge more secure and preferred urban spaces.

## 2.3.3.4. Maintenance

A well-kept view in public places can be provided by regular cleaning and maintenance works. Neglected places lose their appeal in time and become an abandoned place. It is observed that there are some maintenance problems in open public places (Erkip, 2001). For example, a quick cleaning of a graffiti drawn from the wall can be dissuasive for a new one to be drawn or people do not hesitate to throw trashes if environment is not cleaned regularly, because irregular and complex places affect human's perception, adoption and sense of safety for a place negatively (Shaftoe,

2008). The crowd in city centers, traffic problems, insufficiency in maintenance and substructure decrease the safety for pedestrians and it causes an increase in demands for shopping malls (Erkip, 2001). In other words, well-maintained and clean urban spaces cause decrease in the level of danger, also it provides a decline in the level of crime indirectly (See 4.4.3. Providing Optimum Security).

#### 2.3.3.5. Vehicular/ Pedestrian Circulation

To be able to decrease the high density vehicle and pedestrian traffic complexities, and provide pedestrian security in urban places, adoption and usage of public places are provided by closing vehicle traffic completely or partially during the day in shopping centers and commercial zones, and by decelerating and directing vehicle traffic in housing areas. These arrangements have great importance to create urban open places, which provide secure and comfortable movements to various ages of people, formed as pedestrian wandering and shopping center, equipped with multi functions (Bayraktar et al., 1987). Examples include home zones, play streets and woonerf.

#### 2.3.3.6. Animation

Convivial places, including a combination of various activities should attract different people. When an urban space is designed with the aims of increasing the use of space, enhancing a feeling of confidence and creating a more fun place, it awakens desire in people's minds to go there, which could be possible by '24 Hours Living Urban Space' regulations. "This can be as simple as licensing or allowing street entertainers and vendors, or as complex as organizing large public events such as fairs and festivals" (Shaftoe, 2008: 129).





Figure 2. 22 Market Square in Brugge, Brussel (Source: Author' Archive, 2012)

Figure 2. 23 Grand Place Square, Brussels (Source: Author' Archive, 2012)

"It is therefore, surprising that more street entertainment is not encouraged, whether proactively by organizing events or simply by designating spaces for buskers and so on, as it is an almost no-cost way to bring color, joy and delight to public spaces" (Shaftoe, 2008: 121). This is a process that will generally occur within the municipalities to encourage artists and performers for such activities. Additionally, activities such as free festival, concert etc. can be more beneficial for the city in the long run. Because of these activities, more tourists will come and stay in the city.

There are some examples that the public spaces become more attractive and lively with special projects in Ankara. Such as; 'Streets are ours once a year' (Yılda bir sokaklar bizim), 'There is life on the street' (Sokakta hayat var), etc.

'There is life on the street' (Sokakta Hayat Var) is an activity aiming socializing, inviting people to the street with variety of activities and improving physical situation of street with the sponsorship of Efes Pilsen. 'There is life on the street' project is also called as Conversation Street (Muhabbet Sokakları). Conversation Street Project, started in 2010, describes the modern, social streets coherent to city identity where people spend pleased time securely, participate activities inside, strengthening the bond of friendships and family, and displays their typical cultural features of cities. In this context two streets are selected in Ankara: Taşkın Street in Yenimahalle and 69 Street in Bahçelievler. Street use is actively supported by competitions, concerts, street entertainment, etc. (muhabbetsokaklari.com, 01.09.2015).



**Figure 2. 24** Taşkın Street in Yenimahalle, Ankara (Conversation Street) (Source: fotokritik.com, 03.08.2015)

"All in all, the way public spaces are managed and animated is as important as design and location in the creation and maintenance of conviviality in the public realm" (Shaftoe, 2008: 129).

## 2.4. Components of Convivial Urban Design

Besides the geographic, physical and managerial dimensions of the place, convivial urban design approaches provides planning activities which place importance on meaning of the place in its users' mind. In this manner the effect of a place on people can be explained with the shape of the place within the psychology of people perceived with sense organs. In order to assess this as an input for urban design studies, we can analyze convivial urban design approaches under two main topics in addition to indicators of conventional urban design approaches. The first one is Sensing Environments which involves senses (seeing, hearing, tasting, smelling and feeling). The way of getting and interpretation of a data coming from a place by these senses also constitutes a flow of information important for the development process of the place. The second one is The Psychology of Public Spaces which involves data entry formed by psychological interpretation of the information that is created by senses.

## 2.4.1. Sensing Environments

Perception is mandatory to be alive. We are surrounded by the built environment. Even if we are in the village, we can find human-made structures in everywhere such as, houses, paths, bridges, ponds, roads, walls and so on. All these structures are made functional to make our life easier. For instance; houses were built to protect us from bad weather and predators; roads are built to ensure that we can reach easily from one place to another place. We may think that some structure has no functional purpose, such as monuments, fountains, etc. (Shaftoe, 2008). However, they are in our subconscious. In the light of all the facts mentioned above, it is a way of signing the territory in our mind by the senses.

Perception can change according to effective situation in place, and lead to different sense. It causes different senses to take primacy such as seeing, hearing, touching or odor senses. When designing a space, if the senses are ignored, this place will, firstly, affect emotions, and it makes people pessimistic, depressed, dissatisfied and physically sick (Shaftoe, 2008). As we can see in this psychological and physical condition, spaces designing that appeal to the senses are vital importance. The relationship between humans and the environments can be defined under 4 stages; perception, cognition, evaluation and action (Rapoport, 1977).

## **Perception**

Perception is one of the most important and the oldest disciplines of psychology, extending over Ancient Greeks. The purpose of the perception research is to examine how our sensory system and stimuli from the environment affect each other and how shaping visual, auditory, tactile, olfactory and gustatory presentations of the environment (Niyogi, 2013).

According to Rao (2008); in psychology, perception is influenced by a variety of factors related to;

- <u>The perceiver:</u> behaviors, motives, interests, experiences, expectations
- The condition; time, working environment, social environment
- <u>The goal;</u> innovation, movement, sounds, magnitude, background, closeness, resemblance

Because of all these different factors, same space can be perceived distinctively by different people. They can affect people's attention on event or object (Rao, 2008).

#### How People Perceive The Environment?

Understanding of place can be subjective. A perception which can be taken as a mediocre terrace house for some, can be seen as a monument place for others. Some places are described with their objective features not being an emotional place. Since the invention of timer, it has been accepted that latitude, and longitude are the most global and accurate positioning system. This system is connected to traditional direction finding with compass. In fact only a few people know how to use this coordinate system. Latitude and longitude are not known even the people who know well enough the environment actually. Instead of that system, people trust their own sample local system like a name of a street or described with its position according to the downtown with relationally the reference point (Golledge, 1999).

"Perception is a process by which individuals organize and interpret their sensory perceives in order to give meaning their environment." (Rao, 2008). In addition, society, culture, experience and level of education have a big influence in the process of the human perception.

#### **Cognition**

"The study of the cognitive process came about more than twenty three centuries ago, beginning with Aristotle and his interest of the internal processes of the mind and how they affect the human experience and existence" (Modrak, Teodorescu and Gîfu, 2014: 57). Cognition means a mental process or competence gaining knowledge by the use of perception, reasoning, and/or intuition.

Both words come from Latin; Perception stems from "percipere" meaning to obtain/receive, while cognition stems from "cognoscere" meaning to larn/know. As we understood from these definitions, they describe different time courses. Nevertheless, these time courses can be intimately linked to each other. Mostly, prior to larn/know something, information should be obtained/received. However, one can larn/know something without having obtained/received information (Vocabulary, 2015).

There is no sharp boundary between perception and cognition. While perception is linked to something eventuating in the present, cognition can also be attached to past experiences or what is going to occur in the future (Barros, 2010; Downs and Stea 1973; Golledge and Stimson, 1997).

We perceive our environment with our senses. Even so, designers usually consider a just visual sense when they are designing a space. The reason is that visual criterions are easy to examine and visually can be easily reflected on drawing and modeling.

Every sense makes unequal contact between people and environment. There are two main forms of perception. One of them is autocentric (subject centered) and other one is allocentric (object centered). When sense of tactile, smell, gustatory are mostly autocentric, vision and audition are largely allocentric. However, when we think tone, music, sound and color, lights are autocentric too (Rapoport, 1977).

According to Rapoport (1977: 185) "The autocentric sense are more physical with a strong link to pleasure and comfort and, through them, behavior tends to be more controlled by the environment itself and less by knowledge. The allocentric senses are more intellectual and spiritual and; in Western culture, they have become dominant with an atrophy of the autocentric senses."

As many researches indicates, places are perceived with movements. We do perceive by our senses. With perception we experience the place, in other words we store the formal and objective specialties of a place or area to our temporary memories by living. According to staying time or type of using it, place gains meaning with various memories. All this perception process differs according to individual, to worldview and to the culture of living geography (Inceoğlu and Aytuğ, 2009).

We can make an inference that designing processes of urban spaces have vital importance because everything designed affects perceiver's physical and psychological well-being. In the process of the formation of perception and cognition sticks in our mind with the help of our five sense organs is one of the main factors to be convivial spaces.

#### 2.4.1.1. Auditory Sense (Soundscape)

We are exposed to a lot of noise from vehicles in cities, such as noise of exhaust from motorcycle, car horn, engine noise from car, moving train sound, ambulance-police-fire truck's siren etc. People make sounds when they are talking with each other. Walking through the street, speaking on the phone, grumbling by themselves which are surrounding us in an urban space. Apart from that there are sounds like buzz, jingle, pricking sound, scrape etc. which come from ongoing construction. There are also noises of air condition, electrical appliance, industry etc. which stem from built environment. All these noises are some of the sound that disturb our ears (Landry, 2006).

According to Landry (2006); they are noise not sound that you hear in the city. When human are exposed to noise, they get tired, nervous, have headaches, lack of concentration and other indications. Also such noises can cause hearing loss (Landry, 2006).

Natural sounds (e.g. wind, water, etc.), sounds of the animals (e.g. woodnote, neighing of horses, dog's bark etc.) or a pleasant sounds of music are easy on the ear, but they are masked by the noise pollution in the cities (Landry, 2006; Rapoport, 1977).

Museums, showrooms, bibliotheca and religious institutions are spaces where we run away from noises. These places come into prominence at the present time, because of the noisy built environment in the cities (Landry, 2006). People need such places which are relaxing and comfortable without uninvited noises.

Besides all these negative effects of sound, some sounds can affect people positively, for instance, the sound from the crowd in trade center, busker's guitar's sound, the

shouts of the hawkers, the sound of running water from the fountain, woodnote etc. (Landry, 2006).

"Acoustic space is non-locational, spherical and all surrounding and has no boundaries: it emphasizes space rather than objects (as vision does)." (Rapoport, 1977: 187).

Sounds support a significant relationship intrinsically. For instance, we usually see cars after we hear them. Visual perception is less controversial and less illuminating without sound. Sound is the sense that has been the most researched after visual sense (Rapoport, 1977).

Footsteps, the sound of rain, the whine of a jet, the growl of a dog- all have contextual meaning and dimensions that listeners readily comprehend and make sense of on the basis of lifelong experience and native listening skills (Kortum, 2008: 175).

## Auditory Memory

Short auditory storage comprises one part of the auditory system which places a scurrile demonstration of the sensory stimulus and is preserved ordinarily for no more than two seconds. This short storage provides opportunity to compare these storing sounds with next coming sounds. If the stimulus are handled in more detail, this is probability for more lasting, classified demonstrations and long-term storage (Mense, Debney and Druce, 2006).

Important data eliminates and transfers to conscious. Other data is wiped up or stored in the subconscious. Therefore companies are using popular songs in background music for advertising (Crowe and Fennelly, 2013).

The space can be pervious for sense of sound; on the other hand some spaces can have hard boundaries for sense of visual (Behrendt, 2010). Also our ability to see cannot be useful in the dark place but audition space can help hearing and perceiving dark places (Motte-Haber, 1998; Behrendt, 2010). Sound emerges from the source and moves around the space, finally evanescing in time.

Although we are not able to close our ears like our eyes for avoidance of unwanted sounds, we can improve our sense of hearing, for example, talking with friend in a very noisy place or ignoring the clock ticking at the midnight (Behrendt, 2010).

## **Chemical Senses**

Gustatory and olfactory senses resemble each other in many aspects. However, they have also differences, both of are chemical senses. Gustatory sense has an important role in some cases, but it doesn't directly take part in urban space design (Lucas and Romice, 2008).

#### 2.4.1.2. Gustatory Sense

According to Tom Finger, chairman of 2008 international Symposium' which is about Olfaction and Taste, while you are chewing a gummy bear, if you block your nose, the taste obtained is limited. When you open your nose at that time, you can abruptly realize lemon or orange gummy bear.

The reason is that the outcomes of the taste and the smell cortices in the brain are associated with in a flavor center. Gustatory is about tasting, smelling and somatosensory inputs. If we disconnect the sense of taste and smell, we will think that food is tasteless (Landry, 2006). Human is able to identify five different types of flavors which are sweet, salty, bitter, sour and the new one is umami. It is the meaty taste that is amino acid based nutrients, for example, Bacon set in motion our umami receptors (Dinino, 2013).

When we say "it tastes delicious", we actually imply that it has excellent flavor. Flavor consists of these components; taste and smell and also some other data, but mostly smell. Olfaction constitutes 70% to %90 of the gustation (Henshaw, 2014). Our perception of environment is affected by the gustatory sense. Our taste perception is substantially complicated which contain smell of food, its texture and its warmth (Keverne, 1982).

#### 2.4.1.3. Olfactory Sense

The use of language is part of our brain, which has a couple of direct connections with the olfactory system. When we think that conscious and linguistic performances are closely related each other, we can understand why smell knowledge takes a part cardinally on an unconscious level (Landry, 2006).

Olfaction and gustation are the most primitive senses. Human can distinguish more than 10.000 odorous substances without close attention (Landry, 2006; Henshaw, 2011). The sense of smell is a part of anatomical affinity with the limbic system and hippocampus which is the location of emotion and place of memory as it has long been known. Therefore, smelling knowledge has powerful links with emotional memory and can easefully be stored in long-term memory. Smelling is able to evoke us poignantly of exact moment (Landry, 2006). When the sense of smell compared with other senses, odor experiences can remind memories relatively easyly. Even though many years passes, memory stays such as childhood memories (Henshaw, 2014).

According to the researchers, when we smell something reminiscent of childhood odors, some memories can usually come to light from our childhood. Smelling has a power which is enough to create such an effect. But the researchers present that it is the most common sense after the gustatory sense (Landry, 2006; Henshaw, 2011).

People can temporarily lose this sense when they are sick. In this way, they understand how important it is in such a condition. Odors have a strong effect on changing our mood. As we can determine environment, olfaction is a basic to understand the place and location. However, in the sense of sight and hearing, the sense of smell is difficult to design (Landry, 2006). We can gauge color in frequencies, vocal in decibels and tactile in units of force and pressure. We have no chance scale to record and description for the intensity of an odor. This maybe the reason why the sense of smell is not taken into consideration in urban designing process (Landry, 2006).

First categorizations of smell reaches out to Plato. He has two categories. One of them is pleasant; the other is unpleasant. After Plato, Aristotle had seven categories about the sense of smell in the 16<sup>th</sup> century which are aromatic, fragrant, alliaceous (garlic), hircinous (goaty), ambrosial (musky), repulsive and nauseous. After that two more odors are added, which are ethereal (fruity) and empyreumatic (roasted coffee) (Landry, 2006).

#### History of Smelling

While social movements are giving a priority to visual and hearing senses, other senses, which are sense of smell, taste and tactile has a background that goes back to 17<sup>th</sup> and 18<sup>th</sup> centuries. In European cities, especially London and Paris were concentrated stench in cities before industrialization. Mud, animals, meat, vegetables, decomposing and blood smell become dense in the streets of that time. Epidemics began contamination by airborne odors (Henshaw, 2014).

After with the process of the industrialization, the smell of burning coal in homes and industry mingled with these streets' smells that caused respiratory diseases. Furthermore, rapid growth of population has been one of the main causes of air pollution in this process. Age of enlightenment, personal and social hygiene began to gain importance for public health. For this purpose, sewerage systems have been developed firstly, in Europe, then across the Western world. Regulations and urban management processes were improved for controlling the spread of odors, for instance, street cleansing regime and industrial zoning. New York has designed grid system to provide a healthy air quality and ventilation (Henshaw, 2014).

Japanese Ministry for Environment cooperated with volunteer local citizens for understanding about the significance of odors to balminess environment. Ministry gave meaning to each district by protecting their own smells. For example, some of them smell like food while some other vegetation. Japanese Ministry gave an identity to space by this way (Henshaw, 2014).

People prefer to live such a sterile, homogenized and controlled environment nowadays. However, different kind of odors have a place in urban environmental experience, specially place identifications and perceptions (Henshaw, 2014). Freshly baked bread's smell is a sensible method for attract to people at the shopping center, pedestrian mall and shopping street (Crowe and Fennelly, 2013).

The air in Paris was full of pissoirs, tobacco, pastis and bakers smells. However, it does not smell like that anymore. Today, pastis is not drunk and bakeries are moved out of city; the use of pissoirs decreased significantly. Along with Paris, the urban scent has been removed from many countries. (Gill, 2005).

When we are thinking about urban design considering smell effects, we can, firstly, talk about the air and the wind. Air quality has an important influence odor experience in urban context. You cannot see directly the air and the wind, like an odor. On the other hand, the air and the wind can be seen through circling leaves. Furthermore, they can be felt by the other senses. Such as touching, hearing the wind etc. As well as wind can clean the air; it also allows circulation of smell. Bad and unhealthy smells, which are due to traffic emissions, can be dispersed by the wind. Windy weather is aroused a feeling of fresh air on people senses (Henshaw, 2014).

"The different senses interact and affect each other, but it is not clear how, when and to what extent although it appears that the different sensory spaces are organized in a similar way" (Rapoport, 1977: 192; Fisher, 1968).

Sense of smell has a relation with the visual sense as olfaction. For example, chefs attach importance to visual presentation of the dishes along with its smell and taste (Crowe and Fennelly, 2013).

We can secondly talk about trees, planting and green spaces. These kinds of elements can clean the air which is polluted by the car emissions. Furthermore, they reduce the temperature in urban areas when the weather is very hot. In addition to all of these, they support the formation of positive memories, emotional ties, well-being, perception and identity of a place. The trees rustling in the wind, the flowing water from the mountain, the smell of the moist soil, the sun's heat on the face, skin, all these natural elements provide physical and mental well-being (Henshaw, 2014).

There were 22 participants (including 12 women and 10 men) in the research conducted by Moss and Oliver and the average age was 23.2 years. Even though it was told to the participants that the research was about mood, and memory, there was no mention about rosemary essential oil. 5 minutes before the participant entry to the test room 4 drops of rosemary aroma installed to the places. The result according to the research is that; being exposed to the rosemary essential oil longer means improvement in cognitive learning; moreover, it increased the number of correct answers while decreasing the reaction time of answers to questions. What scientists from The University of Northhumbria found is that when subjects smell the herb, it improved their cognitive functions. 1,8-Cineole one of the elements of Rosemary is also available in some aromatic herbs. These are eucalyptus, bay, wormwood and sage (Moss and Oliver, 2012).

Smell only provides one input to get experience in space. Therefore, design process needs to pay attention to sense of smell and its interactions with other kinds of sensory data, such as the tactile, auditory and gustatory senses to create convivial urban spaces.

## 2.4.1.4. Tactile Sense (Skinscape)

Haptic sense is associated with movement and touch. According to Herssens and Heylighen; firstly, Geza Revesz (1931) mentioned about the term "haptics". This word came from Greek words "haptikos" which means "able to touch" and "haptesthai" which means "able to lay hold of".

Environment cannot be altered via hearing, seeing, tasting, but it can be possible to alter via haptic body movements. In addition, the body is affected by the environmental data through the sense of touch, for example sun can dry our skin, like the wind roughen and the rain moisten. Skin also becomes cold through perceiving coldness and warm through experiencing warmth (Classen, 2005). The eyes can see all form of sights but cannot show any marks of it. On the contrary, skin and urban space are connected in multiple ways. This strong relationship finds out how important the sense of touch for perceiving our environment (Herssens and Heglighen, 2012).

According to Herssens and Heglighen's research (2012); haptic qualities and obstacles concern with surface in the built environment. Landmarks, nodes, edges, paths and boundaries are introduced by Kevin Lynch (1960) in a visual context. They also can be applicable to haptic context. Like a clock tower can be a visual landmark, haptic landmark can be a variation of floor texture on the square. Every part of our body is affected in a different rate from tactile perception. For example, the fingertips and the lips are more sensitive than the back, shoulder, legs and arms. Also the hands are more susceptible than the feet (Herssens and Heglighen, 2012).

While designers have mostly ignored other senses, they generally focused on vision. Our whole body is covered with receptors for feeling of touch, temperature and pain. The largest sensory system is belonging to our skin. "Newborns can feel the touch better than they can see, hear, or even taste. The sense of touch is crucial to infants, as it helps them detect and explore the physical world and is important for health and emotional well-being" (Herssens and Heglighen, 2012).

When we are moving through the space, we perceive the space with effects of nonvisual aesthetic experience as well as visual aesthetic experience (Shaftoe, 2008).

The sense of the ground underfoot, the inclination of the way to be walked, the feeling of the wind or air on the skin are included in non-visual aesthetic experience (Taylor, 2008). All these elements should be taken into consideration as a part of the urban design, with the aim of having a positive aesthetic experience to people.

Correctly chosen surface material is a fundamental importance for the success of convivial urban spaces. Although asphalt and concrete are used in many spaces, they are not giving pleasure. Materials need to be good-looking and also be durable such as marble and granite. They are expensive but in the long term, they can redeem themselves. On the other hand, soft landscaping (e.g. bushes, tress, and flowers) is a great source of delight alongside submitting useful benefits and healthy condition. Proper planting has a calming effect on users, offering a more suitable microclimate and reducing pollution (Shaftoe, 2008).

"A human being can spend his life blind and deaf and completely lacking the sense of smell and taste, but he cannot survive at all without the functions performed by the skin." (Montagu, 1978: 8).

The enjoyment of being alive and our deepest sense of well-being based on tactile, which can occur any given time and anywhere such as the store is cool in the canopy, the temperature of the glass, the slickness of a baby's face, the flossy texture of a puppy's hair and inside of your sock surface (Classen, 2005).

People lost their real connection with environment and each other because of the technology's penetration into all areas of life. In this process, touching is not a fashion anymore and people away from each other. People are attracted for connecting each other and the urban spaces and by this way providing socialization can be happened by convivial urban design.

The sense of touch is supported by the visual sense and sense of sound for instance, there is no sound on the soft surface; on the other hand, hard-surface causes sound which is ticking of shoes (Rapoport, 1977). Tactile sense also have a role in gustation sense. When we eat something, we touch the food surface with our tongue (Crowe and Fennelly, 2013).

The tactile is upwards of finger touch, e.g. touching component of sensors in the skin and muscles which assist to perceive temperature, moisture, pressure, form, texture, size and weight of objects (Crowe and Fennelly, 2013). "Touch, unlike the other senses, modifies its object. It reminds us that we are not only observers around the world but actors in it." (Classen, 2005: 78-79).

Interpersonal relationships consist in touching. It is also different from each culture. According to Anthropologists, there is the least and greatest spatial dimension which is needed for activities and relations (Crowe and Fennelly, 2013).

## 2.4.1.5. Visual Sense

The human eye constantly revise environment and detect even the smallest details. Visual sense is more powerful than the other human senses. Sense of vision, the area was used a lot in the design and psychology. It can provide much more information and can be used effectively to detect the surrounding area (Rapoport, 1977).

"Visual environmental perception relies among others on space, distance, tectural gradients, light quality, color, shape and contrast gradients" (Rapoport, 1977: 186).

Light and color are the main elements of the environment. Light has an important role for the visual senses as necessary for the continuation of the natural environment. Plants grow with light. If there is no light, there will be neither air nor food. In the absence of daylight mankind has learned how to produce light at night or in a place. It was observed that in the research, better lighting in convenience store increases their sales (Crowe and Fennelly, 2013).

When we are designing a space, light has two goals. First, one is enlightening of human activities; the other one is security. Light gives people the feeling of being safe when it is used properly. Because many lighting we see in our everyday life, does not illuminate the pedestrian spaces which are designed frequently (Crowe and Fennelly, 2013).

Psychologically, light has positive impact on human behavior. For example, continuous rainfall for the country, such as London, Germany, France, Lithuanian, etc., due to lack of sunlight rates of depression is very high. This is also the influence of color on rainy weather, which is usually grey or dark color. "Light is composed of colors that range from red in violet. These are the visible colors of light." (Crowe and Fennelly, 2013).

Colors influence behaviors. Some behaviors are learned such as stopping at red lights and running at green lights.

It is interesting to note that visual perception is highest in the middle of the spectrum of visible light (color). The spectrum ranges from red in orange, yellow, green, blue and violet. The middle, or yellow-green, bands have the most visibility. The reds and violets have the least (Crowe and Fennelly, 2013).



**Figure 2. 25** Burano Island in Venice, Italy (Source: huffingtonpost.com, 22.06.2015)

Burano is a former fishing village where fishing traditions is based on Roman times. This village is a famous for its brightly multicolored houses. The purpose of this is not known what to do with colorful houses but according to rumors fisher painted their houses with varied color because identifying their houses, which were very difficult to see through the fog.



Figure 2. 26 Painted apartment buildings, Tirana, Albania (Source: balkanforum.com, 22.06.2015)

"I love the joy that color can give to our lives and to our communities," said Edi Rama, President of Albania and former Mayor of Tirana (ted.com, 22.06.2015).

Albania was so poor after leaving the Soviet control. Old concrete housing blocks were painted colorfully to encourage people in the future. This was one of the most effective and cheapest ways for transformation of the environment. There is no particular method for the painting of these buildings but creates the effect of a surprise and evokes good feelings when we are walking the street.

Another example is the demonstration of Gezi Park in İstanbul but it effects all country. People painted stairs colorful to express themselves and show their freedom in many cities of Turkey (see Figure 2.28).



Figure 2. 27 Colorful stairs in Atatürk park, Ankara (Source: Author' Archive, 2014)

**Figure 2. 28** Colorful stairs in Karaköy, Istanbul (Source: Author' Archive, 2014)

The most successful way for gathering information from the environment is the visual sense. 90% of our knowledge from the environment is provided by our sense of vision. However, we cannot distinguish visual sense from the other sense, there has a tight junction between them (Crowe and Fennelly, 2013).

"The different senses interact and affect each other, but it is not clear how, when and to what extend although it appears that the different spaces are organized in a similar way." (Rapoport, 1977: 192).

# 2.4.2. The Psychology of Public Spaces

People affect space who are affected by space. According to a study published in the Journal of Environmental Psychology; a group of young adults divided into two groups. One of the groups was sitting in front of the window which had trees and landscape view, other groups was sitting in front of the window with no view. After that they walked in natural environment. It was observed that while first group was the less nervous and more positive, other group was just the opposite (American Planning Association, 2003). This is an important input indicating how the environment affects the psychology of the human. Starting from this point, there are some indicators for the Psychology of Public Spaces.

# 2.4.2.1. Sense of Safety

Urban Design and Planning literature have been negotiated about prevention of crime and increasing the sense of safety since 1960s (Jacob, 1961). According to Jacob as stated in her book *The Death and Life of Great American Cities*, mixed-use and dense pedestrian flow enhances 'natural surveillance'.

People's perception of safety is an important part in deciding whether you are using a space and restrict participation in activities at night, especially in city centers. If people do not use these places, especially at night, it takes the form of spaces more insecure, less convivial, visually ineloquent and depression areas. The use of a space, is directly proportional to the sense of safety of the space (City of Greater Bendigo Road Safety Plan, 2007).

It has a direct effect on people's perception of safety and using the request of area for the design of public space. Some important measurements can reduce fear and crime in public places. Such as,

- Comprehensible and apparent signs increase the sense of safety. Because it simplifies routing people to themselves.
- Proper lighting increases perception of safety.
- Clear view of area, you can see what other people are doing and observing the environment freely, increases the sense of safety.
- Variety of colors, textures, shapes and landscape elements gives a meaning to environment. On the other hand, it excites user's interest.
- Mixed-use areas have positive effect on sense of safety.

Physical condition of the environment affects the sense of safety of people for example; garbage, graffiti and damaged street furniture make people feel in abandoned place, restricted passage of vehicles or reduce traffic congestion (National Recreation and Park Association, 2012). As Jacob (1961) said that "eyes on the street", people should be encouraged to observe the streets and public spaces.

#### 2.4.2.2. Territoriality (Sectionalism)

One of the basic features of people (due to the nature of human) needs to sign district. When designing a space, we should take people's needs which living and using this space into consideration. Designer should pay attention to creating such a diverse and evocative environment for convivial urban spaces (Shaftoe, 2008).

People prefer the real places just for sleeping and eating needs because of the Internetoriented lifestyle in these days. Only people can have a good psychological well-being when body, mind and sense work together. This can be achieved with combining these three main points by convivial urban spaces (Castell, 2010).

When you entered a cafe, you'll probably want to sit where you sit before. If another person is sitting in "your" place which you have sat in the past, you might sense a little upset, but you'll choose to sit another. All people create own special paths, edges, nodes, landmarks and districts in their subconscious, as mentioned Kevin Lynch's in the book "The Image of the City" (1960). Unconsciously in our minds, we create cognitive maps with using these five elements. These cognitive maps show us what includes in our territory.

# Cognitive Maps

The concept of mental perception was put forward in 1948 by Edward Tolman. Cognitive maps are about the subjects of the followings which are sensing, creating, remembering, storing and organizing the location, distance and spatial information of the physical environment (Ülkeryıldız, Arsan and Akış, 2009). In the context of urban planning, Kevin Lynch (1960) used to reveal human knowledge by these maps in large-scale complex environments.

The cognitive map provides knowledge that allows one to solve problems how to get from one place to another, or how to communicate knowledge about places to others without the need for supplementary guidance such as might be provided by sketches or cartographic maps (Golledge, 2002: 2).

#### 2.4.2.3. Interpersonal Distance

The concept of personal space emerged in the 1950s, but there was not much research on the interaction of people. The researchers were usually doing research about personal space on animals. The concept of interpersonal distance goes back 30 years. They defined different application areas such as design. "Studies have attempted to define the optimal layout of furnishings for maintaining individuals' feelings of adequate space and for allowing people to regulate their interaction distance from others to reduce unwanted closeness" (Bechtel and Churchman, 2002: 652). When designing offices, stores, banks, and other types of building, the notion of interpersonal distances has been used. Especially, public transportation and institutional environment are the most important practicable fields because of the limitation of personal mobility and stationary seating (Bechtel and Churchman, 2002).

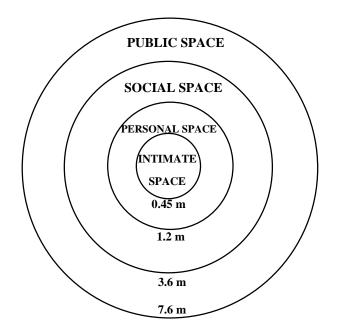


Figure 2. 29 Hall's Personal Reaction Bubbles (1966)

Anthropologist Edward T. Hall (1966) firstly, came up with the concept of the personal space in his book, The Hidden Dimension. According to Hall's Personal Reaction Bubbles: Fast friends, darlings, kids and members of the family take part in an Intimate Zone. Group discussions, chat with kith and entourages are included in second shorter

distance zone, which is Personal Zone. Foreigners, nascent groups, kith and kin take part in a Social Space Zone. Orations, conferences, theaters are included in last zone, is Personal Space Zone which usually covers the wide audience community (Hall, 1966).

The intrication of human behavior which gives priority to the distance between people for feeling of well-being. When there is an insufficient distance from other people, we will be feeling of irruption, and it creates a demand of escape from there. When the exact opposite situation, we will be feeling of incuriousness and solitariness (Kowaltowski, Silvia and Raquel, 2006). Interpersonal distance is particularly affected by gender, age, culture and environment. For example, in Japan, interpersonal distance is shorter than Mongolia, because of the shortage of space.

We are actually in hesitation and feeling uncomfortable when sitting on the same bench with a foreigner. "As the space becomes more congested, people have to accommodate themselves gradually more closely to each other, but always according to some unwritten law about 'reasonable distance''' (Shaftoe, 2008: 52).



**Figure 2. 30** METU Campus (Source: Author' Archive, 2014)

# 2.4.2.4. Different Types of Observation and Communication

We are constantly interacting with our environment in conjunction with our memory in our daily lives. People observe others, even if everyone does not do it on purpose.

Mankind intrinsically needs to observe and communicate with other people. We observe the people around us with our sense of sight, touch and hearing, which experience will suppress the feeling of loneliness. "Whatever the reaction, observation of life in public space as a catalyst for memory and fantasy" (Lennard and Lennard, 1995).

A person just relaxes away from other people and wants people to watch from afar, another person who wants to get in daily interactions; another person may want to be interacting with the friends in the same place. All these different requests are based upon the regulations that will be required to sit or linger in a good urban space which is able to fulfill expectations. If the surface at the place is a soft landscape such as grass, sit and linger area can be shaped according to the wishes to the people. On the other side, the location of which will be located on the hard landscape, bench is very important, as well as informal sit and linger area such as bulges, low wall and stairs. The best proposal can be mobile seats, but it will not always be applicable (Shaftoe, 2008).



**Figure 2. 31** Center of Gliwice, Poland (Source: Author' Archive, 2010)

Figure 2. 32 Movable 'Union Bench' Design (Source: jangirmaddadi.com, 22.06.2015)

## 2.4.2.5. Individuality and Uniqueness

According to Lynch (1960), "Identity of place provides its individuality or distinction from other places and serves as the basis for its recognition as a separable entity. It is focused that each place has a unique address that is identifiable".

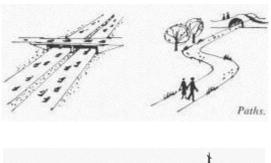
Streets have an identity with using different land uses, building forms, colors, texture of the materials, location of the trees and bushes, form and ratio of elements, the regional characteristics of the area in the context of the neighborhood (Jenks, Noble and Pattacini, 2000; Burton and Mitchell, 2006). In this way, people can understand their location, and they can go where they want in the complex urban context. When a place is distinguished from other places, people perceive space with its own characteristics and differences, as in the cognitive maps.

# 2.4.2.6. Legibility

People try to reach the destination in huge areas living in integrity, confusion with unclear or irrelevant things. Specific areas contribute themselves while choosing the appropriate information and acquisition. This feature gives a reference to legibility. An area simplifying environmental information acquisition and understanding, contains a high legibility factor.

Because the degree of environmental legibility affects the intellectual map connected to individuals; environmental legibility is a feature of environment connected to environmental image. A legible environment consists of arrangements describing the identification formed by shape, color, etc., efficient structure, cognitive images defining environment. Legible environment helps person to perceive the environment easily and correctly; also creates trust in person by make him feel comfortable in finding ways (Kancioğlu, 2005).

The primary function of essential elements of city physical form is to help leading and reflecting city cognitive maps. Lynch and a few city planners offer five key concept for legibility of city as follows:





Nodes.

district.



<u>1. Paths:</u> Consist of linear components like canals, walking paths, street, transit lines, rail roads, corridors. It forms the basis in cognitive map as a spine.

<u>2. Landmarks:</u> These are the constructions, and objects won remarkable characteristic different from the city pattern. Such as building, statue, mountain, tower, etc.

<u>3. Nodes:</u> These are the city's focusing strategic spots in roads or intersections' junction points, for example, crossing of paths, popular hangout places, etc. In most cases, nodes located at the center of the

<u>4. Edges:</u> These are the elements attracts attention with its linear features surrounding city with natural borders like mountain, sea, lake. Furthermore, they can be coasts, walls, railroads, edges of urban development.



<u>5. District:</u> These are the wide city regions and spaces of people when they are forming the physical borders in their minds and feeling the zone when they are in and it can be visible from the

outside (Lynch, 1960).

It is not easy to distinct these five terms. Moreover, some of the features of environment can consist of a few of these. While constructing the cognitive map, the city planner should pay attention to emphasize these five terms in spatial concept. With doing this also means increased in legibility and imagination quality. To provide this quality, it is essential to comprehend different physical and mental features of environment for users (Lynch, 1960).

<u>A requirement of Legibility</u>: One of the most important needs for today's people living in urban places is to maintain their lives in comfortable, peaceful ambient and without wasting of time. These conditions can only be provided by a good city planning in two and three-dimensional places. According to this, the advantages of good city planning are as follows:

- It provides to get rid of getting lost.
- It provides way of findings and easy, fast movements.
- It socially provides to develop common group psychology.
- It gives emotional trust.
- It increases the potential perspective and intensity in personal experience.

- It gives profoundness to daily experience, emotional satisfaction, infrastructure for organization and communication (Erem and Erkman, 2003).

# 2.5. Conclusion

In order to have a good convivial space, it is not required to satisfy all of the factors mentioned above, however, having a majority of them will definitely help in creating one. In addition, the combination of these elements in a way that people will be pleased does not have an exact formulation. Of course perception of some of these elements such as adequate illumination, elimination of motor traffic, smells of foods & beverages will change from person to person. However, a standard for these attributes can be set, which will provide comfort for the majority of the users. The most common example for this can be the books, movies or music. Although everyone has a different taste, there are some piece of these arts which are considered to be classics by a wide range of people. Similarly, there will be some level for these factor on which most of the users will agree and choose.

# **CHAPTER 3**

# INTRODUCING THE CASE STUDY: SAKARYA STREET

#### **3.1.** The Methodology of the Analyses

Method of investigation of this research is a case study approach. Sakarya Street, a side-road of Atatürk Boulevard in Kızılay, is used as the sample of analysis of the research. This research aims to examine the conviviality of Sakarya Street and to identify common elements for a convivial space.

In order to assess the Sakarya Street's conviviality, the research examines the main elements, which are broadly categorized under the heading of conventional urban design and convivial urban design and explained in detail in Chapter 2. This chapter, firstly, explains the reasons why Sakarya Street is chosen as the case study area in Ankara and the methodology of the analyses in detail; secondly, the analyses of the urban design elements (geographical, physical and managerial) that contribute to the conviviality of Sakarya Street; thirdly, the analyses of sensual (meaning how a space affects five senses) and psychological (meaning how a space affects the mind) elements of Sakarya Street with the sources of evidence and questionnaires, which are conducted for this study.

Sakarya Street is analyzed in two sections to examine the perceptions of people with observations, questionnaires, in-depth interviews, photographs and cognitive maps. For each section, 60 citizens of different age, gender, and profession are asked to fill out a questionnaire. Detailed information about questionnaire participants can be seen at Table 3.1, Table 3.2 and Table 3.3.

The questionnaire is conducted;

• In 07/07/2015 Tuesday (weekday), between 14:00 and 17:20 within the working hours in order to analyze user group (the temperature of weather was indicated as 290 since the temperature has effect on sense of smell in the survey);

• In 15/07/2015 Wednesday (weekday), between 11:00 and 13:30 in order to analyze lunch break use (the temperature of weather was indicated as 290 since the temperature has effect on sense of smell in the survey);

• In 11/07/2015 Saturday (weekend), between 12:00 and 16:60 in order to analyze the types of user groups that choose Sakarya street for spending their spare times(the temperature of weather was indicated as 320 since the temperature has effect on sense of smell in the survey); with question and answer method.

The questionnaire is conducted by choosing the sample using convenience sampling method with approximately equal number of people in terms of age and gender groups in three days comprising of two weekdays and 1 weekend day.

	Age	15- 29 years	30- 44 years	Age 45 and older	Total
First Section	Female	16 (%27)	8 (%13)	6 (%10)	60
	Male	12 (%20)	10 (%17)	8 (%13)	
Second Section	Female	16 (%27)	8 (%13)	4 (%7)	60
	Male	14 (%23)	12 (%20)	6 (%10)	

**Table 3.1** Age Range of the Number of the Participants in the Questionnaires

We encountered with some problems while making the questionnaire in Sakarya Street, which citizens gather for expressing their opinions with protests on, embrace:

- Some citizens rejected the questionnaire because they thought that the questionnaire is asking political questions, mainly due to political identity of the street;
- Some shop owners and employees showed annoyances while taking pictures and collecting data for mapping;

- The balance within sample group in terms of men and women were not achieved since women are shier (see Table 3.1).

	Age	Student	Civil Servant	Self- Employment	Retired	Housewife
	15- 29 years	21	-	6	-	1
First Section	30- 44 years	-	3	9	4	2
	45 and older	-	-	4	10	-
	15- 29 years	13	10	-	-	-
Second Section	30- 44 years	-	8	7	-	
	45 and older	-	7	9	2	4
	Total	34	28	35	16	7

Table 3. 2 Profile of the Participants

As can be seen from Table 3.2, the sample group generally consists of students and self-employed workers even the area attract people of different business groups.

Educational Status	Primary School Graduate	Secondary School Graduate	High School Graduate	University Graduate	Total
<b>First Section</b> (number and percentage of participants)	2 (%3)	4 (%7)	34 (%57)	20 (%33)	60
Second Section (number and percentage of participants)	6 (%10)	4 (%6)	22 (%37)	28 (%47)	60

Table 3. 3 Education Level of the Participants

As can be seen from above table, the sample group usually consists of high school and college graduates.

# 3.1.1. The Reasons Why Sakarya Street is Chosen as the Case Study Area in Ankara

The central business district (CBD) of Ankara since the 1990s has expanded towards the west corridor with the construction of many governmental buildings and new suburban residential areas, while the historical city center, Ulus and Kızılay have began to lose its significance for many economic and social activities. The user profiles of Kızılay changed, affecting the economic and social vitality of the city center. The boulevards, such as Atatürk Boulevard, Inönü Boulevard, have turned into the main intra-city transportation routes. Additionally, many car-oriented transportation projects in the city center resulted in deterioration and degeneration of the city center. As a result, pedestrians are alienated from the city center. Only a few places such as Sakarya Street and its surroundings, Izmir Street, and Yüksel Street are pedestrian streets in Kızılay. Even though the city center is becoming more car-oriented, the number of negative factors that affect its livability is increasing, only a few streets in Kızılay are still the examples of convivial urban spaces. Sakarya Street is one of them.

Today, there are many reasons for Kızılay to be a salient place than other places. Being essential point of passenger transportation and at the junction point of roads, having a subways, being close range of Ministries, being a commercial and business hub are some of the preference grounds make Kızılay vital point of pedestrians and important city center. Today, Kızılay has a formal and private workshops, shops, shopping malls, music shops, newsstands, bazaars, markets, theatre, movie theaters, restaurants, coffee shops, schools, cultural hubs and green spaces. Sakarya Street, located in the east of Ataturk Boulevard, is a pedestrianized street. It is one of the significant gathering places of Ankara with its colorful pattern, dynamic functions and pedestrian density.



Figure 3. 1 Location of Sakarya Street in the City Center (Source: Author' Archive, 2015)

Having a variety of commercial, touristic and business activities, Sakarya Street attracts many people from different income, age and gender groups. The students of the private tutoring institutions, known as *dershane*, in K121lay district were spending time in the cafes, restaurants and bars along the street. The government decided to close down private tutoring schools in 2013. Therefore, some were converted to office buildings and units of some private teaching schools. Even though the student population decreased in K121lay, the leisure activities in Sakarya Street attract many students. Residential population in K121lay is decreasing day by day; however, there is still a residential community that uses Sakarya Street and its surroundings for their daily needs. The presence of Cankaya Municipality building creates liveliness in almost all workdays of the year. Sakarya Street provides an important example to assess the conviviality of a pedestrian street. It is important to identify the elements which contribute to its conviviality.

# 3.1.2. Methodology of the Analyses for Conventional Urban Design Elements

The case study analysis of this thesis is Sakarya Street in Ankara. In the first part of the analysis, the research investigates the conventional urban design elements (geographical, physical and managerial). The location of Sakarya Street and its close proximity to Kızılay, its current land-use pattern and its accessibility to public transportation are examined to introduce Sakarya Street. The research tools are direct observations, land-use and transportation maps, photographing, in-depth interviews and questionnaires. In the second part of the analysis, the investigation focuses on the conviviality dimension of Sakarya Street in terms of sensual and psychological elements. In this part of the analysis, the examination focuses on the area from Atatürk Boulevard to Mithatpaşa Street. The research tools are direct observations and questionnaires.

For the assessment of the conventional urban design elements, the key question to be answered and the research tools are presented in Table 3.4.

The contributing element	The key question in the questionnaires	The research tools
Usage rate of the street	- How frequently do you use Sakarya Street? When do you prefer to come to this street?	<ul> <li>Land-use maps</li> <li>Observations</li> <li>Photographing</li> <li>Questionnaire</li> <li>In-depth Interview</li> </ul>
Accessibility	<ul> <li>Which mode of transportation do you use to come to the Sakarya Street?</li> <li>For what purposes do you come to this street?</li> </ul>	<ul> <li>Transportation maps</li> <li>Observations</li> <li>Photographing</li> <li>Questionnaire</li> <li>In-depth Interview</li> </ul>
Legibility	- Which buildings, structures, furniture, plants, etc. are important for you in Sakarya Street? Why?	<ul> <li>Lynch Analysis</li> <li>Ratio of building height</li> <li>Observations</li> <li>Photographing</li> <li>Questionnaire</li> <li>In-depth Interview</li> </ul>
Feeling Safe and comfort	<ul> <li>Do you feel safe in this street?</li> <li>Is the street suitable for all weather conditions? (are there any elements that cast a shadow when the sun shines or to be protected from getting wet when it rains)</li> </ul>	<ul> <li>Observations</li> <li>Photographing</li> <li>Questionnaire</li> <li>In-depth Interview</li> </ul>
Seating places	- Are there enough seating places in this Street? (Bench, etc.)	<ul> <li>Map of street furniture location</li> <li>Observations</li> <li>Photographing</li> <li>Questionnaire</li> <li>In-depth Interview</li> </ul>
Green spaces	Do you think that there are enough green areas in this street? Why?	<ul> <li>Observations</li> <li>Photographing</li> <li>Questionnaire</li> <li>In-depth Interview</li> </ul>
Lighting	- Is the street lighting adequate? (Your answer, especially considering the evening.)	<ul> <li>Observations</li> <li>Photographing</li> <li>Questionnaire</li> <li>In-depth Interview</li> </ul>

# 3.1.3. Methodology of the Analyses for Convivial Urban Design Elements

On the basis of Lefebvre's ideas and his major work, 'The Production of Space' (1974/1991), space is socially produced but not a given. Every society produces a spatially: a physical space, managerial space and way of thinking about it. Space is a consequence of a society and precondition for a society. Therefore, the spatially includes a pyhsical world, mental world and social world. Each of the three worlds is distinct while all have interrelations with each other, forming a whole. Perceived space, conceived space and lived space correspond to physical, mental and social spaces, respectively.

Conviviality in Sakarya Street is analyzed in real (senses) and psychological (mind and spiritual) terms. Regarding 'conviviality'; color, taste, sound, smell and pattern of the street- feeling safe and comfort- lightening- sitting and green areas of the street are the elements which are investigated. Interview questions were categorized under the following three headings:

- 1) Physical/Perceived Space: Measures
- 2) Mental/Conceived Space: Interpretations
- 3) Social/Lived Space: Practices.

The aim is to understand the street in people's senses and mind. The key questions to be answered and the research tools are presented in Table 3.5.

Senses	The key question in the questionnaires			
	Measures	Interpretations		
Vision	<ul> <li>What color does your attention on this street?</li> <li>Which buildings, structures, furniture, plants, etc. are important for you in Sakarya Street? Why?</li> </ul>	• Is there any structure or urban element of the street which is bothering you? If any, what are these? Why do these elements or structures bother you?		
Smell	• Do you have a good or bad smell that attracts your attention on this street? If any, what is it?	• What do you think about this smell?		
Taste	• Do you eat in any restaurant on this street?	• If yes, which places do you prefer?		
Audition	• What sounds do you hear on this street?	• What do you think about these sounds?		
Touch	• Can you remember the street floor if you close your eyes? If you remember, what is the floor covering throughout the Sakarya Street? (Which material?)			

 Table 3. 5 Senses and psychological elements

According to the practices, the question is

• What kind of events are carried out in this street? (Wooden sculpture symposium, performances of people which are dressed in different costumes, demonstrations, etc.). Do you join these activities?

#### 3.2 History of Sakarya Street and Its Surroundings

# **3.2.1. Introduction**

Municipality of Ankara is reorganized as Capital Municipality on October 17, 1923, four days later when Ankara is declared as the capital. Istanbul got smaller during The Independence War whereas Ankara was flooded by soldiers, officers, workers, and other people looking for a job even before being a capital city. Rapid increase in population necessitated building of new places for people to work, rest, eat, get education and join entertainment and cultural activities (Ankara Metropolitan Municipality, 2023).

## 3.2.2. First Planning Period of Ankara (1924-1930)

## Lörcher Plan (1924)

The first zoning plan of Ankara was prepared by Dr. Carl Christoph Lörcher, member of Istanbul Development Commission, between 1924 and 1925. Lörcher Plan and 1928-1932 Jansen Plan had a great effect when designing modern capital of Ankara (Cengizkan, 2004; Günay, 2012; Duru, 2012).

1924 Lörcher Plan aimed to place the growing population to old town and around. New roads were planned to provide service to the planned and existing neighborhoods. However, before the plan which targets 200.000 of population and 150.000 hectares of field was completed, restraint about rapid increasing population of Ankara while becoming a capital came into a question and a new governance district created with the name of "Cankaya" with land acts and suitable enlargement plan. In this district, an "administrative quarter" was established containing both a new parliament, ministries and other public institutions, besides a residential area to live in who work here (see Figure 3.1). The relation between the old and new town is thought closely (Cengizkan, 2004). New town was constructed as spacious Garden City Concept and equipped with public space, which reinforced experiences of New Nation and National State. These public spaces, not seen much in Ottoman Closed City Concept, are formed of streets, parks and squares (Uluiş, 2009). The three-dimensional Urban Place both provides new improved relation of pedestrians and vehicle traffic and also a geometric hierarchy which supports the meaning of the plan (Cengizkan, 2004; Duru, 2012).

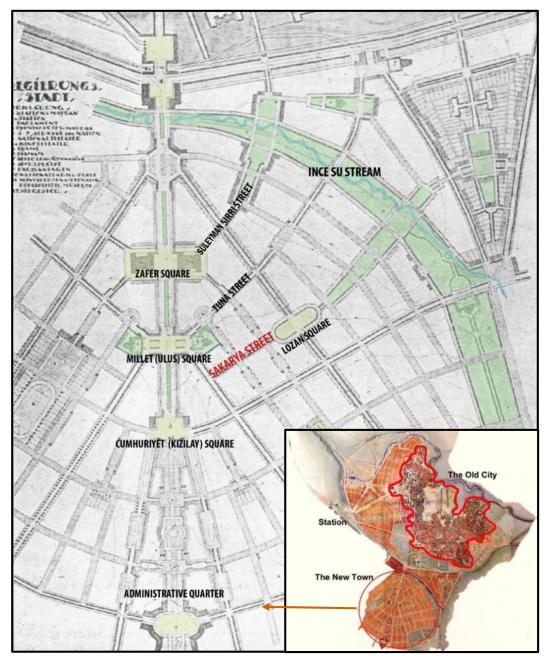


Figure 3. 2 (1925) Lörcher New Town Plan (Source: Cengizkan, 2004)

Lörcher Plan, which is known to be the first plan of Ankara, gave basic decisions for Kızılay and neighborhoods, symbolic center of the city nowadays. Lörcher Plan predicted homogeneity of 1-2 floor housing fabric with garden on Grid Plan road system (Şenyapılı, 2004; Uluiş; 2009). Despite that plan was implemented, the city started to expand towards Cankaya and Keçiören at the end of 1927 (2023 Capital Ankara Master Plan Report).

According to the plan, Lozan Square is at the junction point of Sakarya Street and Mithatpaşa Street in an ellipsoid shape (Figure 3.1). At the southeast part of square, there is home of Mustafa Necati which was restored in 2001 by Ministry of Culture. The square is named by the Lozan Agreement (1923) and associated with Lörcher Plan (1925) (Cengizkan, 2004).

Lörcher also suggested to protect the Incesu Stream and around as Green Belt. Thus Süleyman Sırrı, Tunalı and Sakarya Streets that are pedestrians ways connected to Green Belt, have an importantce for the city at the present time (see Figure 3.1).

## Physical and Social Conditions of the Period Between 1924 and 1930

In this period, the situation at Sakarya Street and its surroundings was as shown in Figure 3.2 and the street was a traffic way without any connection to Atatürk Boulevard. Besides, other streets around Sakarya Street, which are Tuna Street, Selanik Street, Mithatpaşa Street and Bayındır Street were also traffic ways. The Kızılay building and its garden, which is the symbol of Kızılay, was built in 1929 and the name of the square was changed from "Cumhuriyet" (Republic) to Kızılay. The building give a new identity to city center at that time. Güvenpark and the buildings of ministries was being built at that time (see Figure 3.3).

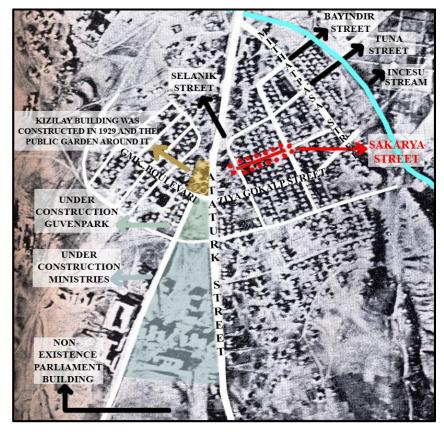


Figure 3. 3 Satellite image from New town in Ankara, 1930

New Town was not showing the features of a center in this period. It was in the foreground with "havuzbaşı" (poolside), planned as a park, corresponding new life style. According to the Lörcher Plan, 'Havuzbaşı' was in Cumhuriyet Square (Kızılay Square today). Evening concerts given by Ankara Municipality Band took place in the newspapers in those days. It is known that square was used intensely by people living in garden houses.



Figure 3. 4 'Havuzbaşı' (Poolside) in Cumhuriyet Square (Kızılay Square today) (Source: Cangır, 2007)

# 3.2.3. The Period Between 1930-1955

# Jansen Plan (1932)

The impact of Lörcher Plan on the city was limited to determine the direction of development. It was understood in 1927 that the 1924-1925 Lörcher Plan lost its validity in terms of some predictions and coverage zone. The municipality invited three experienced planners to Ankara for competition (Chief Architect of France Government Leon Jausseley, German Planner Hermann Jansen and Joseph Brix) and acquired preliminary reports (Tankut, 1990; Tekeli, 2009; Yavuz, 1952; Duru, 2012; Cengizkan, 2004).

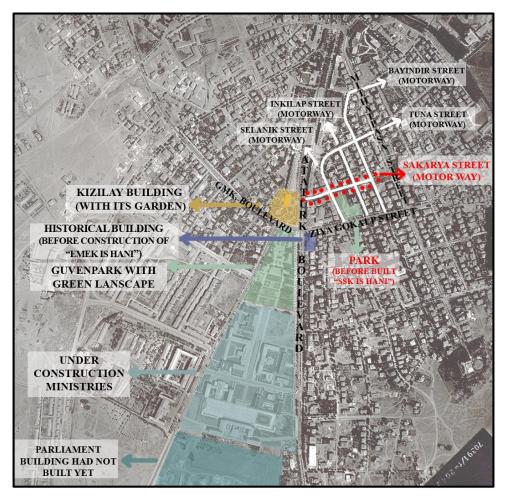


Figure 3. 5 Satellite image from New town in Ankara, 1940s

In this contest, the competitors are limited in their planning decisions. The most important limitations came from implementations made at that time. These implementations made the city development directed to Ulus-Cankaya. The decisions about important roads, places of important buildings and about protection of old town were given to competitors (Tuncer, 2000). Result of competition was announced in the beginning of 1929. The first prize was given to Jansen Plan because the plan was economic and easy to apply (Yavuz, 1952).

The population was predicted to be 300,000 in 50 years. But it should be considered that in 1927 the population of Ankara was 74,553, between 1920 and 1927, the population was increased 3 times but it was supposed to achieve a saturation point and get slower (Tunçer, 2000).

As Table 3.1 illustrates population of Ankara, which has the characteristics of small town, increased approximately ten times from the declaration of capital to 1950s.

Year	Population	Year	Population
1923	30.000	1950	289.197
1926	47.727	1955	451.241
1927	74.553	1960	650.067
1928	107.641	1965	905.660
1935	122.720	1970	1.467.304
1940	157.242	1975	1.997.980
1945	226.712	1980	2.561.767

Table 3. 6 Population Distribution of Ankara

Source: (Şenyapılı, 2004, Cengizkan, 2004)

According to these approaches, Hermann Jansen's Plan predicted a simple zoning for Ankara. Also the structure realized by Lörcher Plan 1924-1925 became legal as wanted from competitors. Jansen Plan made an overall zoning, specified vehicle and pedestrian transportation on a main city spine. While indicating the basic development direction of city to south, he suggested a new structuring in three directions around the old town. He described the Bend Stream, Ankara Stream and Incesu Stream as important open-green fields (see Figure 3.5) and emphasized a specific green-field system (Cengizkan, 2004).

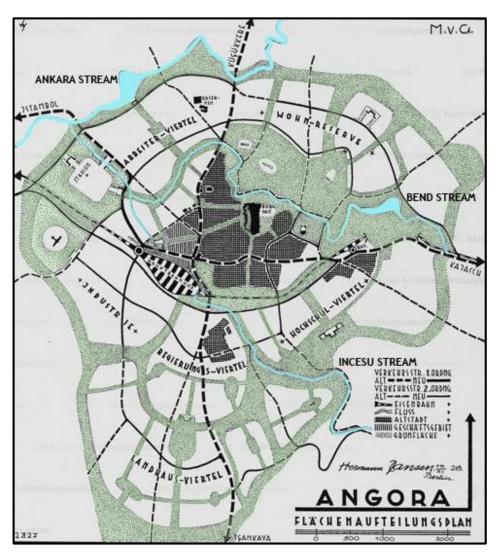
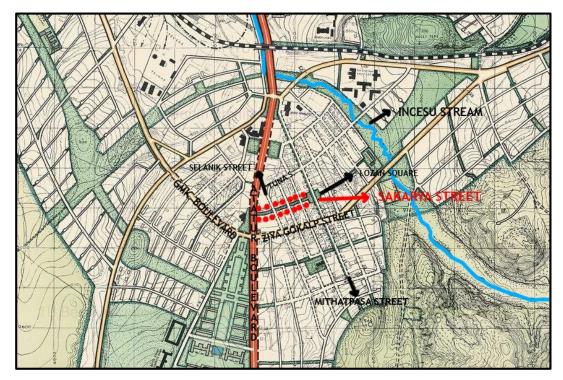


Figure 3. 6 Green System in Jansen Plan

Jansen, adopting all the values of 1924 Lörcher Plan, developed a zoning plan and described development dynamics of city like Isci district, University Region, Tandogan Airport, thus he proposed a general plan that Atatürk boulevard is main arterial road. Jansen cleared away some of the squares by developments of Atatürk Boulevard's two-way road in implementations in 1930 (Cengizkan 2004).

The population of Ankara reached 287,000 in 1950. Ankara arrived the 50-year population prediction in 20 years. Jansen plan led development of Ankara despite some changes until 1950's. A modern city emerged with wide green spaces, low-density streets (especially Atatürk Boulevard) and constructed corporate buildings meticulously. (Tunçer, 2001).

The historic center was proposed as Ulus, also new development areas, Kızılay, as New Town in Hermann Jansen' Plan (1932), which is made under the Garden City movement.



**Figure 3. 7** Sakarya Street in Jansen's Plan (Source: ankaraarsivi.atilim.edu.tr, 11.06.2015)

Sakarya Street, which was not connected to Atatürk Boulevard in Lörcher Plan, became a green belt and engaged to boulevard in Jansen's. In other words, Sakarya Street is planned to support green system in Jansen Plan as pedestrians' thought. Lozan Square was located at the junction point of Sakarya and Mithatpaşa streets that is seen as an ellipsoid shape in Lörcher Plan, became a rectangle shape and came until today in Jansen Plan. But, it is prevented to be perceived as a square because of overpass on the road (see Figure 3.7).



Figure 3.8 Lozan Square- Ankara, 2015 Figure 3.9 Lozan Square- Ankara, 2007 (Source: Author' Archive, 2015)

(Source: Günay, 2002, Private Archive)

# Physical and Social Conditions of the Period Between 1930 and 1955

Between 1930 and 1950, Kızılay became important bureaucratic and political center with construction of ministries even though it was not designed as a center in Jansen Plan. In the plan of Kızılay Square; Kızılay Park, Atatürk Boulevard and Güvenpark were planned as a public space which aimed to provide modernizm. Atatürk Boulevard (see Figure 3.9.), that has acacia trees, locates in the middle of wide refuge and shadows of horse chestnuts in both sidewalks were a place called 'piyasa' (promenade).



Figure 3. 10 Zafer Square in Ankara, 1940s (Source: Cangir, 2007)

Figure 3. 11 Atatürk Boulevard in Ankara, 1930s (Source: Cangir, 2007)

Güvenpark integrated to Boulevard through separated roads for pedestrians and bikers was the most powerful open space supported the public characteristic of Boulevard. Güvenpark was fictionalized with the view of transition between housing area and administrative buildings and creation of a unified open space with Kızılay Park (Bayraktar, 2013). In addition, the decision taken in 1952 regulated the ground and basement floors as passage and allowance the adjacent building construction enabled the development of Kızılay as a commercial center. Mixed-use property, that has been set up by the Kızılay Square and the city center which majority of it, was used by middle and upper income group intensively strengthened spatial and semantic link with boulevard (Batuman, 2002).

#### 3.2.4. The Period Between 1955-1970

#### Yucel - Uybadin Plan (1955)

Jansen's plan couldn't cope with increasing population owing to rapid migration. Thus need for a new plan was emerged to carry out this situation and it was Yucel-Uybadin Plan because population of Ankara had reached 450.000 until 1955 and was anticipated to reach 750.000 by 2000s. The competition was held for the new plan of Ankara in 1955, of which selected jury was more technical than Jansen's plan' jury in 1928 (Günay, 2012). The Development Plan was prepared by Nihat Yucel and Rasit Uybadin which involves an area of 12.000 hectares came in first and was approved in 1957 (2023 Capital Ankara Master Plan Report).

The unpredicted center formation in Yucel-Uybadin Plan caused boulevards to change physically and lost public meanings because of road expansions, pedestrian way reduction, removing trees and reduction of road elevation. With the approval of District Height Regulation Plan in 1968, number of floors of buildings were increased 7-8 floors on housing lots in both sides of boulevard. Small scale organizations provided the viability of the boulevard which is cafes, restaurants, pastry shops and other commercial usages were transformed to trading uses because of pressure from getting unearned income (Bayraktar, 2013).

An implementation plan which was organized by planners covering all city still has validity for Ankara. The implementation plan was designed due to topography and natural parameters. Main development axes and green belt, the ideas of Jansen' Plan, were also included in this plan.

Yucel-Uybadin Plan couldn't predicted that Kızılay would developed as the center, couldn't control the rapid changes and caused a process of changes in Kızılay square negatively by not foreseeing transportation-pedestrian integrity. (Bayraktar, 2013, Kaya, 2002).

# Physical and Social Conditions of the Period Between 1955 and 1970

During the 1960s, in addition to ministry buildings new parliament building which opened in 1961, literally made Kızılay bureaucratic and political center. Besides cinemas and bookshops opened to serve the new residential area formed around ministries make this area a cultural hub, newly opened bank had begun to bear the financial center features (Batuman, 2002).

In late 1960s, Kızılay was the city center with Kızılay Building, which was constructed in 1929, and the public garden around it ornamented with flowers, and Atatürk Boulevard with low traffic density and Sakarya Street which was not pedestrianized then but whose traffic density was low (see Figure 3.12). Kızılay was mainly pedestrians' in those days (Bayraktar, 2013).



Figure 3. 12 The entrance of Sakarya Street from Atatürk Boulevard in 1966 (Source: İşçen, 2012)

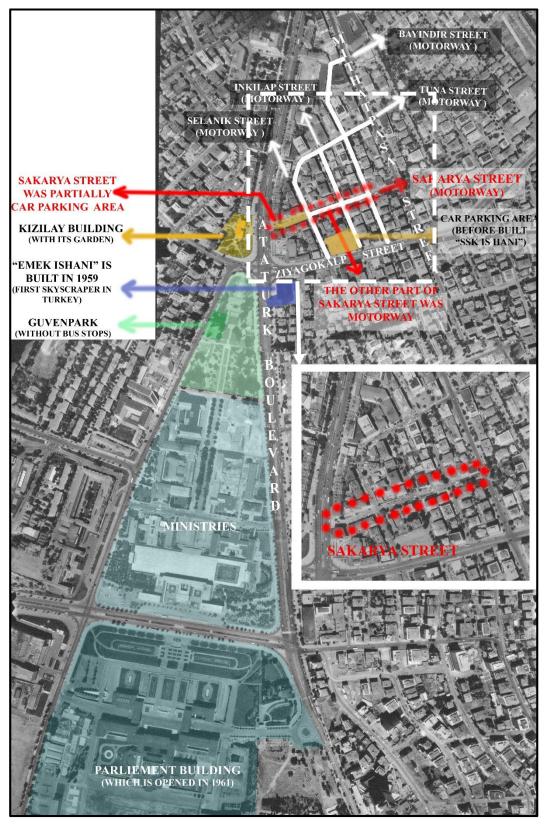


Figure 3. 13 Satellite image from New town in Ankara, 1966

The first skyscraper in Turkey named "Emek İş Hanı" was built in 1959 connected with center. Construction of "Emek İş Hanı" has brought a new image to the city which gave meaning to Kızılay Square (Bayraktar, 2013). After 1960, Kızılay gained prestige with Jansen Plan and became a favorite place of consumer, personal services, administrative centers and international business centers (Tunçer, 2002).

In 1961 District Height Regulation Plan was caused number of storey of buildings to increase in 1957 plan. Also this plan lead to Early Republican Period' and 1940-1950' buildings were demolished and renewed by giving permission to 6-8-10 storey for construction on main streets both in old town (Ulus) and new town (Tunçer, 2009). This plan caused changes in residential areas starting from city center, and appearance of the city with high-rise buildings constructed without any changes to infrastructure by allowing construction of buildings with 4 to 10 floors, which were projected as 2 floor houses with gardens in Lörcher and Jansen Plans.

Lively commercial center between Ulus-Samanpazarı has lost its importance in time and at that time Kızılay became the symbol of developing Ankara. Also the streets close to Sıhhiye side around boulevard got a share of the development tendencies starting from Sıhhiye direction. Izmir Street and Sakarya Street played role in new social structure. (Ayoğlu, 2010).

## 3.2.5. The Period Between 1970- 2000

#### 1990 Master Plan (1982)

When 1970 predictions of Yucel-Uybadin Plan was exceeded in population and settlement, the capital started to turn into a metropolitan. Besides, the population in squatter houses was 784.000 and there were 144.000 squatter houses in capital. More than 70% of population lived in squatter houses in 1970 while the population was 1.230.000. Reclamation Development Plan period started with the law no 2981 Development Amnesty in 1984 (Erol, 2011). This period can be explained as a beginning of "planned unplanning" period. With succession Development Amnesty Law, suburbs emerged instead of squatter houses with high-rise buildings. Aside from

technical and social infrastructure problems, city become a balls-up with increase in storey and density. This tendency is ongoing in the 1980s also is continuing in the beginning of the 1990s. (2023 Capital Ankara Master Plan Report).

According to 1990 Master Plan the population of Ankara in 1990 is predicted to be between 2.8 million (accepted low migration) to 3.6 million (accepted high migration). Actually it was 2.3 million in 1985 and 2.5 million in 1990. The basic policy of Master Plan was to arrange development of urban settlement, which was continued in northsouth corridor until that time, through a main west corridor to ensure that the settlement go beyond topographical bowl and by this way to make citizens live in a less-air polluted area. In this respect, important landmarks like Eryaman, Batikent, Sincan collective housing areas and Sincan organized industry region were planned to develop and city directed to Istanbul road mainly (2023 Capital Ankara Master Plan Report).

Sakarya region is a pedestrian zone consist of Sakarya Street and connected streets, called "Sakarya". In 1990 Ankara Master Plan Process Sakarya, Selanik, Bayindir and Inkilap Streets were closed to vehicle traffic for testing purpose. It was made with the decision dated of 24.02.1978 City Traffic Commission of Governorship of Ankara. With the favorable results and outcomes of this implementation decision No. 1979/165 dated 06.07.1979 of the commission where of streets were declared as 'Sakarya Pedestrian Zone' (the area between Atatürk Boulevard, Ziya Gökalp Avenue, Mithatpaşa Avenue and Tuna Avenue). Directorate of Technical Services, Directorate of Development, Directorate of Parks and Recreation, Directorate of Municipal Police of the Municipality of Cankaya take the responsibility of planning, controlling and cleaning of Sakarya Street. However there is a deficiency of coordination among these units. Sakarya Street with its advantages about pedestrians, being a meeting place for people, with many different dynamic structure and density of pedestrians is one of the outstanding place for Ankara. (Yetkin, 2004).

# Physical and Social Conditions of the Period Between 1970 and 2000

After 1970, unforeseen center formation in Yücel Uybadin Plan has led to changes in the city such as road widening, sidewalks narrowed, reducing the street level. Also, in

1979 with the collapse of Kızılay building which identify the square, its public space usage and meaning lost. With these kind of changes Atatürk Boulevard and Kızılay began to lose its meaning as public space (Bayraktar, 2013).

Kızılay has entered into the rapid process of renewal since 1970s till today which lost its urban fabric of Jansen Plan Era with its urban civil architecture examples during this process (Tunçer, 2002). Also, subway construction started at the beginning of 1970s continued for 27 years affected Kızılay Center negatively. Firstly Kızılay-Batıkent line was opened for use at 28<sup>th</sup> December 1997 (Bayraktar, 2013).

After 1980, with the shift of center from Kızılay to Kavaklıdere, upper income users had replaced. Kızılay, has been transformed into a commercial center, mostly for middle-income users. By the time 1990 commercial, office, cultural function of Kızılay center shifted towards to city periphery because of the new residential areas at outskirts and increase in number of shopping malls. Kızılay square has become completely a traffic intersection, Pedestrian Streets that are associated with the life of the city, participated in the streets as new public spaces (Bayraktar, 2013).

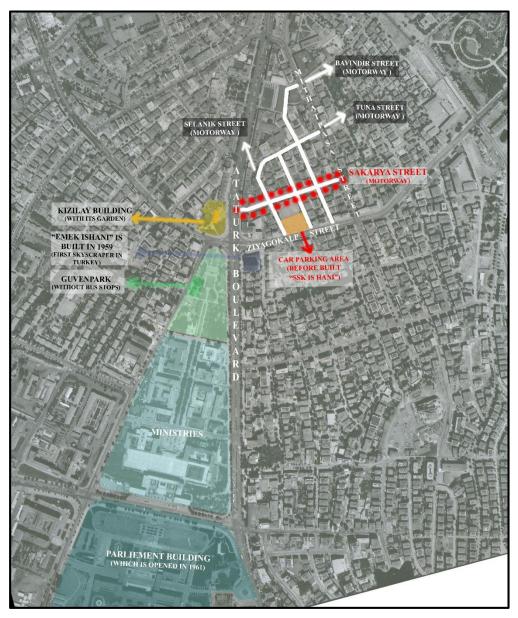


Figure 3. 14 Satellite image from Kızılay in Ankara, 1971

In 1980s and after, these places were properly fixed up by a lot of implementations and projects toward given functions. For instance with a study made in 1982, many of these places were took into account for new arrangements; but only decisions about Izmir Street and Yuksel Street with its surrounding were implemented (Bayraktar, 2013). In the process of Ankara Metropolitan Municipality, the areas to which the old pedestrian regulations are applied rearranged and named as "Pedestrian Zone". The pedestrian zones' connections between each other that were inherited from history of Ankara weakened because of regulations about priority of motor vehicles. Even though there are invaders, high-storey constructions around, they continue one's existence as a Kızılay's special breathing fields (Ayoğlu, 2010).

# Kızılay Pedestrian Zones Plan (1986)

Ankara Kızılay Environmental Plan and Pedestrian Zones Plan was won by the Yalçın-Beat Oguz Company, which had been tendered for a contract by Ankara Metropolitan Municipality on 20<sup>th</sup> of March 1986 (Oruçkaptan 1990). There are unimplemented suggestions, which are in connections with Zafer Square, Kumrular Street, Guvenpark, Izmir Street outside of the existing pedestrian area in the project (Figure 3.11). Instead Yalçın-Beate Oguz company project was prepared by Metropolitan Municipality, a new project was prepared by Dr.Turgay Ates in 1987 who was an Urban Planner and Landscape Architect for Cankaya Municipality Sakarya Pedestrian Zone and it was applied (Ayoğlu, 2010).

In Ates's plan, there are wide pathway with trees instead of florist shops on Sakarya Street. The Municipality assigned some part of this wide pathway to the florist shops because of commercial income.

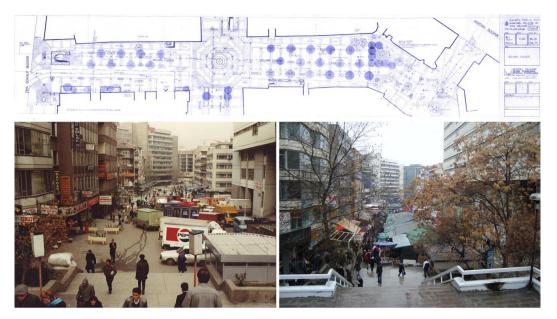


Figure 3. 15 The project of Ates about Sakarya Pedestrian Zone, before implementation and today's condition (Source: Oruçkaptan, 1990).

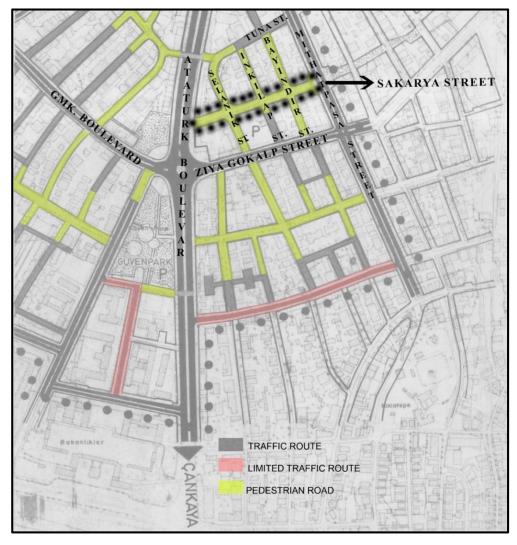


Figure 3. 16 Kızılay Pedestrian Zones Plan (Ateş' Project 1/1000, 1987)

According to the Ates's Project;

- Green area which is still existing is connected to S1hhiye Officers' Club in the west side of Zafer Square which was predicted to be a car park. The east side of square was predicted to be green belt above the Zafer Square and is inactive today.
- The area where Kızılay building was shown as Kızılay park area does not consist of any structure and "It is arranged as a green space" expression was added (Ayoğlu, 2010).

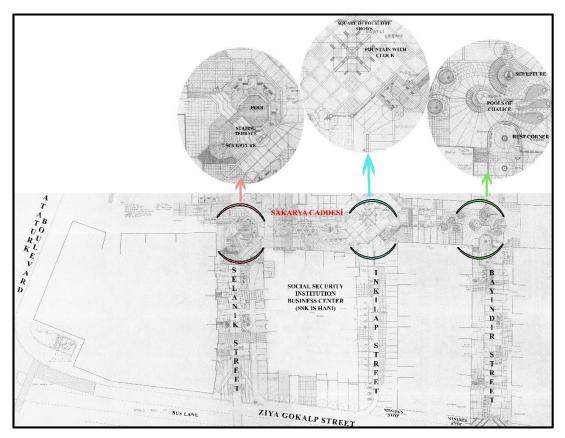


Figure 3. 17 Kızılay Pedestrian Zones Plan (Ateş' Project 1/200, 1987)

- Share taxi station in Kızılay was removed and a car park was offered under the park. Three pedestrian entries planned for this car park. Two of them are close to today's subways entries, other one south of today's share taxi station. Vehicle entry is predicted to be at the conjunction point of Administrative Quarter line, today's Balgat share taxi and street where the florist. Main axis of Administration Quarter's section in the park would be cancelled and a large square was predicted.
- Pedestrianizing along the Kumrular and Izmir Street was predicted. Pedestrianizing was also predicted in the area until Zafer Square which were thought to be a car park for Ihlamur Street. It is offered "democratic streets" to service for Sehit Adem Yavuz, Menekse, Sumer, Fevzi Cakmak Streets.

- According to the plan, it was offered that Tuna and Bayındır Streets in Sakarya
   Pedestrian Zone are also democratic streets.
- Underbridge was offered which connects Selanik Street to Sakarya pedestrian zone in the Ziya Gokalp Boulevard instead of existing overbridge now, another underbridge was also offered which connects two sides of Izmir Street to each other on Gazi Mustafa Kemal Boulevard.
- On the project, only two overbridges existing today were predicted, which is one connecting Sakarya pedestrian zone to Izmir Street and other connecting Yuksel Street to Guvenpark.

For the connection problems in creation of the pedestrian areas, at the first-stage overbridges put in place. Turgay Ates (1990), responsible for Sakarya Pedestrian Zone, offered underbridge in his own plan. He expresses existing 4 overbridges;

In my opinion overbridges connecting pedestrian zones to each other in Kızılay are good but there must be moving stairways. In our plan, there are underbridges and shops in there. Existing subway should be in these underbridges and there should be shops to ensure safety. Underbridge has a high cost because it is difficult in terms of construction techniques. Also what will happen to the vehicular traffic while constructing underbridge? Overbridge was preferred for this reason. Architecture of tubular passages are very nice but dirty because of being neglected (Oruçkaptan 1990).

Because even though vehicular traffic was stopped because of Ankaray subway construction, subway weren't planned for those points. Today connections between pedestrian zones are getting weakened because of car-oriented traffic policies. Overbridges, firstly, that were thought to be temporary solutions with subways, have increased in numbers. Overbridges, besides the aesthetic and functional problems, weakened the connections between pedestrian zones instead of strengthen them and caused unsecured areas for users.

In high density of usage in pedestrian zones in Kızılay, it is possible to notice change of user profile. Usage of content of pedestrian zones changes, for example, while use of political party centers, culture homes, art galleries decrease; cafe, bar use increases and vertical distribution has formed to upper floors. Kind of bazaar shops filled the free places which could be expressed as 'stand mall' (İşporta Avm). New usages not only repeat each other, but also they emerge parallel contents for new user profile.

### Kaplan and Acuner (2005) made assessments as:

'Even though pedestrianized zones at the city center of Ankara seemed to be adequate according to 1980s beginning position, they are inadequate and old nowadays.' In addition to this they suggested that 'Pedestrianizing in the city center of Ankara must be revised and it must be developed with the integrity of the city plan.'

Ates (1990), based on structural pattern in the area, expresses and underlines the design and function of Sakarya Pedestrian Zone with these words; 'Approximately 99% of pedestrian zones all over the world are constructed to the most beautiful, well-known places having historical identity, like an Independence Street (Istiklal Caddesi). But Sakarya Pedestrian Zone is constructed to a place of the ugliest conditions around and so it was done to hide ugliness. Ugliness stems from irregular innovation in Sakarya. All constructions in these space, are still new and uncompleted architectural texture. There is nothing about history. It is a shopping and transition zone. Constructions are so outrageous. I'm expressing this because; buildings are demolished and constructed again whereas pedestrian zones are generally designed as permanent around the world.' (Oruçkaptan 1990).

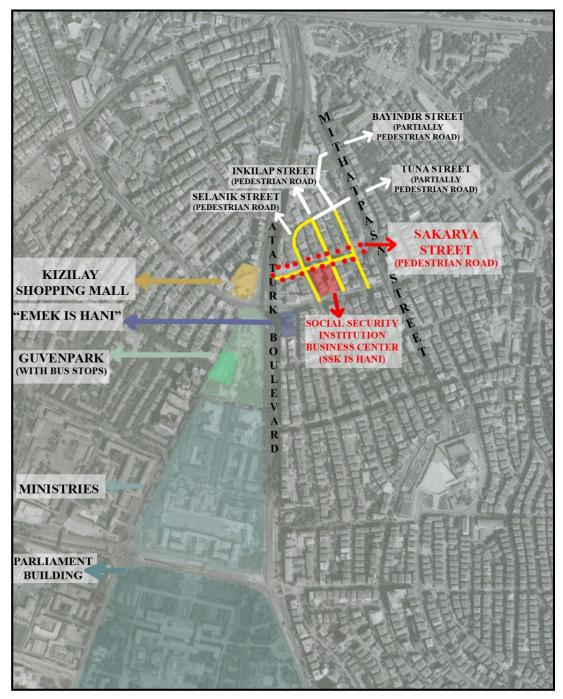


Figure 3. 18 Satellite image from Kızılay in Ankara, 1990s

### 3.2.6. The Period After 2000 until Today

Kızılay Center was defined as business space in 2023 Capital Ankara Master Plan and it is suggested that measures are taken under the name of "Cultural Center Kızılay" in order to strengthen its structure and liven. However, no arrangement is done to Sakarya Street.

### Physical and Social Conditions of the Period after 2000 until Today

Vehicle oriented solutions of local governments includes, starting from mid 90s, left turn prohibition in Kızılay Square, putting hold on pedestrian passage through level crossing by placing concrete barriers, constructing a high number of upperbridges, making it difficult to walk along the curbsides (Ayoğlu, 2010).

The solution for pedestrians within a traffic speeded up with vehicle oriented arrangements was foreseen as upperbridges. Vertical applications such as upper/lowerbridges at some boulevards with high vehicle traffic density are inevitable, however, these applications extends the way pedestrians should walk, making it unattractive to be pedestrian (Babalık-Surcliffe, 2005).

Destroying the squares which have the signatures of the history of the city has become the most explicit attitude of urban administrations since 1980s. Today, the connections between pedestrian zones are insufficient, unmodern, unaesthetic and non-functional.

The fictionalize scheme of Atatürk Boulevard was deformed seriously with latest spatial arrangements. The political characteristics, figurativeness which is going back to 1960s of Kızılay constitutes the base of this spatial arrangements and political struggle.



Figure 3. 19 Satellite image from Kızılay in Ankara, 2015

Today, people visits the Sakarya Street in order to meet daily needs, especially to buy fresh fish, eat doner, go shopping, spending spare time at the cafés, sit through the street and converse. Sakarya Street still sustains its function as an area of reaction of public despite its changing structure. A lot of political parties, institutions, democratic organizations, chamber of professions, student communities, express their social reactions in this area.

# 3.2.7. Structural - Functional Transformation in Sakarya Street

### **Atilim Sculpture**

Atilim sculpture belongs to Burhan Akar made in 1979 of galvanized iron tubes and previously standing in Sakarya Pedestrian Zone was removed from that area in time.



Figure 3. 20 Burhan Akar Atilim Sculpture, Sakarya Pedestrian Zone 1978 (Source: Alkar, 2015)

# Tasankara Sculpture

There was a stone sculpture in Sakarya pedestrian zone named Tasankara at the intersection point of Sakarya and Selanik Street. The Sculpture was created with forcing technical abilities, engineering proficiency of putting masses vertically upwards in 1992 at a workshop Ankara. (Anonim, 2004). The Sculpture is standing on a wide octagonal elevation which is providing people places for sitting and walking over. This elevation is also designed as a pool of same form in the projection of Ates.

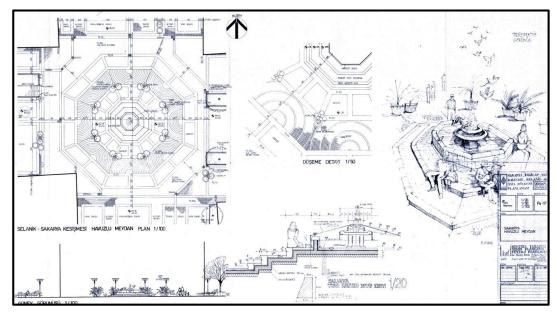


Figure 3. 21 The point of Tasankara Sculpture in the project of Ates (Source: Oruçkaptan, 1990)



Figure 3. 22 Tasankara Sculpture Implementation Process and Current Situation (Source: Author' Archive, 2015)

# Amphitheatre

With some intervention made for Sakarya Pedestrian Zone in 2003, floor texture and some equipment were changed. Public reacted because of removing the trees from Sakarya Street during the implementation of changes. The amphitheater, which was planned to be a place for watching music, street show, water and light shows, were largely applied under the direction of Ates's Project. But it lost its importance during the time because of squalidity. As a part of new arrangements, the pool in this field removed and an informal amphitheater and generated protecting the original lines of the project. This amphitheater is tried to be used actively with individual and social activities organized by Cankaya municipality in these days. (Ayoğlu, 2010).



Figure 3. 23 Design of Amphitheatre with Pool and Implemented Condition in Sakarya Street

(Source: Oruçkaptan, 1990)



Figure 3. 24 Current Situation of Pool in Sakarya Street (Source: Author' Archive, 2015)

# Social Security Institution Business Center (SSK İş Hanı)

Social Security Institution Business Center (SSK İş Hanı) as previous name and Labor Servant Building (Emek Hizmet Binası) as current name, founded in 1973 with an architectural projection competition of Cankaya Municipality. The implementation of Architect Orhan Dinc project, which ranked to be first in competition, started in 1974 and completed the building in 1980. Social Security Institution Business Center served to unearned income facilities until 2009 which have 44.200 m<sup>2</sup> usage area and 6137 m<sup>2</sup> floor area in Kızılay City Center. The building having a specialty of the different kind used for a long time as butcher, green grocer at downstairs and cafe, bar, belvedere at second floor. Social Security Institution business center, hosting accountancies connected to Ministry of Finance, Cankaya Registration office and a lot of institutions, has lost its value timely because of squalidity and depression in Kızılay (Cankaya Municipality Web Site, 21.07.2015).



**Figure 3. 25** Business Center Before and After (Source: Oruçkaptan, 1990 and Author' Archive 2010/2015)

The business center block, which is a part of structural texture of Sakarya Street, has become a depression area with its huge, high and ragged construction timely. Furthermore, it affected negatively the pedestrian zone, which is called an 'entertainment center'. The building was opened for using as Cankaya Municipality Labor Servant Building after renovation workout finished in 2013. Small changes were made around with the renovation of building. Some of these are flowerpots hung to lighting poles, ground pavements for visually handicapped people, some benches put at the bottom of buildings, changes on grounds only immediate surroundings of the building etc. These changes are functionally out of use. For example, ground pavements for visually handicapped people only made around the building and entry, also just made to make it seem beautiful to create a line texture parallel to each other 1.5-2 m length (see Figure 3.24)



Figure 3. 26 Ground Pavements for Visually Handicapped People (Source: Author' Archive, 2015)

The area before Business Center, there is a gap and its current mass, which is the point in question of the thesis of Oruckaptan (1990), are lost values in the area today. These lost values which are Theatre (Yeni Sahne Tiyatrosu) and Institute of French Culture, also have an impact on the area's cultural identity and character. Even though there were reactions from all chambers of profession, craftsmen, artists, intellectuals, public opinions, Theatre (Yeni Sahne Tiyatrosu) was evacuated and destroyed, because of owners' opinion that it couldn't provide a sufficient income and the owner started plan for a new usage. Because it didn't bring similar usage in this area, it left a lasting impression in cultural identity of Sakarya Street.

## **3.3.** Conclusion

In time, a large proportion of green areas are replaced with other functions when comparing Jansen's 1932 Plan with Uybadin-Yucel's 1957 Development Plan of Ankara. Existing green areas along the streams, are taken into the canal or road with engineering applications at that time (1950s). Even Ankara stream partially transformed into a canal, there is still a green belt on the part of the Incesu Stream. Before 1957 Yucel-Uybadin Plan, most of the pedestrian greenways had already become streets. Only part of the Guvenpark-Tandoğan green belt was defended from these situations which is still protected as a green areas. The hippodrome and 19 May sport complex were in same position as in Jansen Plan but a highway separated sport

complex and hippodrome which is at Kazım Karabekir Avenue now. The Guvenpark and Youth Park were executed in 1930 and Uybadin-Yucel plan have also maintained them. Also Kurtuluş Park which is located along the Incesu Stream, Hacettepe Scenic Park are kept. Finally, there are two squares shaped gardens which is the shape of Zafer Square (Burat, 2008).

Yucel- Uybadin Plan and Jansen Plan proposed not only Kurtuluş Park, but also Guvenpark and Youth Park which are in existence now. Cebeci Stadium, 19 May Sport Complex and hippodrome are also still in use. Zafer square was formed as park and partially used as a park of two squares at eastern side of city center. One of them of this park which is a shopping center built over on the west part of park. There is no greenspaces of just a few small park in the Guvenpark-Tandogan greenbelt stay as greenspaces and two greenbelts on the east and north of Ziya Gokalp Street of today were transformed into pedestrian ways which are Yüksel and Sakarya Pedestrian districts (Burat, 2008).

Campus type improvements have started on Eskischir Road Public Institutions Route, which was proposed in 1990 Ankara Development Plan and supported with 2015 Structural Plan. Public Institutions having a tendency to leave the town center also affected the direction of city development (Tunçer, 2002). Moving public institutions like ministries from Kızılay, caused Kızılay began to lose its bureaucratic and political identity.

Today Kızılay maintains the process of change, it continues its existence as a center with pedestrian spaces of middle and upper-middle income group addressing the commercial unit. When we look at the historical process Kızılay, it lost its function of being the central area has undergone considerable deformation in terms of physical and social.

"Transformation of Yenişehir from a low density garden city type to a high density commercial center is the story of the emergence of abstract space together with the development of capitalist relations in urban space" (Baş, 2010).

### **CHAPTER 4**

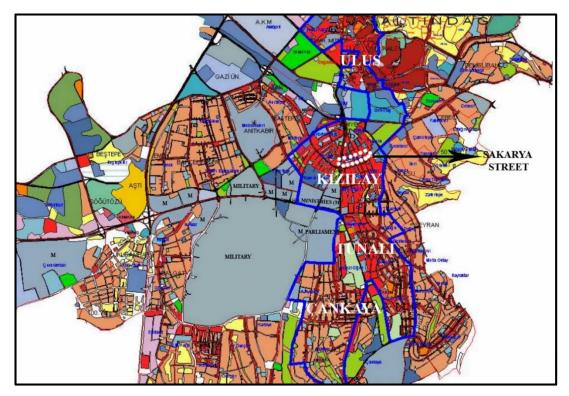
## CASE STUDY: SAKARYA STREET

As mentioned in Theoretical Background section, there are five indicators (geographical, physical, managerial, sensual and psychological) that are necessary for a place to be convivial. These indicators are analyzed for Sakarya Street and the effect of these indicator on people is also assessed as well as spatial, physical and managerial characteristics of Sakarya Street. These analyses are based on observations, questionnaires, in-depth interviews and other analyses made on the street. In addition, the results of questionnaires are analyzed with detailed explanations.

### 4.1. Geographical

## 4.1.1. Location

Sakarya Street is an attractive point and it is a part of the major pedestrian zone in city center of Ankara. Moreover, Sakarya Street has a high accessibility because Kızılay is a hub of public transportation and the street is in the junction point of public buses, minibuses and subways. Not only commercial but also public and social activities took place in the street, thereby; people prefer to meet with their friends or colleagues in Sakarya Street.



**Figure 4. 1** The Location of Sakarya Street in Ankara (Source: Ankara Metropolitan Municipality, 2023)

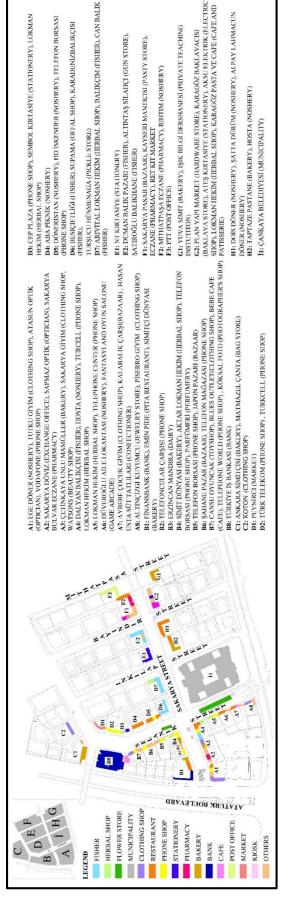
# 4.1.2. Land-use

Sakarya Street is in the Ankara Central Business District (CBD) and on the main transport route, Ataturk Boulevard. The street is popular with its fishers, florist shops, bars, doner restaurants. The pedestrians are served by pedestrian bridges to enter Sakarya Street and the subs transient of the subway Ankaray under Sakarya Street.

General points about the conviviality of Sakarya Street are;

- Providing services for tourists as well as local people's daily needs,
- Housing a variety of people from different income, age and gender groups,
- Consisting much food & beverage units, banks, clothing shops, stationaries, herbal shops, bars, fishers, doner shops and florist shops.

Bars, fishers, doner shops and florist shops show the distinctiveness of Sakarya Street in the central business district of Ankara (see Figure 4.2).



# Figure 4. 2 Land-use of the Sakarya Street (07.07.2015)

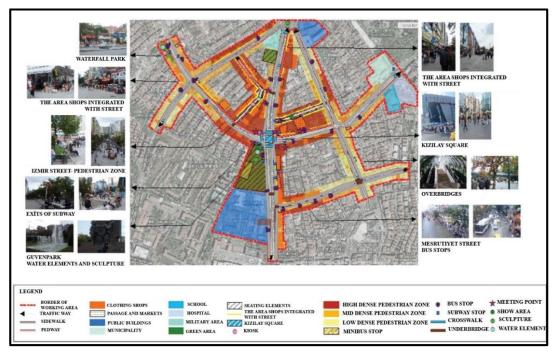
Sakarya Street is a part of Kızılay pedestrian zone, closed to vehicle traffic, approximately 300 meters length and 2.5 meter width. According to the data of Head of Department of Traffic Planning Ankara Metropolitan Municipality, Sakarya Street is the widest street after Atatürk Boulevard and Anafartalar Boulevard in spite of its 300 meters length as the shortest among other shopping streets in Ankara.

	Length		Street Width
Shopping Street Name	(km)	Level of the Road (degree)	( <b>m</b> )
Sakarya Street	0.30	3 degree pedestrian road	20
Anafartalar Street	1.30	2	14-24
İzmir Street	0.47	3 degree (Partially pedestrian road)	5-15
Atatürk Boulevard	1.46	1	30
Gazi Mustafa Kemal Boulevard	0.75	1	16
Ziya Gökalp Street	0.77	1	16
Mithatpaşa Street	0.74	2	14
Necatibey Street	0.89	2	14
Tunalı Hilmi Street	1.24	2	10
Arjantin Street	0.39	2	10
Meşrutiyet Street	0.74	2	12

 Table 4. 1 Analysis of Transportation Street

Source: Ercoşkun and Özüduru, 2013

With regard to research of Ercoşkun and Özüduru (2013) "Social Sustainability of Shopping Streets in Ankara", it is established that there are local commercial units like cafes, restaurants, bakery houses in Sakarya Street. Moreover, according to research taking into consideration, there are plenty of entertainment places in Sakarya Street and around, it is concluded that number of third space has more than others. Furthermore, other prominent factors increasing density of pedestrian in the street are existence of fishers and florist shops.



**Figure 4. 3** Analysis of Social Sustainability (Source: Erçoşkun Y. and Özüduru, 2013)

The street is mostly surrounded by buildings of 6-7 floors except for the building of Cankaya Municipality, which has 13 floors. Some of the dominant featured buildings are 10 or more floors and these buildings are focus points. For example, building of Cankaya Municipality is a focus point in the content of having an enormous mass and having more floors according to environment (Figure 4.4).

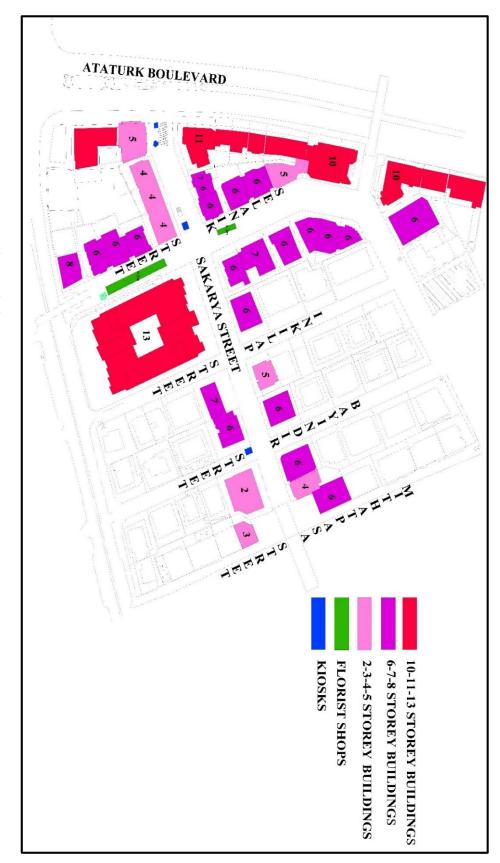


Figure 4. 4 The Number of Floors of the Existing Buildings (07.07.2015)

### 4.1.3. Accessibility

Having no barrier like a fence or a wall, Sakarya Street is an open street, implying high level of visual access. The main entrance is from the Ataturk Boulevard while the secondary entrance is from the Mithatpasa Street and there are many streets crossing Sakarya. The visuality level of its entrances is high. Even though there are insufficient lighting, unsafe crossings, broken pavements, improperly built street ramps, all of which decrease the attractiveness of the street, the high accessibility to public transportation and other pedestrian zones of Kızılay increase its attractiveness.

Sakarya Street was planned as a part of the main pedestrian zone in the Ankara city center. Many public transportation modes and routes intersect in Kızılay. Parking spaces for private cars are limited; however, Cankaya Municipality building has a parking area when parking is needed for short periods. The access to Sakarya Street by public transportation is easier because the location of Sakarya Street comprises a junction point with its proximity to subway, bus and collective taxi stops (see Figure 4.6). These transportation means constitutes links between almost every portion of the city (Batıkent, Çayyolu, Etlik, Dikimevi, etc.) and Kızılay, consequently Sakarya Street (see Figure 4.7).



Figure 4. 5 Visual Access and Relation to Transport in Sakarya Street (Source: Author' Archive, 2015)

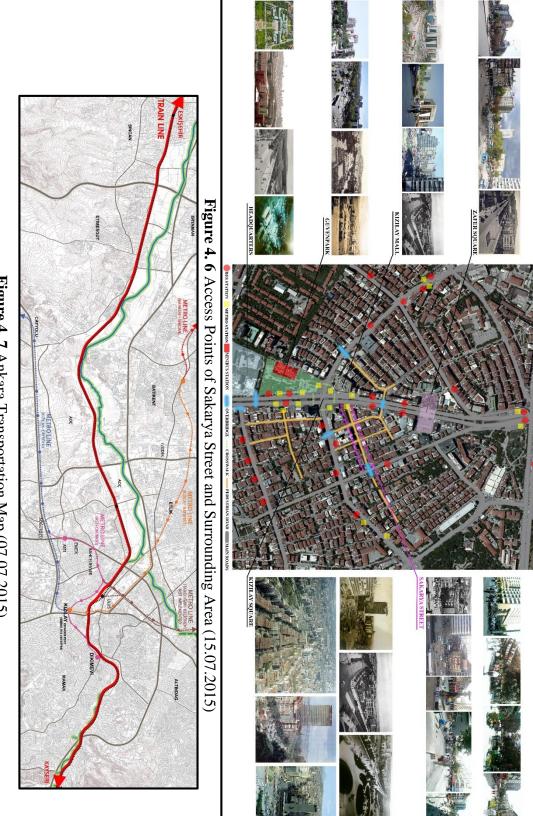


Figure 4. 7 Ankara Transportation Map (07.07.2015)

### 4.2. Physical

### 4.2.1. Adaptability

In the process of urban growth, rapid increase in the urban population of Ankara caused dense urban development not only in the city center but also periphery areas of the city. Being the main street of the commercial, touristic and business centers, Sakarya Street also faced the pressure for changes in parallel with the changes in K121lay. However, Sakarya Street could not keep up with the rapid urban development in Ankara and meet the demands of population. The physical quality of the street has been decreasing. Even though the pavements of the street were renewed, deterioration level is high. There is the unpleasant smell of the garbage hanging bags. The façade of the buildings are old. However, the street houses and shops serves all kinds of people if the social aspect of the space is evaluated. The profile of the street users has changed through the time. Sakarya Street continues to serve people nowadays.



**Figure 4. 8** Sakarya Street Entry from Atatürk Boulevard (Source: inankara.com, 2015 and Author' Archive, 2010/2015)

## 4.2.2. Seating Places

It cannot be said that Sakarya Street has many seating opportunities (see Figure 4.12). A seating area, formed by steps like a small amphitheater is located on the square where the pool was centered. There are also standard fixed benches along the street. Other than these seating opportunities, it is observed that in the middle of street people are sitting on the borders of the green belt and concrete fences of the municipality

building. According to questionnaires results, observations and in-depth interviews, it is found that seating places in the area are insufficient and it is observed that sometimes people queue to sit, are sitting any elevation or step they find. Moreover, present seating places are unsuitable for changing air conditions. Lack of canopies (for protection from rain and sun) is a big deficiency. For example, people try to find shades of buildings or trees in sunny days and they stand in the shades in case they couldn't find a seating place in Sakarya Street.



Figure 4. 9 Variety of Seating Areas between Ataturk Boulevard and Inkılap Street (Source: Author' Archive, 2015)

On the other hand, it is a great pleasure for a person to find a place to sit while chatting with friends or listening music or watching and observing the other people on the street. We can observe easily the effect of seating places on the conviviality of an urban area in Sakarya Street. The steps are used for sitting and they are creating a vantage point where a pool was located before.

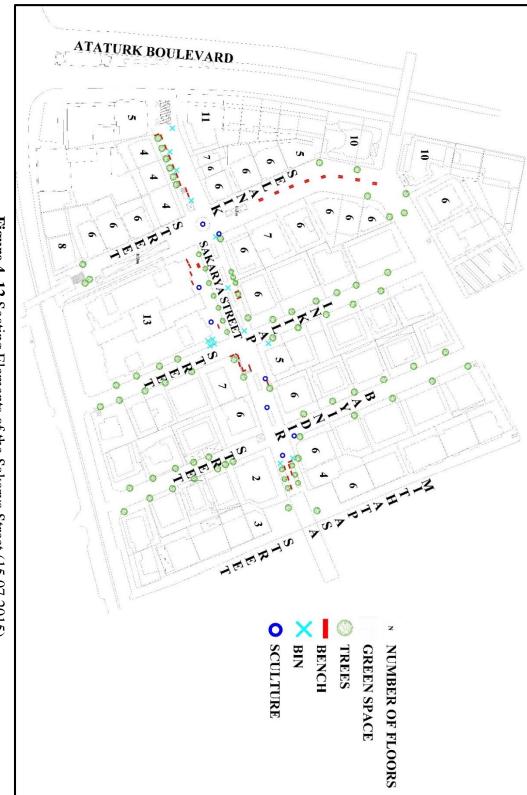


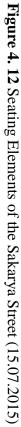
Figure 4. 10 Variety of Seating Areas between Inkılap Street and Mithatpaşa Street (Source: Author' Archive, 2015)

When we compare the different segments of Sakarya Street in terms of seating places, it is found that benches under the trees in front of the Kızılay Metro entrance are preferred more and it is crowded at nights, too. Seating places that are close to the overcrossing in the intersection with Mithatpaşa Street have similar features (shades of trees, intersection of transportation routes, food and beverage opportunities etc.) but it attracts less people. Regarding to geographical, physical and managerial urban design elements, both seating places have similar properties.



Figure 4. 11 Variety of Seating Areas in Sakarya Street (Source: Author' Archive, 2015)





### 4.2.3. Pyhsical Quality and Robustness

In terms of robustness, the main problem in Sakarya Street is the pavements. Though many renewal and renovation work done by the municipality in Sakarya Street, the floor quality is very poor. Broken pavements, unsafe levels, unusual obstacles affect both the movements of the pedestrians and aesthetic of the environment. The impacts of physical quality on the conviviality of a place were discussed in Chapter 2 of this thesis, physical quality affects the variety of activities, thereby, conviviality. In this context, Sakarya Street is a convivial place because a variety of shops, restaurants, cafes and bars are located along the street and Cankaya Municipality building attracts many citizens from different neighborhoods of Ankara during the entire year. Additionally, Sakarya Street and its surrounding area still house many people. The mixed land use characteristic of Sakarya Street creates a convivial urban environment in Kızılay.



Figure 4. 13 Physical Condition in Sakarya Street (Source: Author' Archive, 2015)

### 4.2.4. Variety and Distinctiveness

Sakarya Street has a distinctive feature when we compare the street with other pedestrian zones in Ankara city center and evaluate the answers of the interview questions. We can conclude that it is a well-known street and people emphasize the distinctive features of Sakarya Street. There are popular restaurants to eat doner and fish and bars to drink in evening hours. Quiet corners for thinking and observing other people are also found in Sakarya Street. In terms of diversity for city users, the street is attractive for people from various ages and income groups.

## 4.3. Managerial

### 4.3.1. Mixed use

The mix-use concept in urban planning was emerged as an opposite approach to the zoning. Compact land-use forms provide efficiencies for its users, and mix-used street is the considerably lively place with many pedestrian activities. According to Jane Jacobs (1961), mixed use and dense pedestrian circulation increase is 'Natural Surveillance'. This approach, i.e. places controlled by its users, argue that providing this kind of security is safer than other ways. She supports 'Eyes on the street' conception. According to this conception, the more people are in the street and the more windows are facing the street, the safer the street is.



**Figure 4. 14** Sakarya Street 2015 (Source: Author' Archive, 2015)

Sakarya Street is not completely mixed use street. But it has a life in 24 hours with restaurants, bars, various business, cultural and educational facilities, and a transit hub. Positive effects of the mix-used on the conviviality of Sakarya Street are as follows:

- Lively at all hours during the day, people are always around,
- Shops lights, which are open even at nights, support the inadequate lighting,
- Giving the sense of security due to people exists in the evenings and nights,
- Variety of shops increases the number of customers with different purposes.

In this regard, one of the interviewees answered a question as follows;

• "Sakarya Street is hosting a variety of people. Kids are going to school. Teenagers are dancing the halay on the street after they drink beer in the turku bars. Moreover, some are body rocking and headbanging when they are walking in front of the rock bars. There was a guy playing an instrument, sounding like a Japanese melody for 4-5 years and I always saw him" (Interview.2, 2015).

### 4.3.2. Inclusiveness

Equal access to service for each person, which is one of the principles of urban design for all, is almost possible in Sakarya Street. The street attracts many people from rich person to poor, from elder to younger for any use; however, it does not provide physical possibilities for people with disabilities. An in-depth interview was conducted with a visually handicapped person in the street, and he expressed that obstacles in floor coverings create a risk for him and floor traces designed for visually handicapped are not located properly and correctly so they are unpractical.



Figure 4. 15 People with Disabilities in Sakarya Street (Source: Author' Archive, 2015)

Another in-depth interview was conducted with walking disabled person, and he expressed that it is hard to arrive and spend time in there, elevators in the area are not working, and the material used for the pavements is unsuitable for him. Even though there are many obstacles that affect his movement negatively, he mentioned that he enjoyed coming here and had conversations with other people around him that he knows or not.

### 4.3.3. Providing Optimum Security

A part of Sakarya Street is illuminated by the lights from the shops on the street. Therefore, Sakarya Street faces some security problems, arising from insufficient lighting. When the majority of the shops are closed, the insufficiency level increases. Policemen are rarely patrolling during the nights so the security level is decreasing on the street. On the other hand, some motor vehicles are crossing the street and waiting in front of the shops for handling. Handling activities should be completed before the shops open and pedestrian movements start. When many delivery cars and trucks enter the street during day time, traffic safety level is decreasing.



Figure 4. 16 Security Situation of Sakarya Street (Source: Author' Archive, 2015)

# 4.3.4. Maintenance

We can line up the problems arisen from weak maintenance and cleaning activities on Sakarya Street as:

- Failure to clean the bird droppings and graffiti on the Tasankara Sculpture at the intersection of Selanik and Sakarya Streets,

- Deformations of wooden sculptures (poster residues on them, some being burnt etc.),

- Bad smell and visual pollution arise from plastic trash bags instead of trash bins,

- Unaesthetic issues emerge from the garbage collection point on the northeast side of Cankaya Municipality Building in the middle of Sakarya Street,

- Posters, placarded to the electronic panels, graffiti on seating places and floor coverings increase visual pollution.

As we mentioned before, local environment conditions are important when walking along a street, sitting in a public place or a café. The cleanliness of Sakarya Street is relatively weak and its environment is dusty.



Figure 4. 17 General Situation of Sakarya Street (Source: Author' Archive, 2015)

# 4.3.5. Vehicular/ Pedestrian Circulation

Controlling the vehicle traffic in a pedestrian zone makes people move comfortably and safely. For this reason, vehicle entry is forbidden to streets intersect to Sakarya Street with rising bollards. However, some delivery cars and trucks which are expected to enter in the permitted hours for handling of commercial goods, not obeying the rules and enter the area in rush hours, so it limits the pedestrian movements in the street.



Figure 4. 18 Vehicle Restriction of Sakarya Street (Source: Author' Archive, 2015)



Figure 4. 19 Vehicles do not comply with Restrictions in Sakarya Street (midday) (Source: Author' Archive, 2015)

# **4.3.6.** Animation on the Street

Other activities and shows in Sakarya Street besides eating-drinking, recreational activities, hanging-out, observing people can be listed as follows:

- Music shows of the redskin costumed people,
- Horon dancing performance from the Blacksea Region people,
- Symposium of wooden sculpture,
- Several concerts,
- Many individual music shows and performances,

- Some protests and meetings to defend the interest of some groups and to ask some rights.



Figure 4. 20 Entertainment Activities in Sakarya Street (Source: ankaramiz.com, 2015)

'Cankaya Summer' (Çankaya Yazı) is one of the revival project of Kızılay organized by Cankaya Municipality. This project is organized to create places where people have a good time in the summer months. Degirmendere International Zuhtu Muridoglu Wooden Architect Symposium was performed in Cankaya in previous years. International Cankaya Wooden Architect Symposium was firstly, organized by Cankaya Municipality in the content of "Cankaya Summer" in 2011 and repeated every year. Six wooden sculptures were gained with this symposium in the Sakarya Street.



Figure 3. 27 Six Wooden Sculpture from Symposium (Source: Ayoğlu, 2010)

With all these activities, an urban environment attracts more people and makes them feel belonging to Sakarya Street. Taking parts in the various activities as a performer or an audience strengthens their belongingness feelings and jogs their memories. These performances, shows or unusual activities are one of the reasons why Sakarya Street is preferred and why it is a convivial urban space.

The following answer of the interviewees shows the impact of these kinds of activities on the public spaces;

• "It is a beautiful street that you can meet with movie stars of TV series, such as Behzat C., while they are acting. If there is a crowd in this street, I expect that one of the following three events are taking place. The first one is that people from Black Sea Region are meeting and playing horon together. Second one is that young thespians are acting their performance in the street, and the last one is that Behzat Ç. TV series are being shot" (Interview.5, 2015).



Figure 4. 21 Animations from Sakarya Street (Source: Author' Archive, 2015)

# 4.4. Evaluation of Questionnaire for Convivial Urban Design Elements

While the individuals give a meaning to the environment, personal experiments (memories about the place), personal features, emotional personality and purpose of being there etc. can be influenced; and the environment can be interpreted as a different meaning what designer attributed to or its real meaning. The meaning attributed by designer and meaning determined by the user can differentiate to a particular range. The ideal situation is a structural environment that emotion producing, leading the person and being understood by people using it.

A questionnaire is applied to 120 people (Sakarya Street is divided into two sections of 60 people each. First section is 30 male and 30 female. Other section is 32 male and 28 female). The questionnaire is applied to different social groups of people in Sakarya Street in terms of professions, age, sex, education (see detailed information in Table 3.1., Table 3.2. and Table 3.3.) and prepared to aim at evaluation of environmental perception (landmark, nodes, etc. in the area), urban elements that lead people in working areas, favorite places, and familiarity to area.

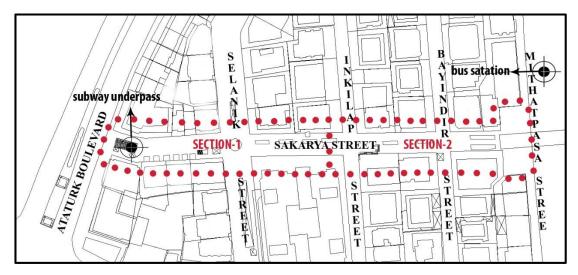


Figure 4. 22 Borders of Working Areas

When people are asked about how to go from Sakarya Street entry of Ataturk Boulevard to Mithatpasa Street; the nodes on the itinerary are florists shops (%85.71), Square in the intersection of Sakarya and Selanik Streets (%54.28), Cankaya Municipality (% 42.85), Hosta (% 22.85) are shown as landmark and described. According to this, landmarks and nodes can be seen in Figure 4.23.

The area has a particular identity which is formed with its characteristics. Sense of orientation and creation of a well-defined structure can be obtained by urban blocks, street networks and patterns, and the district's edges. The area also gains meaning with its religious, commercial and transportation activities. The legibility of the area is composed of these three components.

The visual, spatial and functional features of an area defines **the district**. Also, nodes and edges plays a role of separation references. Sakarya Street is located in a district at which commercial use is intense. The Street has an environment which shows variety with its public institutions district, ministries district, hospital district, military district, housing district and school districts.

**The edges** present around the Street has a semi-permeable characteristics which comprises traffic ways at 3 different sides. Especially the fences located on the refuge at Ataturk Boulevard lets pedestrians cross the boulevard only from specific locations.

Besides, the semi-permeability of Sakarya Street is provided with rising bollards within the street.

**The paths** of the study area are marked on figure 4.23. Sakarya Street has the characteristic of path. Apart from that, the primary path around it is Ankara Boulevard and the secondary paths are Ziya Gökalp Street and Mithatpaşa Street. Other paths offers pedestrian areas within Sakarya Pedestrian Zone are Bayındır Street, İnkılap Street, Selanik Street ve partially Tuna Street.

The nodes which shares a mutual relation with districts and paths. Taşankara statue and the square which is located on the intersection point of Selanik and Sakarya Streets is an important node for Sakarya pedestrian zone and Ankara. People sit here and eat while others continues their interactions, watch demonstrations, meet with their friends. In addition, the sitting benches located on the right of Sakarya Street subway access also constitutes an important node. Other nodes on the street are Hosta and fishermen. Besides, the peace sculpture located at the intersection of Selanik Street and Tuna Street also can be counted as a node. The nodes throughout Kızılay are subway accesses, minibus stops, the frontiers of Güvenpark and Kızılay Shoping Center.

**The landmark** is one of the basic factors that help to define the place. The Çankaya Municipality building is the most important landmark of the street since it is easily recognizable with its width and height. On the other hand, "Emek Office Building" is another landmark despite the perception of it changed by citizens. Another landmark at Kızılay is Kızılay Shopping Center due to it is located at the very center of Kızılay and its huge structure. In addition the Hittite sculpture on the Ataturk Boulevard can also be counted as a landmark.

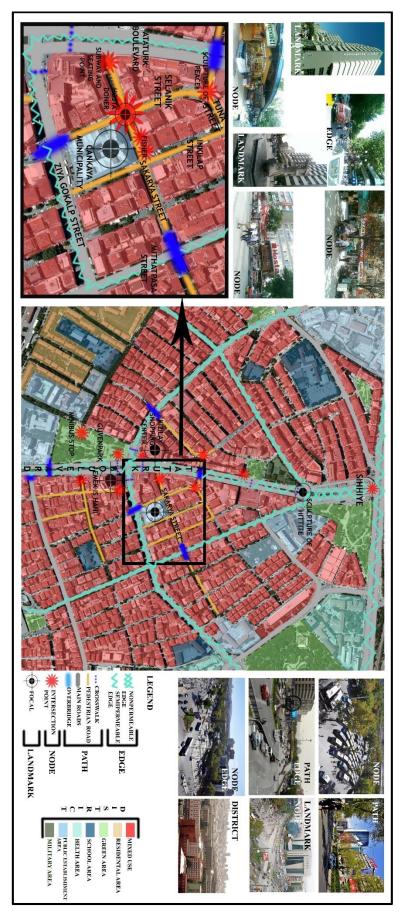


Figure 4. 23 Lynch Analysis (15.07.2015)

69.16% of transportation to Sakarya Street is provided by minibuses and buses through the bus stops on Güvenpark or Ataturk Boulevard, 12% by bus stops on the Mithatpasa Street, 10.8% by Ankaray or Metro Subways and 8.04% by private cars. Private car owners park their cars in parking garage of Kızılay Mall, Kurtuluş parking garage or paid parking points along the roads. Moreover, it is observed that public transport is used because of parking problems within the area.

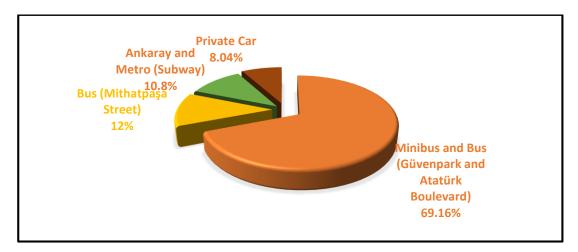


Figure 4. 24 Transportation Type and Usage Rate of Sakarya Street

According to the questionnaires of Section-1, 41.66% of people comes to the street every day, 31.66% sometimes, 20% rarely and 6.68% very often frequencies of people come to the Section-1 are % 41.66 everyday, % 31.66 sometimes, % 20 rarely and %6.68 very often. Out of the questionnaire, according to interview made by people who use every day Sakarya Pedestrian Region, it is observed that, more than 50% of retired from various public offices, come to this area, sit on the banks under trees in the subway exit, and they converse with their friends stopped by every day between 13:00 to 17:00 for years. It can be understood that they feel themselves belong to that place. Moreover, they told that, anywhere in Ankara doesn't make such a sense to them, they know people here and the environment. Even though the street changes, they could find something in this urban space which makes people feel that the place is livable for them. In section-2 the percentages are %46.80 every day, 37.80% sometimes, 9.60% rarely and 5.80% very often. Based on questionnaire and observation it can be said that because of insufficiency in a number of seats, it is hard

to spend time in the area without paying money. So generally users are people working around here or training classroom's students.

Besides, from an interview. 4 with a shoe shining boy who has worked on Sakarya Street for years, he expressed his opinion in these words: "We had a shop in Esat since 1985. People living there would like to come to Bayindir Street (The street perpendicular to Sakarya Street) with their wives, darlings to have a beer. To them, here was a chaste and safe place. However, now, they abstain coming here with a woman beside them. Even they come because it is hard to find a place for parking, they have begun to spend their times in Tunali Hilmi region." Indeed with these observations, he put forward the reality that, changing the user groups directly changes the place.

According to questionnaire results, first section used the place generally for recreation and wondering whereas second section is mostly used for dining. People who are working here and around, are going to second section for lunch, on the other hand, first section is not only a shopping area in time but also has become a convivial place because of people feel themselves belong here, without paying money for spending time, interacting with others and environment.

For both sections, it has been found that complex and distorted building structures, disordered floors, bad smelling garbage are disturbing facts. The elements in the working area that gained recognition are florist shops, trees and sculptures. Furthermore, Sakarya Street is the first place that comes to mind when people say Doner, Fishers, and florist shops.

When first section is analyzed in terms of smelling, 73.33% of people told that it is **the fish smell**, but a huge portion isn't uncomfortable with this odour. Other smells in the area are heavy oil with and food smell come from Doner shops 15%, the smell of exhaust with 8.33% and spices smells with 3.34%.

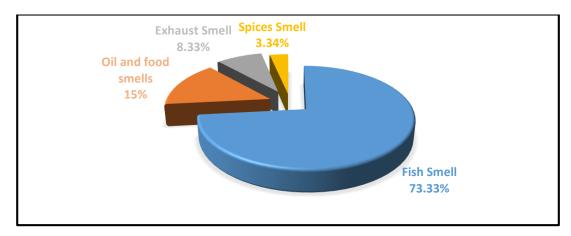


Figure 4. 25 The distribution of odors in the first zone

In second section fish smell is again in the foreground with 60%. Exhaust smell follows fish smell with 18.33% and garbage smell with 11.66%. Also in this section even though not too much there is 6.66% spices smell and 3.34% bear smells (see Figure 4.26).

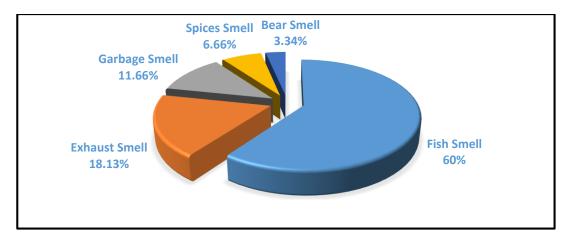
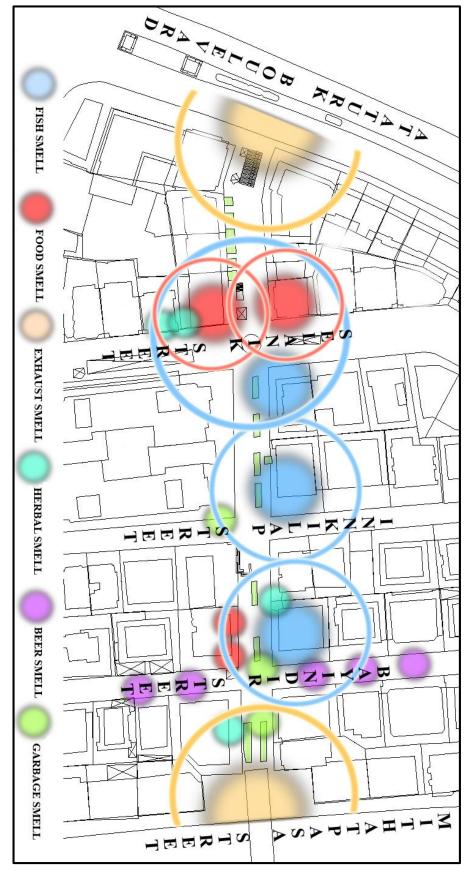


Figure 4. 26 The distribution of odors in the second zone

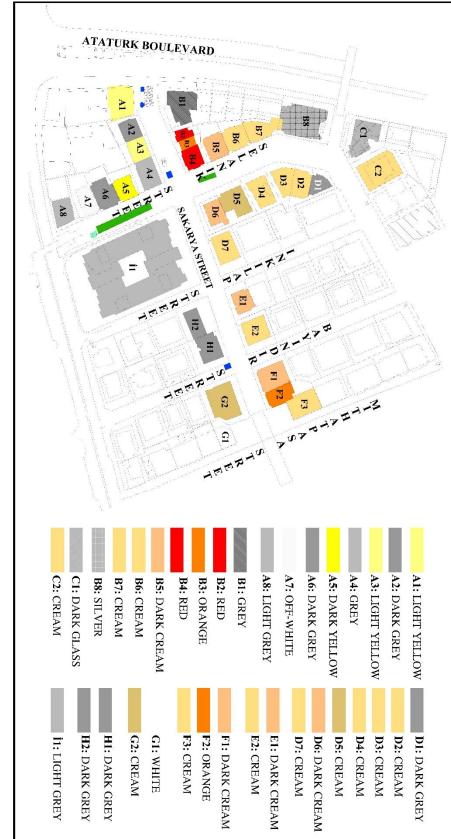




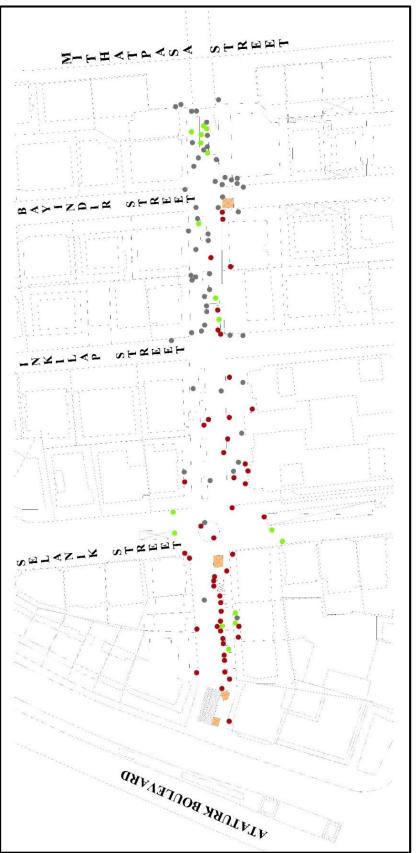
The noise from the vehicle traffic from the beginning to the end of Sakarya Street also The noise from the vehicle traffic from the beginning to the end of Sakarya Street also affects people in terms of sound effects as smell. Except for this, people hear the voices of the vast majority of people in the area and state they are happy to hearing others voice. At a lower rate, there is a complexity of sound comes from pitchmen, shops, music sound of individual performances, and speeches of people, but people are not uncomfortable with that because of pleasure of living place in time.

According to field works made on Sakarya Street, the colors of buildings, which are important entries for convivial urban space with direction finding, comprise cognitive maps, etc., and it is established that the colors of the buildings in area are generally grey and tones or cream and tones. Except for five buildings are established that dominant colors which are; red, orange and dark yellow (Figure 4.28).

When people are asked about the color of place in first section, because of some red buildings, red signboards 68.33% of them responded as **red**. 13.30% are affected by sunshades of the florists, and a couple of trees and answered as green, and some people who are affected by buildings and floor said grey with 18.37%. In second section, 73.34% say the place is **grey**, 15% say green and 11.66% say red. Because second section of Sakarya Street has wider concrete fields, it is associated with grey color, and 15% of green color showed us it has an interaction with linked streets, which are connected to Sakarya Street have high density of trees (see Figure: 4.29).









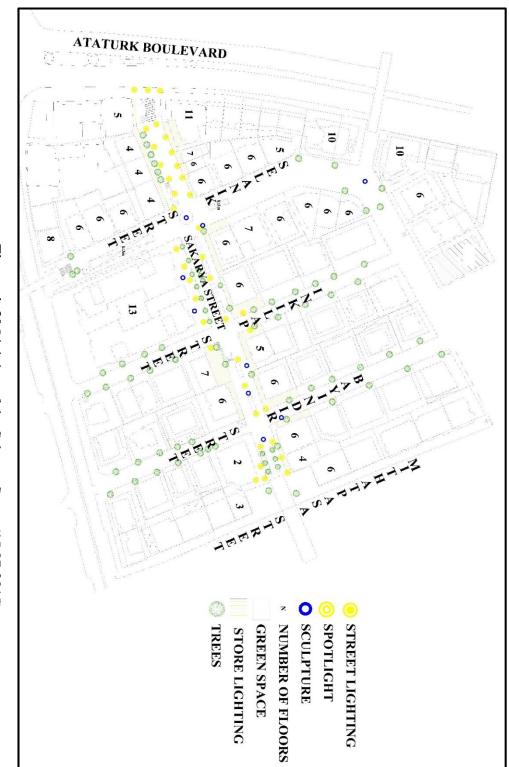


Figure 4. 30 Lighting of the Sakarya Street (15.07.2015)

For the first section seating elements, green belts are seen 90% insufficient. Lighting components are seen 65% inadequate whereas remaining 35% think besides the street lighting, lights of shops provides enough illumination for Sakarya Street and environment (see Figure 4.30). For the second section, more than 90% of people say seating elements, green belts and lighting components are inadequate.

The answer for the question, "Do you feel safe yourself in Sakarya Street?" answered 60% as "No" in both sections. But especially men using the place for a long period of time of the day responded as "Yes".

International Cankaya Wooden Architect Symposium, performances made by people wearing different costumes (singing, pantomime etc.), dancing the horon by people from Black Sea region, and concerts won recognition of people using the area more than 95% and demand more demonstrations in the area. By these ways socializing, engaging with the area, identification of the area, interacting with people, and adoption to place becomes possible.

# 4.5. Sensual

# 4.5.1. Auditory Sense

Sakarya Street is located within the center of the capital city. It is a crowded and noisy place, consisting of many voices, sounds of automobiles, peddlers and music; however, it attracts people. Voices, which is the sign of a living place in the street come from especially people's communications and interactions, is an important element in usage of place.

One interviewee mentioned that;

• "This street is special, insomuch as we feel both complexity and vitality at the same time. It is a living street with intermingle of human voices" (Interview.6, 2015).

## 4.5.2. Gustatory Sense

Fishers and doner shops in Sakarya Street with their uniqueness, give a special identity to the street. When people think doner and fish, the first place came into their minds is Sakarya Street. The street is popular with its gustatory characteristics.



Figure 4. 31 Sakarya Street is referred as the stomach of Ankara (Source: Author' Archive, 2015)

During the in-depth interviews, conducted on 07.07.2015 and 15.07.2015, many interviewees told the followings about the gustatory characteristics of Sakarya Street.

- "The street must be seen in Ankara. I am meeting with my friends in this street before leaving Ankara. I am sure that the street changed a lot. There are still many changes in the shops and many transfers between the owners. However, Hosta Piknik (Doner Shop), Can Balık (fisher) and Köksal Pastane (patisserie) is still on Sakarya Street. Though the number of doner shops increased all across Ankara, Sakarya Street is still the stomach of Ankara" (Interview.3, 2015).
- "The street that you shouldn't leave before eating Hosta Piknik Doner. Additionally, there are some popular nodes in the street. Cankaya Municipality Building is here. Florist shops are in line towards Ziya Gokalp Street. Fishers are also quite famous" (Interview.1, 2015).

In the Internet, similar descriptions for Sakarya Street were written.

- "The place where a swarm of people from every corner of Ankara is hanging out, you can't leave there before eating doner" (Interview.8, 2015).
- "The street is one of the few streets that are closed to motor traffic in Kızılay, Ankara. Hosta (Doner Shop) is one of the irreplaceable shops" (Interview.3, 2015).

# 4.5.3. Olfactory Sense

Sakarya Street is described with fish, doner, garbage, beer, spices and exhaust smells. Even though the condense smell from the fish or doner is widely spread in Sakarya Street, people are coming to the street and spending time with their friends in these restaurants. Some interviewees are complaining the smell of bear or spices, but it is compulsory for them. They want to be there, sometimes because of their jobs or because of their friendships. In any case, the most dominant smell in Sakarya Street is the fish smell in living memory.



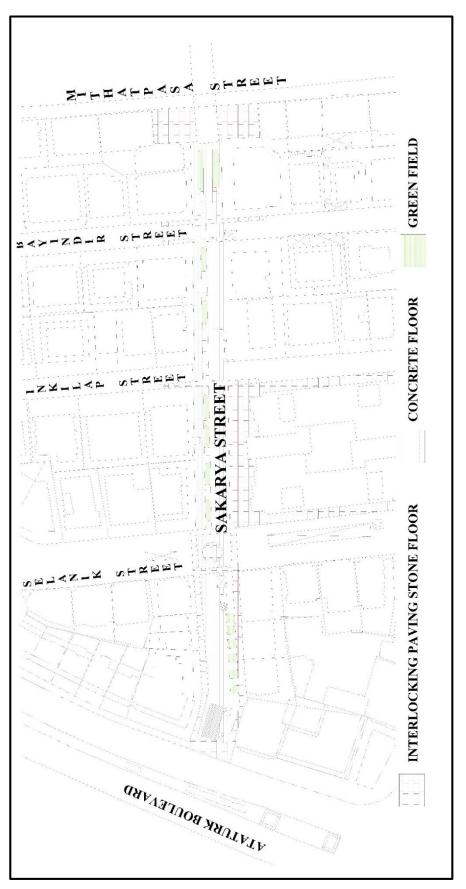
Figure 4. 32 Fish and Doner Smell (Source: Author' Archive, 2015)

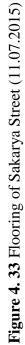
A sample of users' thoughts about the smell of Sakarya Street is as follows;

- "Think of a street that contains from doner smell to fish smell, and flower smell to garbage smell. Think of a street that reflects both the grey color of dusty Ankara streets and fresh silver of fishes on the stalls, all sorts of colors of flowers have been located in flower stalls" (Interview.4, 2015).
- "The place welcomes you with too many fish smell" (Interview.6, 2015).
- "The street is known as its florist shops in Ankara, and it is a street where flowers are sold under the smells of fish" (Interview.7, 2015).

# 4.5.4. Tactile Sense

'Cognitive mapping', based on people's mental images of Sakarya Street show that participants couldn't easily perceive the street pavements. When people area asked about the pavements, they stated that there are pavements which do not exist in the place in addition to the current situation that is showed in Figure 4.33. The reason for this weak remembering could be the disorders in pavements and street pattern. Even every year the municipality renews the pavement across the street. Additionally, insufficiency in soft landscape elements such as trees and grass causes weak perception. In addition, the floor covering for visually impaired people constitutes danger for people since they are applied in a wrong manner.





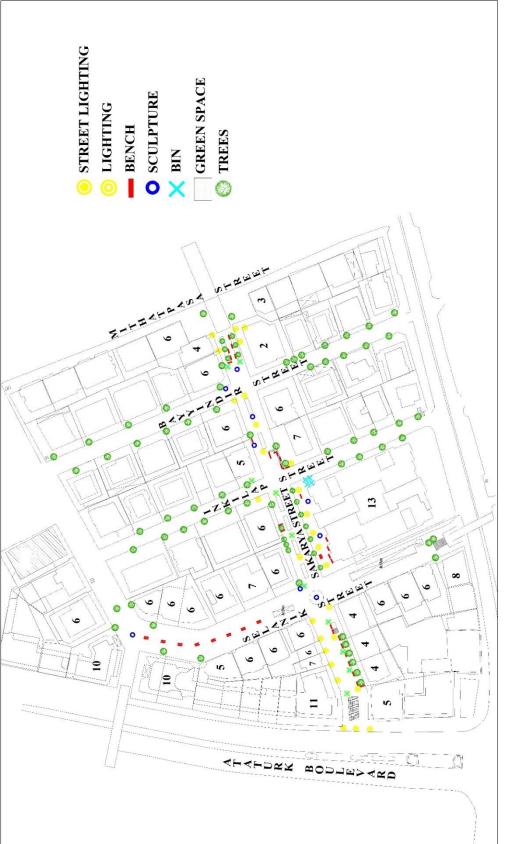
## 4.5.5. Visual Sense

Sakarya Street has certain problems in terms of visual quality. But some physical elements such as Tasankara Sculpture, wooden sculptures, trees along the street have some positive effects on the visuality (Street furniture map of the area can be seen in Figure 4.36). Moreover, visual sense giving more importance to lighting, besides insufficient lighting of section-1 it is created pleasantness and sufficiency with pencil of light coming from shops. But, for section-2 the same situation is not in question because of shops around being introverted places and present insufficient lighting, area is visually affected negatively.



Figure 4. 34 Lighting in the section 1 (Source: Author' Archive, 2015)

Figure 4. 35 Lighting in the section 2 (Source: Author' Archive, 2015)





Furthermore, colors are relevant to emotions and senses. For example, while blue gives you comfort and trust, orange gives sadness, yellow gives you happiness. Red carries both negative and positive feelings. While positive it makes you active, strong and cheerful, whereas negative makes you aggressive, bloody, angry and nervous. Moreover, according to surveys made by Kaya and Epps (2004), green relevant to nature and trees, gives you peace and hope feelings. Yellow, because relevant to sun and summer it gives you the feeling of energy, happiness and roominess. Grey, having a negative effect comes from bad weather and makes you feel in depression, gloom and trouble.

In the light of this information, if we evaluate Sakarya Street in color, the color of first section red, provides a positive effect of the place, and we can conclude that it is an entry into a place to be live, active, and cheerful. Second section is more preferred for necessary activities such as eating-drinking, etc. and when asked about the color of the space, general answer is colorless or grey.



Figure 4. 37 Red Signboards in Section 1 (Source: Author' Archive, 2015)

**Figure 4. 38** Old Buildings and Huge Grey textures in Section 2 (Source: Author' Archive, 2015)

According to in-depth interview on the street, it comes to mind when called Sakarya street, "The street of famous sculpture constructed in 1992 and opened with a ceremony "carrying deep art meanings(!)" Its name is Taşankara. It is claimed that if you look at the sculpture from different angles, many different symbols of Ankara can be seen. " (Interview.5, 2015).

## 4.6. Psychological

## 4.6.1. Sense of Safety

There are a lot of elements that affect the trust of people in a place. The basic elements are lighting, cleaning of the place, maintenance and clarity. At the results of questionnaires and in-depth interviews, even though 60% of users don't feel themselves safe, but they continue to use this street. The portion who feel safe composed of mostly men. The main reason why the percentage is not 100% is that Sakarya Street which is appropriate to the concept of "the eyes on the street" as Jane Jacobs mentioned is a 24 hour living place with various activities day and night. On the other hand, reasons for insecure feelings are insufficiency in lighting, insufficiency about maintenance and cleaning and disorders because of drinkers late at nights.

The description is based on in-depth interviews conducted in the study area is as follows; "It is the only street for Ankara around Kızılay to be able to find open places late at nights," (Interview.7, 2015).

# 4.6.2. Territoriality

As mentioned before the group of retired people, coming this street every day to the benches under the trees at the exit of the underpass of the subway for hosting their friends, conversing with them who adopted to the place belong to them. People create their own zone in a place. For example, from another interview a user mentions that; even though there is a lot of fishers, he always comes to one of them to buy fish, which is shown that except for the physical elements of place, actually how important the life experiences, familiarity and sense of belonging grew in mind.

## 4.6.3. Interpersonal Distance

Sakarya Street has an attracting aura to interact with people around such as eating something, taking a rest, watching the street shows, shopping, etc., On the other hand, there are also facilities to take a rest and watch around without interacting anybody.

# 4.6.4. Observation and Communication

Sakarya Street is an urban space of a pedestrian circulation that one can interact with people; sit and watch others, and feel yourself comfortable. Thus there is a group of retired people come here to convers and watch other people until evening in section-1. With the in-depth interviews, it is mentioned that human voice is heard mostly, and one of the reasons to come here is being a chirpily living place and full of people. 'Human attracts human' and a place is crowded means demanding more.



Figure 4. 39 People Communicate and Observations in Sakarya Street (Source: Author' Archive, 2015)

Street user's idea about Sakarya Street is as follows; "If you are in Ankara, you should go down this street. Firstly, eat fish have a quick bite. You will have a thin jacket on you; you will venture to get cold of that night. Did you eat your fish? After that you will choose one of the outdoor places. You will turn in the street sitting on the chair and watch passerby, listen the conversations around and drink your beer. There isn't any place except for here that you can feel this such comfortable" (Interview.4, 2015).

#### 4.6.5. Individuality and Uniqueness

There is not any physical feature differs Sakarya Street from others. However, on account of sense, psychology and life experiences, the features make differences from others, are sculptures, florist shops, fishers, doner shops, bars and human density.

According to in-depth interview on this street "Here is an indispensable street with fishers, florist shops, bars. The street is full of my memories spending almost every day" (Interview.8, 2015).

# 4.6.6. Legibility

Sakarya Street is a path itself. The place carrying node feature around the street is K121lay Square certainly. If we think about the nodes inside the street, in front of the Municipality Building, intersection of Sakarya and Selanik Street and the area of the benches at the right-side exit of the underpass of the subway. The Landmarks of the place are Municipality Building because of the effect of being tallest building, and Tasankara Sculpture giving the identity to the place from history to nowadays. Rising bollard located in the conjunctions of Sakarya Street and other streets, which are open to vehicle traffic, has a semipermeable feature which is permeable for pedestrians and impermeable for vehicles. The district is in Sakarya Street. Among generally car oriented districts in K121lay, Sakarya Street is in the limited one of the closed to vehicle traffic (see Appendix-B cognitive maps).



Figure 4. 40 Sample of landmarks, nodes, districts and paths in Sakarya Street (Source: Author' Archive, 2015)

#### 4.7. Results from the Field Research

In the context of Convivial Urban Design, it is important what people perceive as good places to be in, no matter what size it is. According to the Convivial Urban Design, the first factor is to create a human scale, which makes people happy and where they feel belongingness. Sakarya Street is an example of this kind of environment, despite its weak physical quality. The street is continuously changing. A variety of people from past to present have been using the street.

In spite of Physical, Managerial and Geographical issues in Sakarya Street, it is observed that street is continued to be used at great intensities. This is because whole negative elements that were mentioned above remains in physical content such as damaged floor coverings, insufficiency in seating places and green belts, etc. But the process of perception and adoption of a place is not only visual but also a basic process as a combination of alerts of all senses and psychological. A user explains his experience of feeling of a majority of senses such as taste, sight and hearing, at the same time and same space with following words.

"You can go for a fried fish sandwich, maybe for mussel, maybe for doner maybe for a drink, or maybe for none of them just to watch around; to watch people, life alone, to listen the concerts, to witness to mini concerts, participate meetings, or find something for yourself from plenty of other meetings" (Interview.7, 2015).

"It is the place to describe Ankara and close to the center" (Interview.8, 2015).

At the results of questionnaires, interviews and researches; the conclusion is that in spite of physically negative points of Sakarya Street, besides the experiences, owing to gustatory, olfactory and visual factors, Sakarya Street actually has a very important place in people's minds and has too many users because the place cannot get in a living form with physical standards, as in previous urban design approaches. The place turns into convivial urban space form when it appeals to people's senses, meets their needs, wishes, and finds a part in them. In other words, a preferred urban space can only take

place when it is included to design process of the social and sensational extent of physical place, not only with accordance to physical standards.

# 4.8. Conclusion

Convivial Urban Spaces (CUS) are not just places where people have a good time. CUS provides more social interaction and communication between people. The lack of public spaces and CUS accelerates individualism and social segregation, resulting in many other problems in the society. An environment, formed only by buildings, does not create a space, thereby, no social interaction occurs between people. In addition to the geographical, physical and managerial factors of the urban design, the sensual and psychological factors are indispensable in analyzing and designing urban spaces.

The following statements support the conviviality of Sakarya Street. Users told that they felt the majority of senses such as taste, vision and audition at a corner of Sakarya Street at the same time.

- "Street of memories... Sakarya Street belongs to everybody; street belongs to the lonely persons at nights and friend groups at evening hours and couples for any time of day. Maybe you can stop for a fried fish sandwich, maybe for stuffed mussels, maybe for doner, maybe for a drink, or maybe for none of them, just to watch around. You can watch people or lives of alone; listen a song from a music group or a short dialogue, participate a meeting, in short, you can find something for you from an activity" (Interview.2, 2015).
- "It is a place that describes or summarizes Ankara. This narrow and small place is enough for someone to understand Ankara" (Interview.1, 2015).

The findings from the field survey, interviews and documentary research conclude that Sakarya Street actually has a very important and memorable place in people's minds and has many users because people have some experiences related to gustatory, olfactory and visuality in spite of physical negative factors on Sakarya Street. The conventional urban design elements (geographical, physical and managerial) affect the conviviality of Sakarya Street negatively; however, the street is a convivial place when it appeals to people's senses, meets their needs, wishes, and finds a part from themselves.

### 4.8.1. Findings of the Research on Sakarya Street

When we examine the conviviality level of Sakarya Street according to the conventional and convivial urban design element, we can divide Sakarya Street into two parts. The first part is from the intersection of Sakarya Street with Ataturk Boulevard to Inkılap Street. The second part is from Inkilap Street to the intersection (Figure 4. 22).

Examining the geographical, physical and administrative dimensions of place, both sections have similar concepts. However, these two parts of the street acquire differences in terms of emotional and psychological criteria which are also summarized in the following tables.

- While the first section is in red and lively, the second section is described with grey, which is dull. The illumination of the first section is better due to the shops which are open till late hours compared to the second section.
- In the second section, the noise of vehicles outtalks other voices but the first section has a more active environment with intense human voices.
- The smell of the first place is a mixture of food and fish fry which has an attraction on people, and in the second section, however, the garbage and exhaust odors annoy people.
- In the first section, the seating area is more preferred than second section, because of the variety of seats and compliance with air conditions.
- Taşankara sculpture is located in intersection of the Selanik Street and Sakarya Street, place are usually appropriate for the animations, which provides people to gather together.

- People create their own places in section- 1, on the other hand, section- 2 do not have a permanent guest.
- Section- 1 is a lighter and making feel safer than section- 2, because of the many different commercial uses, open until late, which is increasing the sense of security.
- While Section- 1 and Section- 2 have similarities in visual aspect, Section- 1 is a region that used by more people in aural aspect, hosting different commercial places from human voice to street peddler's voices and music sounds appealing aural sense more densely.
- Also taking gustatory sense about Section- 1 into consideration, there are ancient restaurants and cafes have historical significance, with more varieties (Can Balık, Hosta Döner etc.).
- In addition Section-1 confronts as a region of smell of flowers, fishes, doners.
- Section- 1 has a presence that appeals people more than Section- 2 in four senses (smell, sight, hearing, taste). This is the indicator of having importance in usage, preference of a place by people and of course 'conviviality' in psychological and sensual aspect.

It is an important factor in increasing the quality and performance of urban space that providing for user's adoption and using the area under the process of design of living places. In the process of design considering the users, it is possible to reach the target in shorter and efficient time periods. That's why the planner sends specific signs while giving the decisions of design by means of environmental information like shape, color, texture, etc., which are perceived by the senses. To be able to appreciate and embrace those signs by the users, that should be a common intersection area in the meaning of quality between the needs and wishes of user and the design of a planner. The town-dweller, user of urban spaces, uses places integrated with him or places find something about himself in it actively. In other words, for use of urban spaces, users should satisfy their wishes and needs, and they should adopt to the area, accordingly the quality of cities get higher and protection of city identity must be realized.

		1. SECTION			2. SECTION			
		High	Middle	Low	High	Middle	Low	
	Size, Shape and Type	✓			✓			
	Adaptablity		✓			✓		
	Good Quality and							
Physical	Robustness			$\checkmark$			$\checkmark$	
	Variety and							
	Distinctiveness		$\checkmark$			$\checkmark$		
	Plenty of Sitting							
	Places		$\checkmark$				$\checkmark$	
S E C T T I O N I I I I I I I I I I I I I I I I I							Ph	
S E C T I I O O N - 1							Hos Geldiniz Mañasi Colum Merkoz	
S E C T I O N 2 C C C C C C C C C C C C C C C C C C		<b>S</b> R						

**Table 4. 2** Physical findings from the research

Figure 4. 41 Physical Situation in Sakarya Street

**Table 4. 3** Geographical findings of the research

		1. SECTION			2. SECTION			
		High	Middle	Low	High	Middle	Low	
	Location	$\checkmark$			✓			
	Accessibility		✓			✓		
Geographical	Type of							
	Neigbourhood and							
	Surrounding Areas	$\checkmark$			✓			
S E C T I O N I								

Figure 4. 42 Geographical Situation in Sakarya Street

		1. SECTION			2. SEC.	2. SECTION			
		High	Middle	Low	High	Middle	Low		
	Providing Optimum Security			✓			~		
	Mixed Use	✓			✓				
Managerial	Inclusiveness		$\checkmark$			$\checkmark$			
wanageria	Maintenance			$\checkmark$			$\checkmark$		
	Vehicular/ Pedestrian Circulation		~		~				
	Animation	✓				✓			
S E C T I O N I				P					
S E C T I I I I I I I I I I I I I I I I I I									
SEC TION A AUCHINALA BELEDITES OF									
S E C T I O N 2									
S E C T I O N I & Z					ARE		TT IL IV		

 Table 4. 4 Managerial findings of the research

Figure 4. 43 Managerial Situation in Sakarya Street

		1. SECTION			2. SECTION		
		High	Middle	Low	High	Middle	Low
	Territoriality	✓					✓
	Interpersonal Distance	✓				✓	
Psychological	Observation and Communication	✓				~	
	Legibility		✓			✓	
	Sense of Safety		✓				✓
	Intrigue and Curiosity	✓				✓	
S E C T T T I O N .							

**Table 4. 5** Psychological findings of the research

Figure 4. 44 Psychological Situation in Sakarya Street

**Table 4. 6** Sensual findings of the research

		1. SECTION			2. SECTION		
		High	Middle	Low	High	Middle	Low
	Visual Elements		$\checkmark$			✓	
	Aural Elements	✓					✓
Sensual	Olfactive Elements	✓					✓
	Tactile Elements			✓			✓
	Gustatorial Elements	✓				✓	
S E C H I OZ							
R E C T I O N 2							
S C T O N ·							
S C T U S S S S S S S S S S S S S S S S S S							

Figure 4. 45 Sensorial Situation in Sakarya Street

#### **4.8.2.** Findings of the Research on Convivial Urban Spaces

This part on the thesis concludes the findings from the interviews, conducted with the observers, customers, employees, employers, walkers and socializers on Sakarya Street. The analysis is developed from the three spaces of Lefebvre, discussed in the beginning parts to this chapter. Perceived space, conceived space and lived space, corresponding to physical, mental and social space, respectively, are captured from the answers of the interviews. A matrix for the results from the measures and interpretations is built to summarize the findings of the in-depth interviews. The matrix is developed according to the senses (smell, taste, audition, touch and vision).

Public spaces are the heart of the society and democracy. Moreover, not only public spaces but also private spaces play important roles in our lives. Some of sense of belongings in our lives is not technically public. They are privately run enterprises like restaurants, cafes, bookstores, music stores, corner groceries or hair salons. Everyone frequently has a chance to run into interesting people as for the products and services s/he needs. Oldenburg (1989) defines such spaces as semi-public spaces and alternative to the conventional public spaces. Such spaces serve for a great variety of people, gathered regularly, voluntarily and happily. Such semi-public spaces exhibit a great deal of variety, serving different types of publics. Their success depends on providing a convivial public space. This is the reason why we spend our money.

SENSES	MEASURES	INTERPRETATIONS						
		OBJECTIVE	SUBJECTIVE					
VISION	<ul> <li>Stores</li> <li>Fishers</li> <li>Doner shops</li> <li>Buildings</li> <li>Trees</li> <li>Cars</li> <li>Sculptures</li> <li>People</li> <li>Benches</li> <li>Signboards</li> <li>Public buildings</li> <li>Streetlights</li> <li>Pavements</li> </ul>	<ul> <li>Large</li> <li>Small</li> <li>Narrow</li> <li>Width</li> <li>Green</li> <li>Red</li> </ul>	<ul> <li>Mixed</li> <li>Too much</li> <li>Colorful</li> <li>Various</li> <li>Multiple</li> <li>Diversity</li> <li>Alternatives</li> </ul>					
SMELL	<ul> <li>Garbage</li> <li>Flowers</li> <li>Fish</li> <li>Doner</li> <li>Exhaust</li> </ul>	<ul> <li>Stink</li> <li>Redolence</li> <li>Unpleasant smell</li> <li>Foul smell</li> <li>Condense</li> </ul>	<ul><li>Heterogeneous</li><li>Various</li><li>Nice</li></ul>					
TASTE	<ul><li>Doner</li><li>Fish</li></ul>	<ul><li>Greased</li><li>Spiced</li></ul>	• Delicious					
AUDITION	<ul><li>Cars</li><li>Peddlers</li><li>Music</li><li>People</li></ul>	<ul><li>Noisy</li><li>Loud</li><li>Jarring</li></ul>	<ul><li>Complex</li><li>Mixed</li><li>Vital</li><li>Nice</li></ul>					
TOUCH	<ul><li>Pavements</li><li>Surfaces</li></ul>	<ul> <li>Broken</li> <li>Divided</li> <li>Hard</li> <li>Soft</li> </ul>	<ul><li>Discontinuous</li><li>Dissimilar</li></ul>					

# Table 4. 7 Findings of the in-depth interviews

## **CHAPTER 5**

## CONCLUSION

Urban space has faced with rapid transitions due to technological, economic and social changes. However, relations of citizens and urban space often excluded during these changes. While current urban design approaches deals with the place in terms of geographical, physical and administrative, ignoring the importance attributed by the user to the place, their needs and perceptions through place may result in weakness in spatial characteristics, leading to losses of identity and value of the urban space. On the other hand, convivial urban design approach tries to solve this kind of problems bringing social dimension of urban space into the forefront.

This thesis analyzes the conviviality of Sakarya Street in Ankara. In this manner, the research aims to come up with an analysis method for evaluation of conviviality of the urban space. To do this, the theories convivial urban designs are examined along with their backgrounds. As per the theoretical background of this study, approaches examine urban space with regards to five main dimensions has been adopted under the main headings of geographical, physical, administrative, sensual and psychological. In this manner, Sakarya Street is chosen as the research area, which has been changing since early 1800s in terms of urban development dynamics in line with modernization of Ankara. To better understand the changes Sakarya Street has encountered during this changes, the method of interviewing is used.

Although it was planned as a green pedestrian area in the first plans made after Ankara became the capital of Turkey (Löcher Plan in 1924 and Jansen Plan in 1932), *pedestrianization* took place at the end of 1970s. With *Height Regulation* of buildings

made in 1960s, there were additions to the buildings around Atatürk Boulevard and Sakarya Street was also affected by these changes. These Height Regulation plans caused the buildings in Sakarya Street have average 6 floors. Due to existence of various gastronomy units on the street (The famous restaurants at that time: Tavukcu Restaurant, Musuri Restaurant, Kumsal Restaurant, Goralı Sandwich), it was the most preferred place for eating and having a drink and having a nice time. There were nice smells and colors due to the flowers in 1980s, which creates a differentiation from other streets. The street addresses different types of users with its fishers and doner shops in addition to other shops, which gives the street the value of today. At the end of 1980s, the center moved towards Tunalı Street from Kızılay due to the increasing number of residences reaching out towards the borders of the city and the increasing shopping malls. In this period, Sakarya Street become a place for middle income users. The number of users and the variety of them has increased after 1997 with the subway coming into service. In today's Kızılay, the number of pedestrian areas has decreased due to the car-oriented urban approaches. Even Sakarya Street has experienced some physical changes through its history, it maintains its conviviality thanks to its uses and activities it has and the place in peoples mind.

To examine the Sakarya Street in terms of conviviality, two basic components have been discussed: psychology and sense of the place. Through the study, an urban design criteria for evaluation of Sakarya Street in terms of psychological and sensory qualities has been tried to be achieved. In addition, developing the social quality criteria for and urban space, questionnaires, sensorial and perceptual analyses are used.

While examining the conviviality of the urban spaces, the importance of the users and urban environment sense have an important role. In this manner, sensorial analyses of Sakarya Street are carried out with smell, flooring and color examinations. On the other hand, cognitive maps have been established in order to analyze how people interpret the place psychology. According to the research results, the first section of Sakarya Street still maintains its conviviality. However, in order to provide conviviality for the second street, some minor interventions should be carried out.

In order to make the urban space a livable, usable and preferable place, some physical characteristics are necessary, such as green field for comfort, adequate lighting for feeling of safety, cleanness of the street, variety of users and place, in terms of which Sakarya Street is insufficient. In addition, Sakarya Street has other features playing an important role in people's perception through Sakarya Street, such as distinctive units, e.g. florists, fishermen, doner shops, etc., accessibility due to proximity to transportation hub, and adaptability to time. On the other hand, these characteristics are not enough for a place to be used. When users find a piece that belongs to themselves, then they adopt to place with their experiences and continue to use it. In this case, senses and psychologies of users are connected to the conviviality of the place, beyond the geographical, physical and managerial dimensions of the place.

In the context of Convivial Urban Design, it is important what people perceive as good places to be in, no matter what size or shape it has. According to the Convivial Urban Design, the first factor is to create a human scale, which makes people happy and where they feel belongingness. Secondly, the places with distinctive character and identity attract people and they repeat visits. Sakarya Street is an example of this kind of environment, despite its weak physical quality and managerial deficiencies. The street has been continuously changed; however, its distinctiveness, arising from the customers looking for traditional taste, doner and special taste, fish, attracts people from past to present. Its identity on gastronomy becomes positively memorable and attracts new as well as old customers, which makes Sakarya Street a convivial space. A variety of opportunities to eat and drink and some performances and shows on the street give people the sense that they are in a unique place. Shows of Indians, music groups over many years, dancing performance from the Blacksea Region people and symposium of wooden sculpture make Sakarya Street memorable. Pleasant aromas of flowers on the flower shops affect the attractiveness of Sakarya Street. Different people are affected by different combinations. Some are drinking cafes and observing other people; some stops for a glass of beer. People attract people and streets with a lively environment are more likely to appeal to more people and new visitors.

Not only the design of the space, but also the available characteristics of it, such as location and size, and the way of design are important. While designing public places, the ones considered to be successful should be taken as examples. Because the need for conviviality has not changed although technology has developed tremendously during the last century. The interaction between pedestrians and design within the pedestrian zones which are important public spaces of a city is a phenomenon that should be taken into account. Psychology and sensations of pedestrians affects the design directly, and the same is valid for vice-versa. The places that preserved for decades should not surprise us. These places should be taken as examples while creating new public places or modifying the existing ones.

#### Recommendations

The arrangements that should be carried out in order to make a place convivial are listed in two categories below:

## Improving geographical, physical and managerial dimension of environment

# Creation of a City Center with multiple functions

- Increasing the number of dwellings in the city center and distributing them uniformly;
- Defining a policy of minimum requirements for mixture of different types of use. For instance shops at ground floor and offices at top floor with residences between them.
- Promoting activities of different types.
- Designing urban spaces which appealing different citizen groups, which also have different commercial functions and uses in terms of social activities.

#### Improving physical conditions of public areas

• Connection between pedestrian areas and transportation means should be established;

- Urban furniture, artistic elements, planting, paving, historical and cultural elements should be organized so that they provide a feeling of place within the pedestrian zone;
- The climate of the place should be taken into account and necessary protection and shelter should be provided;
- Any graffiti, vandalism, dumping or fly-posting should be responded immediately;
- The place should offer greenery;
- As the budget allows, high quality materials should be used in the area.

# Creating welcoming public areas

- Public places should be enriched with physical activity opportunities: sports, play, and movement. In addition, activities in evenings and winters should be enriched.
- Different users should have means for interaction and connection with a network.
- Activities will cause more activities created and thus the city will became more attractive by increasing integration.
- The street will create the opportunity of having a cup of tea while children play at a place near the teahouse or café. This will also bring elderly people with young people thanks to combined sports activities.
- Increasing the opportunity of various activities overlap and designing flexible spaces which can handle different types of activities at the same time during day and night will increase the security of the city.
- The streets will become more integrated, varied, alive and exiting for people with a wide variety of activities.

# Increasing the time spent and improving the conditions for relaxing

• Public spaces should provide opportunities and activities for spending time and relaxing by making them comfortable to linger and move in the city for both visitors and citizens.

- More public benches should be provided for seating and resting along streets and in squares with reasonable intervals.
- There should be suitable physical and social conditions for disabled in order to provide easy access to public space and opportunities for them to spend time as other people.

## Improving the safety during nights

- Streets should be well illuminated to create a more inviting environment for pedestrians all times of the day.
- Active shop frontages should be promoted through key streets.
- The city should be designed so that it will invite different kind of people in terms of housing areas.
- The public transport should serve 24 hours a day.

# Improving sensory and psychological environment

- A new place should be created without losing the existing places' color, smell, texture and sound which are memorized by the people throughout history. Thus, before designing a city, the color, smell, texture and sound of the city should be analyzed (not only visually).
- Eating and drinking facilities should be provided.
- If the types of gastronomic units which are already available at the public space are important to people, those units should be protected.
- The sound diversity of the public place should be analyzed in order to determine the effects of the sound of the place since it forms the permanence of the place in people's mind.
- Because it is well known that the psychological bonds between the place and the citizens are formed throughout history, the design should preserve the historical significance of the city.
- The architectural and historical heritage of the city should be strengthened by developing guidelines in order to link the past to the present.

- A public art culture with high quality should be developed by creating art works specific to public areas.
- Heritage landmarks should be emphasized and streetscapes should be enhance by developing illumination schemes.
- While designing the ground floors of new buildings, particular attention should be given to create a good visual quality for pedestrians.

It is impossible to fit all of the elements mentioned above to a space for making it convivial, but, a number of these elements will contribute to this course. In addition, the route to be followed while combining these qualities to create a pleaser environment also does not come from a formula. However, there are some objectives to be fulfilled such as sufficient lighting, even pavements, adequate locations for seating and chatting. Although different people have different choices of combinations, there are some basic characteristics as indicated above that will be welcomed by everyone.

In conclusion, this study aims to analyze the conviviality along with its identifying elements of Sakarya Street by examining the effects of the street of users in terms of senses and psychology of the people. As being the primary pedestrianized place of Ankara through its history, the research showed that the street has a well-defined structure and identity as per its social dimensions as of today. At this juncture, the conviviality criteria that are composed in the scope of this study can be used for further urban design studies.

#### REFERENCES

Ankara Büyükşehir Belediyesi, İmar ve Şehircilik Daire Başkanlığı. (2006). 2023 Başkent Ankara Nazım İmar Planı Açıklama Raporu, Etüdler ve Müdahale Biçimleri. Ankara: Fersa Matbaacılık.

Altaban, Ö. (1998). Cumhuriyet'in Kent Planlama Politikaları ve Ankara Deneyimi. 75 Yılda Değişen Kent ve Mimarlık, ed. Yıldız Sey. İstanbul: Türkiye İş Bankası Kültür Yayınları- Tarih Vakfı Ortak Yayını. Pp. 41-64.

American Planning Association. (2003). How cities use parks to... Create SaferNeighborhoods. City Parks Forum Briefing Papers. American Planning Association.Retrievedfromhttps://www.planning.org/cityparks/briefingpapers/pdf/saferneighborhoods.pdf

Ankara Metropoliten Alan Nazım İmar Bürosu. (1977). *Ankara Nazım Plan Şeması Raporu 1997-1990-Report of the Ankara Master Plan Schema 1970-1990*. Ankara: Yüksek Teknik Öğretmen Okulu Matbaa Atelyesi.

Anonim. (2004). *Ankara Başkentin Tarihi, Arkeolojisi ve Mimarisi*. Ankara: Ankara Enstitüsü Vakfi Yayınları.

Ateş, T. (1991). Geçmiş Dönemlerin Yaşam Biçimine Olan Özlemin Bir Anlatımı: Yaya Bölgeleri. *Peyzaj Mimarlığı Dergisi*, 91/1 (29); Pp.18-22.

Ayoğlu, B.O. (2010). 'Zafer Anıtı – Güvenpark – TBMM' Kent Aksının Varolan Durumunun İrdelenmesi ve Cumhuriyet Aksı Olarak Yeniden Tasarımı. Peyzaj Mimarlığı Yüksek Lisans Tezi, Ankara: Ankara Üniversitesi. Babalık-Sutcliffe, E. (2005). "Kent Merkezi Ulaşım Planlama İlkeleri Çerçevesinde Ankara Kent Merkezi: 1985 Kentsel Ulaşım Çalışmasından Bugüne". *Cumhuriyet'in Ankara'sı*. Tansı Şenyapılı (ed), Ankara: ODTÜ Geliştirme Yayınları, Pp. 286-308.

Barlow, H.B. and Mollon, J.D. (1982). The Senses. *Cambridge Texts in the Physiological Sciences*, Vol. 3. Cambridge University Press, UK.

Batuman, B. (2002). Mekan, kimlik ve sosyal çatışma: Cumhuriyet'in kamusal mekanı olarak Kızılay Meydanı. *Ankara'nın kamusal yüzleri: Başkent üzerine mekân-politik tezler içinde* İstanbul: İletişim Yayıncılık. Pp. 40-76.

Bayraktar, A., Aslanboğa, G., Özkan, B., Güney, A. and Türkyilmaz, B. (1987). İzmir Kenti İçinde Halkın Açık Alan Gereksinimini Karşılamak Amacıyla Bazı Yol ve Meydanların Taşıt Trafiğinden Arındırılması Olanakları Üzerine Araştırmalar. Ege Üniversitesi Ziraat Fakültesi, Peyzaj Mimarlığı.

Bayraktar, N. (2013). Tarihe Eş Zamanlı Tanıklık: Ulus ve Kızılay Meydanlarının Değişim Süreci (Concurrent Testimony to History: The Process of Change in Ulus and Kızılay Squares), *Ankara Araştırmaları Dergisi*, 1(1), 20-35.

Bechtel, R.B. and Churchman, A. (2002). *Handbook of Environmental Psychology*. New York: John Wiley & Sons, Inc.

Behrendt, F. (2010). *Mobile Sound: Media Art in Hybrid Spaces*. Doctoral Thesis, University of Sussex.

Bitar, O. (2015). Reclaiming Pedestrian Priority with Neuroscience. Neuroscience and Sociology Department at University of Toronto. Retrieved from http://gehlarchitects.com/blog/reclaiming-pedestrian-priority-with-neuroscience/

Borbridge, R. (2009). "Conviviality". VIA's Vancouver Urban Planner. Retrieved from www.via-architecture.com/convivislity/

Brereton, F., Clinch, P., J. and Ferreira, S. (2006). Happiness, Geography and the Environment. *Planning and Environmental Policy Research Series*. Planning and Environmental Policy, University College Dublin. PEP/06/04.

Burat, S. (2008). *The Changing Morphology of Urban Greenways, Ankara, 1923-1960.* City and Regional Planning PHD Thesis, Ankara: Middle East Technical University.

Burton, E. and Mitchell, L. (2006). *Inclusive Urban Design; Streets for life*. Architectural Press in an imprint of Elsevier. UK.

CABE. (2005). Start with the park: Creating sustainable urban green spaces in areas of housing growth and renewal. Retrieved from http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk /files/start-with-the-park.pdf

CABE. (2004). The Councilor's Guide to Urban Design. London. Retrieved from http://www.designcouncil.org.uk/sites/default/files/asset/document/councillors-guide-to-urban-design.pdf

Cangır, A. ed. (2007). '*Cumhuriyetin Başkenti*'. Ankara Üniversitesi, Kültür ve Sanat Yayınları No: 3 cilt 1-2.

Carmona M, Heath T, Oc T and Tiesdell S. (2003). *Public Places Urban Spaces: Dimension of Urban Design*. Oxford: Architectural Press.

Carr, S., Francis, M., Rivlin, L.G. and Stone, A.M. (1992). *Public Space*. Cambridge: Cambridge University Press.

Cengizkan, A. (2005) "1957 Yücel-Uybadın İmar Planı ve Ankara Şehri Mimarisi", *Cumhuriyet'in 'Ankara'sı*, Tansı Şenyapılı (ed), Ankara: ODTÜ Yayıncılık, Ankara, Pp. 24-59

Cengizkan, A. (2004). *Ankara'nın İlk Planı 1924-25 Lörcher Planı*. Ankara: Ankara Enstitüsü Vakfı, Arkadaş Yayıncılık.

Classen, C. (2005). The Book of Touch. Oxford: Berg.

Crowe, T.D. and Fennelly, L.J. (2013). *Crime Prevention through Environmental Design*. Boston: Butterworth-Heinemann Publications.

Cullen, G. (1961). Townscape. New York: Reinhold Publishing Corporation.

Çalışkan, O. (2004). *Urban Compactness: A Study of Ankara Urban Form*. City and Regional Planning, Urban Design Master Thesis, Ankara: Middle East Technical University.

Dinino, M. (2013). *Chemical senses: Systems Neurobiology*. Lecture Notes, Washington: University of Washington. Retrieved from https://faculty.washington.edu/chudler/chems.html

Douglass, M. (2013). *Creative Communities Versus the Cultural Economy – The Vernacular City as an Alternative to Globopolis in Asia*. Department of Sociology, Singapore: National University of Singapore.

Duru, B. (2012). "Mustafa Kemal Döneminde Ankara'nın İmarı", *Cumhuriyetin Ütopyası: Ankara*, Haz. Funda Şenol Cantek. Ankara: Ankara Üniversitesi Yayınevi, Pp. 173-192.

Erem, Ö. and Erkman, U. (2003). "Tatil Köylerinin Okunabilirliğinde Çevre İşaretlerinin Rolü" *İTÜ Dergisi*. Cilt 2, Sayı 1, Pp. 51-59.

Erçoşkun Y., Ö. and Özüduru, B. (2013). "Ankara'daki Alışveriş Caddelerinde Ticari Mekânlar ve Sosyal Sürdürülebilirlik Araştırması" *Megaron*, Cilt 8, Sayı 1, İzmir: YTE Mimarlık Fakültesi Yayını, Pp. 29-44.

Erkip, F. (2003). "The Shopping Mall as an Emergent Public Space in Turkey", *Environment a Planning A*, vol. 35 (6), Pp. 1073-1093.

Erol, D. (2011). "Ankara'da Gecekondulaşma Süreci: Barakadan Mega Projelere" *İlbank Dergisi*, Pp. 28-30.

Fessl, T. (2012). "Urban Space and Design for the Pedestrians" Traffic EngineerAustrianRoadSafetyBoard.Retrievedfromhttp://www.ictct.org/migrated\_2014/ictct\_document\_nr\_694\_301A%20Thomas%20Fessl%20Urban%20Space%20and%20Desing%20for%20the%20Pedestrians.pdf.

Fincher, R. (2003). "Planning for Cities of Diversity, Different and Encounter" University of Melbourne, Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.202.607&rep=rep1&type =pdf

Fincher, R. and Iveson, K. (2008). *Planning and Diversity in the City: Redistribution, Recognition and Encounter*. New York: Palgrave Macmillan.

Fisher, G. H. (1968). "The Frameworks for Perceptual Localization" Department of Psychology, University of Newcastle.

Gehl, J. (2010). Cities for People. Washington DC: Island Press,.

Gehl, J. and Gemzoe, L. (2004). *Public Spaces and Public Life*. Copenhagen: Danish Architectural Press.

Gill, A.A. (2005). "A Sense of Loss", *Australian Gourmet Traveler*, *5*(*11*), Pp. 61-62.

Golledge, R. G. (1999). *Wayfinding Behavior: Cognitive Mapping and Other Spatial Processes*, U.S.A.: The Johns Hopkins University Press.

Golledge, R. G. (2002). Cognitive Maps. In Encyclopedia of Social Measurement, CA: Academic Press Inc.

Griffin, K., W. (2004). *Building Type Basics for Transit Facilities* (Der.) New Jersey: John Wiley and Sons Inc.

Günay, B., (2012). "Ankara Spatial History" Ankara, Association of European Schools of Planning (AESOP).

Hall, E.T. (1966). The Hidden Dimension. New York: Anchor Books.

Henshaw, V. (2014). Urban Smellscapes; Understanding and Designing City Smell Environments. New York and London: Routledge.

Herssens, J. and Heylighen, A. (2012). "Haptic Design Research: A Blind Sense of Place, The Place of Research, the Research of Place", *International Conference on Architectural Research*, Pp. 374-382.

Inceoğlu, M. and Aytuğ, A. (2009). "The Concept of Urban Space Quality", *Megaron* 4(3), Pp. 131-146.

İstanbul Büyük Şehir Belediyesi. (2008). Herkes Için Erişilebilir ve Kullanilabilir Fiziksel Çevre ve Yapilar Için Ek Teknik Şartname, Herkes İçin Erişilebilir İstanbul. Retrieved from http://www.bartin.edu.tr/Files/icfnycx3414szh4djfoqhkqua2012323112719icfnycx3 414szh4djfoqhkqua2012323112719.pdf

İşçen, Y. (2012). Ankara Kent Yazıları: Ankara'nın yok edilen kentsel kimliği üzerine iç geçirmeler... Retrieved from http://yavuziscen.blogspot.com.tr/p/ankara-kent-yazlar-2.html

Jacob, T. (2007). Taste (Gustation), A tutorial about the sense of taste, Cardiff University, UK.

Jacobs, J. (1961). The Death and Life of Great American Cities. New York: Vintage.

Jansen, H. (1937). Ankara İmar Planı, İstanbul: Alaeddin Kıral Basımevi.

Jenks, M., Noble, J. and Pattacini, L. (2000). *Creating Places; Achieving Quality in Residential Developments. Incorporating Guidance on Layout and Access.* Leeds: Corporate Document Services.

Kancıoğlu, M. (2005). "Çevresel İmaj, Kimlik ve Anlam Kapsamında Turizm Binalarına İlişkin Kullanıcı Değerlendirmeleri" *Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi*, Cilt 10.

Kaplan, H. and Acuner, A. (2005). "Ankara'da Yayalaştırma Sorunsalı: Yaya Alanlarının Yasal Çerçeve ve Yerel Yönetimlerin Rolü Kapsamında Değerlendirilmesi", *Planlama 2005/4* sayı: 34, Pp. 112-123.

Kaya, N. and Epps, H. H. (2004). "Color-emotion associations: Past experience and personal preference". *AIC 2004 Color and Paints, Interim Meeting of the International Color Association, Proceedings*, University of Georgia.

Kaya, T. (2002). *Post Evaluation of Physical Planning Experience of Ankara: 1957 Plan of Uybadin-Yücel*. City Planning Master Thesis, Ankara: Middle East Technical University.

Keverne, E.B. (1982). *Chemical Senses: Smell*. Introduction to the Senses: From Biology to Computer Science. UK: Cambridge University Press.

Koffka, K. (1935). Principles of Gestalt Psychology. London: Lund Humphries.

Kortum, P. (2008). *HCI Beyond the GUI: Design for Haptic, Speech, Olfactory and Other Nontraditional Interfaces*. San Francisco: Morgan Kaufmann Publishers.

Kowaltowski, Doris. C.C.K., Silvia. A. Mikami G. Pina and Raquel R.M.P. Barros. (2006). Architectural Design Analysis as a Strategy for People Environment Studies: Finding Spaces "That Work". *Conference IAPS 19*, State University of Campinas, Brazil.

Landry, C. (2006). The Art of City Making. London: Earthscan

Lefebvre, H. (1991). The Production of Space. Oxford: Blackwell.

Lefebvre, H. (1996). Writing on Cities. Oxford: Blackwell.

Lennard, S. H. C. and Lennard, H. L. (1995). *Livable cities observed*: a source book of images and ideas for city officials, community leaders, architects, planners and all other committed to making their cities livable. CA: Gondolier Press.

Lucas, R. and Romice, O. (2008). "Representing Sensory Experience in Urban Design". in Design Principles and Practices: an *International Journal*. Volume 2, Issue 4, Common Ground Publishers. Pp.83-94.

Lynch, K. (1960). The Image of the City. Cambridge: M.I.T. Press.

Madanipour A. (1996). *Design of Urban Space: An Inquiry into a Socio-spatial Process.* Chichester: John Wiley.

Marchant P.R. (2010). "What is the contribution of street lighting to keeping us safe? An investigation into a policy" *Radical Statistics 102*, Pp. 32-42.

Marcus, C.C. and Francis, C. (1997). *People Places: Design Guidelines for Urban Open Spaces*. New York: John Wiley & Sons, Inc.

Mense, B., Debney, S. and Druce, T. (2006). *Ready Set Remember: Short-term auditory memory activities*. Camberwell: Acer Press.

Middle East Technical University, City and Regional Planning Document Archive. (2015).

Modrak, V., Teodorescu, V. and Gîfu, D. (2014). "Highlights on Mental Processes in Management" *International Letters of Social and Humanistic Sciences*. 24 (2014), Pp. 56-65.

Montagu, A. (1978). *Touching: The Human Significance of the Skin*. New York: Haper&Row.

Moss, M. and Oliver, L. (2012). "Plasma 1,8-cineole correlates with cognitive performance following exposure to rosemary essential oil aroma" *Ther Adv Psychopharmacology 2(3)*, Pp. 103-113.

Motte-Haber H (1998) Sound-spaces-fields-objects. In: Leitner B (ed.) *Sound, Space*. Ostfildern: Hatje Cantz Verlag.

Nasar J.L. (1989). "Perception, cognition and evaluation of urban places." In I. Altman and E. H. Zube (Eds.) *Public places and spaces: human behavior and environment: advances in theory and research volume 10*. New York and London: Plenum Press, Pp. 31-56.

National Recreation and Park Association. (2012). Creating Safe Park Environments to Enhance Community Wellness. Retrieved from https://www.nrpa.org/uploadedFiles/nrpaorg/Grants\_and\_Partners/Recreation\_and\_ Health/Resources/Issue\_Briefs/Park-Safety.pdf

National Recreation and Park Association, 2012. Creating Safe Park Environments to The Healthy Communities Multi-Sector Model to Improve Community Health: A Resource Compendium 33 Enhance Community Wellness.

Niyogi, S. (2013). *Public Perception of Museum in Vadodara City*. Doctoral Thesis, The Maharaja Sayajirao University of Baroda.

Oldenburg, R. (1989). The Great Good Place: Cafes, Shops, Community Centers, Beauty Parlours, General Stores, Bars, Hangouts and How They Get You Through the Day. New York: Paragon House.

Oldenburg, R. (1999). The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community. New York: Marlowe.

Oruçkaptan, A. İ. (1990). Kızılay Meydanı Çevresindeki Yaya Bölgelerinin İrdelenmesi ve Geliştirilmesi Üzerine Bir Araştırma. Master Thesis, Ankara University.

Peattie, L. (1998). "Convivial Cities" in John Friedman and Mike Douglass, eds. *Cities for Citizens: Planning and the Rise of Civil Society in a Global Age*. Chi Chester, UK: Wiley& Sons, Pp. 247-253. Peterson, C. (2012). "Happy Place: Third Places" *Pursuing the Good Life: 100 Reflections in Positive Psychology*. USA: Oxford University Press.

Rao, R.S. (2008). "Factors influencing Perception" *Citemanagement Article Repository of Cite. Co*, Retrieved from http://www.citeman.com/2849-factors-influencing-perception.html

Rapoport, A. (1977). *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design*. New York: Pergamon Press.

Road Safety Plan. (2007). Prepared by Hennessy Services Pty Ltd Public Health and Safety Consultants, City of Greater Bendigo. Retrieved from https://www.bendigo.vic.gov.au/files/99c6c998-c951-4e51-96eba0fc00a5d0da/Bendigo\_Road\_Safety\_Plan\_Final\_021107.pdf

Rubenstein, H. M. (1992). *Pedestrian Malls, Streetscapes and Urban Spaces*, USA: John Wiley & Sons, Inc.

Shaftoe, H. (2008). *Convivial Urban Spaces; Creating Effective Public Places*. London: Earthscan.

Şenyapılı, T. (2004). Baraka'dan Gecekonduya: Ankara'da Kentsel Mekanın Dönüşümü: 1923-1960. İstanbul: İletişim Yayınları.

Tankut, G. (1990). Bir Başkentin İmarı Ankara: 1929–1939. Ankara: ODTÜ Yayınları.

Taylor, N. (2008). "Legibility and Aesthetics in Urban Design" *Journal of Urban Design*, vol 13.

Tunçer, M. (2013). "Ankara da doğal ve tarihsel çevre korunmasında Hermann Jansen Plan kararlarının günümüzdeki (2013) Durumunun Değerlendirilmesi", Atılım Üniversitesi; "Geçmişten Angorası'ndan Geleceğin Ankara'sına'' Konferansı.

Tunçer, M. (2009). "Kent ve Kent Kimliği: Ankara", Ankara'da Belediye Hizmetleri. Tüketici Hakları Derneği Ve Çankaya Belediyesi Ankara.

Tunçer, M. (2002). "Türkiye'nin Kalbi Ankara; Kentleşme Süreci ve Başkentlik Misyonu". 79. Yıl Ankara Sempozyumu.

Tunçer, M. (2001). "Ankara (Angora) Geleneksel Kent Merkezi Tarihsel Gelişimi (15.-20. yy.)", Kültür Bakanlığı Yayınları Kültür Eserleri Dizisi.

Tunçer, M. (2000). "Tarihsel Çevre Koruma Politikaları: Ankara", Ankara: Kültür Bakanlığı Yayınları.

Uluiş, L. (2009). "Lörcher'in Ankara'sı: Anti-Modernist ve Otoriter Eğilimleri Yansıtan Bir Şehir Tahayyülü" *Toplumsal Tarih Dergisi* sayı: 187, Pp. 73-82.

Ülkeryıldız, E., Durmuş A., Z. and Akış, T. (2009). "Öğrenci Zihin Haritalarında Kente İlişkin Deneyimle Değişen Çevre Algısı", *BAÜ FBE Dergisi*, Cilt: 11, Sayı: 1, Pp. 72-82

Voordt, D.J.M. van der and en H.B.R. van Wegen. (2005). Architecture in use. An *introduction to the programming, design and evaluation of buildings*. Oxford: Elsevier, Architectural Press.

Wilson, J. Q. and Kelling, G. L. (1982). "Broken windows: the police and neighborhood safety". Atlantic Monthly. 249(3), Pp. 29–38.

Kaplan, H. and Acuner, A. (2005). "Ankara'da Yayalaştırma Sorunsalı: Yaya Alanlarının Yasal Çerçeve ve Yerel Yönetimlerin Rolü Kapsamında Değerlendirilmesi". Planlama TMMOB Şehir Plancıları Odası Yayını, 2005/4, Pp. 112-123.

Yetkin, S. (2004). Urban Culture and Space Relations: Sakarya Caddesi as an Entertainment Space in Ankara, Sociology Master Thesis, Ankara: Middle East Technical University.

### Photographs obtained from unpublished documents and internet

- Photographs that were taken in 7-24.07.2015 by Zeynep Murat Çolpa.
- Photographs by Baykan Günay, personal archives, 2002.
- http://commons.wikimedia.org/wiki/File:Plaza\_de\_la\_Revolution.jpg
- http://www.allcountries.eu/russia.htm
- http://commons.wikimedia.org/wiki/File:Bilbao\_05\_2012\_Guggenheim\_200
   8.jpg
- http://www.germany.travel/en/ms/barrier-free-germany/what-to-know/public-transport.html
- http://aragec.com/portakal+%C3%A7i%C3%A7e%C4%9Fi+vadisi.html
- http://www.fotokritik.com/arama/galata%20sokaklar%C4%B1
- http://www.fotokritik.com/2582964/yenimahalle-taskin-sokak
- http://www.ankara.bel.tr/index.php?cID=5102
- http://www.archdaily.com/65218/ad-classics-sydney-opera-housej%C3%B8rn-utzon/
- http://www.barcelonayellow.com/bcn-photos/166-barcelona-aerial-pictures
- http://openbuildings.com/buildings/sheffield-winter-garden-profile-6036
- http://commons.wikimedia.org/wiki/File:Gardens,\_Victoria\_Square,\_Clifton, \_Bristol\_-\_DSC05770.JPG

- https://buildthecity.wordpress.com/2010/12/19/build-the-city-multiwayboulevards/
- http://www.tripadvisor.co.uk/LocationPhotoDirectLink-g196508-i31591913-Sarlat\_la\_Caneda\_Dordogne\_Aquitaine.html
- http://europeanstoryteller.com/tag/venice/
- http://commons.wikimedia.org/wiki/File:MUNICH'S\_LARGE\_AND\_BEAU TIFUL\_FUSSGANGERZONE\_(PEDESTRIAN\_ZONE)\_HAS\_RETURNE
   D\_THE\_CITY'S\_COMMERCIAL\_AND\_CULTURAL\_CENTER...\_-\_NARA\_-\_551801.jpg
- Source: http://theagilelandscape.com/category/movable-site-furniture/
- http://nerdist.com/course-of-the-force-the-schedule/
- http://www.huffingtonpost.com/2013/11/05/burano-italy\_n\_4212666.html
- http://www.balkanforum.info/f16/albanische-architektur-sammel-thread-234123/
- https://www.ted.com/talks/edi\_rama\_take\_back\_your\_city\_with\_paint/transcr ipt
- https://jangirmaddadi.se/union/concrete/
- http://ankaraarsivi.atilim.edu.tr/libinstitutional/view/id/1135/Ankara-Sehri-Imar-Plani/?lang=tr
- http://www.inankara.com.tr/galeri-25-f-505/eski-ankarafotograflari/nostaljik-ankara-fotograflari-1950-1980-ler.php
- http://www.ankaramiz.com/tag/kizilay
- http://www.ankaramiz.com/2010/06/sakaryada-ahsap-yontular/6296
- http://www.muhabbetsokaklari.com/default.aspx?SectionID=Bm1cV%2fn6Z nug7BoiennQnw%3d%3d&ContentID=4oEu6KjEmU33gGZTiL4GkQ%3d% 3d
- http://www.besiktas.bel.tr/Sayfa/508/ataturk-acik-hava-resim-sergisi-ninduzenli-bakimi-yapiliyor
- http://www.mehmetakinci.com.tr/istanbul-ortakoy-ve-bogaz.html/eylul-2011istanbul-asiyan-kabatas-234-2
- http://www.hutopia.net/gezi-parki-yine-yeni-yeniden/
- http://www.geziparki.org/imza/

# **In-Depth Interviews**

- Interview.1. Employer, 07.07.2015
- Interview.2. Employee, 07.07.2015
- Interview.3. User, 07.07.2015
- Interview.4. User, 07.07.2015
- Interview.5. Employee, 15.07.2015
- Interview.6. User, 15.07.2015
- Interview.7. User, 15.07.2015
- Interview.8. User, 15.07.2015

# **APPENDIX A**

# QUESTIONNAIRE

ODTÜ, KENTSEL TASARIM MASTER TEZİ ANKET ÇALIŞMASI Yaşınız: Cinsiyetiniz: Eğitim Durumunuz: Mesleğiniz:
1. Ne sıklıkla burada zaman geçirirsiniz? Günün hangi saatleri arasında? Hergün Çok sık Bazen
Çok nadir
2. Sakarya caddesine gelirken hangi ulaşım aracı/ araçlarını kullanıyorsunuz? Özel araç Otobüs Minibüs Taksi
Metro
Diğer
<ul> <li>3. Bu sokağa ne amaçla geliyorsunuz? Dinlenme Gezinme Yemek yeme Sadece sokaktan geçme Arkadaşlarla vakit geçime Diğer</li> <li>4. Sakarya Caddesi üzerinde sizin için önemli, dikkatinizi çeken binalar, yapılar,</li> </ul>
4. Sakarya Caddesi uzerinde sizin için önenni, dikkatınızı çeken ömalar, yapılar, mobilyalar, bitkiler vs. hangileridir? Neden?
5. Cadde boyunca sizi rahatsız eden yapı yada kentsel elemanlar var mıdır? Var ise neler?
6. Bu elemanlar sizi neden rahatsız ediyor?

7. Bu sokakta dikkatinizi çeken güzel ya da kötü kokular var mı? Var ise hangi kokular?

Çiçek

Yeşillik Egzoz Balık Temiz hava Diğer..... 8. Sizce bu kokular nasıl? Kötü. Hoş, güzel Farklı 9. Bu sokak üzerindeki restoranlarda yemek yiyor musunuz? Yiyor iseniz hangi mekânları tercih ediyorsunuz? ..... 10. Bu sokakta ne tür sesler duyuyorsunuz? Su İnsan Ulasım aracı İnşaat sesi Doğa Sesi İsportacı Karmaşık Diğer..... 11. Sizce bu sesler nasıl? Kötü Hoş, güzel Farklı 12. Gözlerinizi kapatırsanız bu sokaktaki yer döşemelerini hatırlayabilir misiniz? Evet Havır 13. Eğer hatırlıyorsanız Sakarya Caddesi boyunca yer döşemeleri nelerdir? (Hangi materyaller?) ..... 14. Bu sokakta dikkatinizi çeken renkler nelerdir? ..... 15. Bu sokakta kendinizi güvende hissediyor musunuz? Evet Havır 16. Sokaktaki aydınlatmalar sizce yeterli mi? (Özellikle akşam saatlerini düşünerek cevaplayınız.) ..... 17. Sokak her hava koşulu için uygun mu? (Güneş olduğunda gölge olacak, yağmur yağdığında ıslanmaktan korunulacak elemanlar var mı?) Evet Hayır 18. Oturma elemanları yeterli mi? (Bank etc.) Evet Havır 19. Sokak genelindeki yeşil alanlar sizce yeterli mi? Neden? ..... 20. Sakarya caddesinde ilgi çekici hangi aktiviteler yapılıyor? (Ahşap heykel sempozyumu, farklı kostümler giymiş kişilerin yaptığı performans gösterileri, eylemler vb.) Bu aktivitelere katılıyor musunuz? .....

METU, URBAN DESIGN MASTER'S THESIS QUESTIONNAIRES

Age:	
Gender:	
Education:	
Profession:	
1. How frequently do you use	

Sakarya Street? When do you prefer to come to this street? ..... Everyday Very often Sometimes Rarely

2. Which mode of transportation do you use to come to the Sakarya Street? Private car Bus Minibus Taxi Subway Other..... 3. For what purposes do you come to this street?

Relaxation Wandering around Dining Just passing Spend time with friends Other..... 4. Which buildings, structures, furniture, plants, etc. are important for you in Sakarya

Street? Why?

..... 5. Is there any structure or urban element along the street bothering you? If any, what are these?

.....

6. Why do these elements or structures bother you?

..... 7. Do you have good or bad smell that attracts your attention on this street? If any, what are they? Flower Greenery Exhaust Fish Fresh air Other.....

8. What do you think about this smell/these smells? Bad Nice Different

9. Do you eat in any restaurant on this street? If yes, which places do you prefer? ..... 10. What kind of sound you can hear on this street? Water Human Transportation vehicle Sound of construction Sound of nature Peddler Complicated Other..... 11. What do you think about this sound/these sounds? Bad Nice Different 12. Can you remember the street floor if you close your eyes? Yes No 13. If you remember, what is the flooring throughout the Sakarya Street? (What kind of materials?) ..... 14. What color does your attention on this street? 15. Do you feel safe in this street? Yes No 16. Is the street lighting adequate? (Your answer should especially be considering the evening.) ..... 17. Is street suitable for all weather conditions? (Are there any elements that cast a shadow when the sun shines or to be protected from getting wet when it rains) Yes No 18. Are there enough seating places in this street? (Bench etc.) No Yes 19. Do you think that there are enough green areas in this street? Why? 20. What kind of events are carried out in this street? (Wooden sculpture symposium, performances of people which are dressed in different costumes, demonstration, etc.). Do you join these activities? .....

# **APPENDIX B**

## **COGNITIVE MAPS**

