

**INTEGRATION OF SHOPPING MALLS WITH PEDESTRIAN  
ENVIRONMENT: AN ANALYSIS OF AKKÖPRÜ MİGROS AND  
KARUM SHOPPING MALLS**

A THESIS  
SUBMITTED TO THE DEPARTMENT OF  
INTERIOR ARCHITECTURE AND ENVIRONMENTAL DESIGN  
AND THE INSTITUTE OF FINE ARTS  
OF BİLKENT UNIVERSITY  
IN PARTIAL FULLFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
MASTER OF FINE ARTS

**By**

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## ABSTRACT

# INTEGRATION OF SHOPPING MALLS WITH PEDESTRIAN ENVIRONMENT: AN ANALYSIS OF AKKÖPRÜ MİGROS AND KARUM SHOPING MALLS

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June, 2003

In this study, importance of integrated pedestrian environment for urban realm within the context of shopping malls and pedestrian malls is examined. The main concern is rooted in the socio-spatial relationship between indoor and outdoor space. Pedestrian malls and shopping malls are analyzed as the formations that create link between the interior and exterior spaces throughout the study, because integrated pedestrian environment is important for defining the characteristics of the city. In this context, a field survey was carried out in an urban and a suburban shopping mall, to understand their differences in creating an integrated pedestrian environment and propose a model which combines the benefits of open and closed malls. Evaluating an integrated pedestrian environment which has advantages in terms of users' expectations and city image states the significance of relationship between spatial configuration and social life.

**Keywords:** Integrated pedestrian environment, shopping mall, pedestrian mall, city image, urban open space.

## ÖZET

# ALİŞVERİŞ MERKEZLERİNİN YAYA MERKEZLERİYLE BÜTÜNLEŞTİRİLMESİ: AKKÖPRÜ MİGROS ve KARUM ALİŞVERİŞ MERKEZİ

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Haziran, 2003

Bu çalışmada, yaya mekanlarının kent için önemi alışveriş ve yaya merkezleri çerçevesinde incelenmiş ve bir bütünleşme önerisi geliştirilmiştir. Temel sorun, kentlerde iç ve dış mekanların sürekliliğini kaybetmiş olmasıdır. Kentin niteliğini tanımlaması açısından yaya çevrelerinin bütün olarak işlemesi önem taşımaktadır. Çalışma boyunca alışveriş ve yaya merkezleri iç ve dış mekanda bağlantı kuran oluşumlar olarak incelenmiştir. Bu bağlamda, yaya çevresi tasarlarken aradaki farkı anlamak ve iç ve dış mekanın yararlarını birleştiren bir öneri geliştirebilmek için şehir içi ve şehir dışında olmak üzere iki alışveriş merkezinde alan araştırması yapılmıştır. Kullanıcıların beklentisi ve kent imajı açısından, iç ve dış alanların mekansal özellikleri ve sosyal yaşama etkisi değerlendirilmiştir.

**Anahtar Kelimeler:** Yaya çevresi, alışveriş merkezi, kent imajı, kentsel açık alanlar.

## ACKNOWLEDGEMENTS

I would like to thank Assoc. Prof. Dr. Feyzan Erkip for her invaluable supervision and encouragement throughout the preparation of this thesis. I would never be able to complete this study without her patient guidance.

I also express appreciation to Assist. Prof. Dr. İrem Dikmen for her suggestions, continuous offers for technical help, and patience. In addition, I would like to extend my gratitude to my fiancé Gökhan Resuloğlu for his help, trust, and invaluable friendship throughout the preparation of this thesis.

I am grateful to my parents Rukiye and Mahir Gürçel and my sister Tuğba Gürçel for their invaluable support, encouragement, trust, and continuous patience. Special thanks to my sister Tuğba Gürçel for her help in the application of the field research.

I dedicate this work to my dearest family Rukiye, Mahir, and Tuğba Gürçel, and my fiancé Gökhan Resuloğlu.

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## **1. INTRODUCTION**

### 1.1. Aim of the study

The aim of this study is to examine the importance of integrated pedestrian environment for urban realm within the framework of shopping malls and pedestrian malls. In this context, a field survey was designed in two shopping malls, proposing a model which combines the benefits of both open and closed malls, in other words addressing an integrated environment which has advantages in terms of users' expectations and city image.

The research was conducted in an urban and a suburban shopping mall to understand the differences while creating an integrated pedestrian environment. The main concern is the socio-spatial relationship between indoor and outdoor space.

Therefore, the purpose is to find out the most appropriate integrated spaces for city design rather than comparing two kinds of shopping malls.

The principle of urban design is to improve the quality of human life by improving the spatial environment. Neither the effect of a place can be judged without reference to social conditions nor can the quality of life be inferred only from social conditions without reference to the spatial environment (Lynch, 1990, p. 525).

Pedestrian malls as urban spaces have always been the major components of the city and play crucial roles for defining the characteristics of urban places. They create the city form and develop the linkage between the interior and exterior spaces. Like other public spaces, pedestrian malls are the spaces where social activities are

constituted. Thus, pedestrian malls are the one of the most significant indicators of public life and city image.

Public places are the matrices of social groups. Moreover, they should reinforce social experience, in other words, they should not only be related to space but also social structure and human values. As the pedestrian malls are open to public and can be used by everyone for any activity, they act like mirror of the outdoor life and reflect all aspects of the community.

Influences of pedestrian malls on environmental quality and social life should be evaluated to satisfy basic needs of people and consequently, define the appropriate design elements. The design of urban spaces for pedestrians, especially pedestrian malls, should fulfill individual's needs and propose specific functions. Meaningful relations between people in motion and environment can be created through the design elements and strategies. Spatial configuration of the mall has a direct influence on the socialization process. Pedestrian malls are both physical environments and social settings. In fact, their essence comes from the urban public spaces where social activities take place. Thus, liveliness of social life on pedestrian malls depends on the network of spatial configuration, interaction and communication among people.

Shopping has never lost its value in the process of city growth and development both in closed and open areas. Shopping is an everyday activity and a social practice. Shopping as a commercial activity modifies its meaning; it involves social dimension

as well as consumption. Therefore, shopping malls should deal with both social and physical aspects of environment as pedestrian places.

People come to the shopping mall basically for two reasons; first, they are driven by consumerist fantasies and the second to find a common ground for sociability in a society with limited opportunities for public interactions (Gottdiener, 1995, p. 97). Therefore, in order to understand the strategy of shopping mall development better, why and how today's shopping malls have evolved, it is necessary to identify the physical elements within its structure and analyze the historical background.

Shopping malls provide a kind of isolated and comfortable utopian world, especially in suburbs and they have begun to function as a city center. This development creates competition between the traditional city center and the shopping mall. On the other side of the spectrum, shopping malls can also be built in the city and work with plazas, parks, or pedestrian malls which can help to create a more integrated pedestrian environment by means of interior and exterior places.

In the contemporary world, design trends encourage shopping centers turn into more urban with their main design concepts. Positive aspects of indoor pedestrian places can be matched with the positive aspects of urban pedestrian environment. The most important question which should be examined is that "how will it relate to the existing city?" (Bednar, 1989, p. 215).

The purpose of pedestrian places is not only to provide shopping but also to constitute the integration between the interior and exterior places. The lack of

connection to the environment of pedestrian places is perceived as a significant problem. In order to realize what the integrated environment is, the most essential issue is to examine the relation between exterior urban places and interior places and their functions in the pedestrian life. Thus, the aim is to examine the most suitable pedestrian system for the city without losing its spatial and social qualities.

## 1.2. Structure of the thesis

First chapter is introduction. The second chapter investigates significance of pedestrian malls in urban open spaces. It starts by looking at patterns of meaning and design of public outdoor space, and how pedestrian malls interact with city's physical and social space. This leads to a discussion of the development of pedestrian malls and their impact on city image. One of the main aims of contemporary urban design is to promote the development of pedestrian activity. As a result of the growing interest in pedestrian-oriented design and questions regarding design concerns of pedestrian malls in terms of the effects on environmental quality and social life is examined to understand the meaning of pedestrian malls, the communication and interaction between individuals and environment. Design concerns of pedestrian malls are important clues for social interactions and spatial relations to improve urban environment, thus successful pedestrian malls as one of the most important components of a healthy urban life is also discussed in this chapter.

The third chapter explains the physical and social development of shopping malls emphasizing how development of shopping malls as interior pedestrian places affects the usage of pedestrian malls and activities in public spaces. Integrated pedestrian

systems can eliminate the bottlenecks of both open and closed malls where benefits of each mall system can be utilized. Particular emphasis is given to the examples of integrated pedestrian systems to question possible developments in our country, and the examples of urban design case studies which demonstrate the role of interior pedestrian places in shaping the physical character of city centers is analyzed. Thus, this section aims to present shopping mall and pedestrian mall as pedestrian places. Each of these systems is analyzed as complementary parts of a whole which enhances the quality and continuity of city, and improves socialization process.

Chapter four summarizes the current situation of Ankara in terms of pedestrian and shopping malls. Types of shopping malls and pedestrian malls in Ankara are described. A field study was carried out to conduct a detailed case study on two shopping malls, Akköprü Migros and Karum. In this chapter, the details of the case study are presented. Brief information is given on site selection and methodology of the field survey. Finally, results are evaluated and discussed.

In the last chapter, major conclusions about the integrated environment in terms of the continuity between indoor and outdoor, and pedestrian malls and shopping malls are presented. Suggestions for integrated systems are made according to the findings of the field survey. Experiences of advanced countries in terms of integrated pedestrian environments are also utilized.

## **2. IMPORTANCE OF PEDESTRIAN MALLS AS URBAN OPEN SPACES**

Open spaces have many meanings in the planning process of cities. The direct meaning refers to being “free to be entered or used” which means they are open to many activities and spontaneous actions of people. Krier (1979, p. 15) mentions that “urban space as the ‘external space’, all types of space between buildings in towns and localities”. Although outdoor urban spaces comprise this definition, it also implies a more specific meaning; “spaces with which city people are in frequent contact”. In other words, public open space is “...an outdoor area in the metropolitan region which is open to the freely chosen and spontaneous activity movement, or visual exploration of a significant number of city people” (Lynch, 1990, p. 396).

According to Nasar (1989, p. 31) the word “urban” implies city concerns, whereas it involves other public places in practice. Urban space consists of social space as well as built space. (Colquhoun, 1989, p. 223). Due to the involvement of a large number of actors with various roles and interests who interact in different stages, an urban space represents a social process. (Madanipour, 1996, p. 113). Urban open space is a focal point for people from different age, gender and social groups. Therefore, it offers different social practices in the city.

The best way to understand urban open spaces is to concentrate on the development of their both physical and social processes. Urban space has a social dimension and its relationship with people gives its meaning, which creates a dynamism and change within city. Taking physical, economic, cultural processes into account, time is also important, because urban open spaces are not only physical entities but also social

spatial processes that changes through time. As Madanipour (1996, p. 221) claims “...it is crucial to see urban space in a socio-spatial context, i.e. the physical space with its social and psychological significance”. Moreover, as cited in the work of Rybczynski (1989, p. 67) “making space is a social art; and although architecture consists of individual works, these are always parts of a larger context-of a landscape, of other buildings, of a street, and, finally, of our everyday lives”.

Urban open spaces play an important role in the city because they perform valuable functions for the urban environment. Hence, city can only have a chance to be unique and memorable due to the design of open spaces. Lynch (1990, pp. 397-98) explains why open spaces are valuable in the city as the following:

1. With a minimum of social and economic restraint, urban open spaces expand individual's range of choice and allow following his satisfaction directly.
2. Citizen can demonstrate mastery, to meet challenges, and participates actively.
3. It is a place of relaxation where people confront with new sights directly, without the arbitration of social norm and clues.
4. For meeting new acquaintances and convergence of people of particular interests, open space has a suitable location. People can break through some social barriers and escape from the guidelines of “serious” life.
5. Understanding of self and environment is extended by urban open spaces.

Therefore, people can feel a new and more direct relation of self to the world.

The importance of open spaces for the city should also be discussed. Nowadays, the changing patterns of public spaces have become one of the most significant issues of urban design. Patterns are composed of the relationship between elements and

people. Therefore, environment has a structure and it includes social activities. Public space activities and usage designate the success of urban public life. Plazas, parks and streets are the public places that affect the quality of urban life. Streets are the arteries of the city which include pedestrian environment as well. Madanipour (1996, p. 10) states that "...[an] analysis of urban space is therefore confined to morphology, enumerating the basic elements of urban space, street and square, and its basic forms, square, circle and triangle, with a number of variations and combinations". Indeed, the questions are how urban open spaces support public and outdoor life, and also how the concept of pedestrian zones should be examined in the context of urban open spaces that provide public outdoor life.

Pedestrian malls are one of the most crucial components of urban open spaces. They are significant samples of public spaces (Robertson, 1993, p. 361). For centuries, city centers have been formed by pedestrian activities. After 1950s, the importance of pedestrian zone has enhanced and gained a new meaning. Because, it was realized that pedestrianization has put forward some striking benefits in urban life. Brambilla and Longo (1977, qtd. in Robertson, pp. 6-7) categorized these benefits under four major titles: 1. traffic management, 2. economic revitalization, 3. environmental improvements, and 4. social benefits.

In contemporary urban design, the improvements which can help the downtown pedestrian environments are discussed. Robertson (1994, pp. 8-12) summarizes these improvements under some headings which are: widening sidewalks, discouraging automobile traffic, climatization of the pedestrian environment, improvement of safety and security, increasing attractiveness of walkways, enhancing quantity and

quality of seating spaces, making change existing zoning ordinance, and separating vehicles from pedestrians.

In addition to these improvements, especially, the New Urbanists seem to agree that urban areas should struggle for better pedestrian access to create healthy urban life. Talen (2002, p. 257) states that “there ought to be a greater link, planners say, between where people live and work and where they get the goods and services they require for a high quality of life”. Moreover, she claims that enhancing pedestrian access to goods and services is a main aim of walkable, pedestrian-oriented urban environments. Thus, if the accessibility in an urban environment is aimed as well as other improvements, outdoor public spaces should become more walkable. Renewal of pedestrian zones is a necessary condition to make pedestrian environment more livable and usable.

When these improvements serve to their purpose of making the environment better in terms of user activities, it can be claimed that streets and pedestrian malls play crucial roles for defining the characteristics of urban places. As cited by Appleyard (1981, p. 113) “...we spend much time as pedestrians along the streets of central business districts, retail areas, and neighborhoods. So it is not surprising that the character of streets and their surroundings have been found to have major impacts on quality of life”. The reason for focusing on pedestrian malls as public places is due to their important impacts on environmental quality. Ignoring pedestrian malls while examining urban open space is an incomplete way of understanding the design concerns, the relation between man and environment, and social life; in other words the quality of public life. Streets and pedestrian areas are accepted as the public

realm for the enjoyment of the community. They enhance the quality of urban environment, and convey its cultural meaning.

### 2.1. Design and the meaning of public outdoor places

“Space” is seen as an open, whereas “place” is part of space which is filled by a person or a thing and is donated with meaning and value (Goodall, 1987, p.162).

Biological needs are met and values are felt in a “place” associated with security and stability. This creates the contrast to the openness and freedom of “space” (Clark, 1985, p.191).

Scruton (1984, p. 15) describes “public space” as a “... space [which] is made by public by the nature of its boundary. It is a space into which anyone may enter, and from which anyone may depart, without the consent of strangers, and without any declaration-however tacit-of a justifying purpose. The boundary which creates a public space is both permeable and open to our public uses”. According to Madanipour (1996, p. 149) “public space” can be defined as space “...that allows all the people to have access to it and the activities within it, which is controlled by a public agency, and which is provided and managed in the public interest”. As stated by Arendt (1958, p. 5), “public” signifies everything that come into view in public can be seen and heard by everyone and has the widest possible publicity.

Marcus and Francis (1998, p.1) define “public place” or town square as the heart of the city in medieval towns, as the “...outdoor living and meeting place; a site for markets, celebrations, and executions; and the place where one went to hear the news, buy food, collect water, talk politics, or watch the world go by”. A “public

place” is seen as a place not only created and maintained by public authority but also accessible to all citizens for their use and enjoyment (Jackson, 1984, pp. 276-78). Actually, no matter what the word public means, the most significant issue is that “public” defines a group of people which have an identifiable characteristic and people have the chance to live the role of citizen in public spaces.

In public places, diversity of life can be observed and the patterns of behavior in the city can be examined in relation to the meaning of environment and the relationship of individuals with others and with their environments (Madanipour, 1996, p. 63). In one sense, public places are the matrices of social groups. Moreover, public places should reinforce social experience, in other words, they should not only be related to space but also social structure and human values. Carr et. al. (1992, p. 18) claim that “when designs are not grounded in social understanding, they may fall back on the relative certainties of geometry, in preference to the apparent vagaries of use and meaning...Public space design has a special responsibility to understand and serve the public good”.

Identity of the public places can be created by making them memorable and recognizable. This quality gives a sense of place to the entire city. The success of outdoor public places depends on their identity which includes some criteria such as access, linkages, comfort, uses and activities.

Project for Public Spaces (PPS) (2001, p.1) has made a research in 1997 on over 1,000 public spaces around the world and found that successful public spaces have four major qualities:

1. Public places should be “accessible”.

Accessibility of a place is determined by its visual and physical connections to the surroundings. A successful outdoor public space is perceived from a distance and closely and convenient to public transit. Moreover, edges of the space are significant. For instance, it is more interesting and safer to walk on streets which have shops than blank walls or empty lot.

2. People should be engaged in “activities”.

Activities are the key stones of an outdoor public place which give people a reason to visit. If a public space is empty that means something is wrong, either because of its design or its management.

3. The space should be “comfortable” and have an “image”.

Success of the public place is judged through comfort level and image of this place. Safety, cleanliness, and the availability of places to sit are the components of comfort. Meanings shape our environment and these meanings define imageable parts of the city. Sense of place-identity and continuity should be supplied to make public places more legible.

4. It should be a “social” place.

People should meet each other when they come to visit. Although sustaining sociability is a difficult feature for a place to achieve, once it is provided, it makes an outdoor public place a successful one. When people see friends, meet each other and feel comfortable interacting with strangers, they feel a stronger sense of place or connection to their community (See Fig.1 for the factors making public space more accessible).

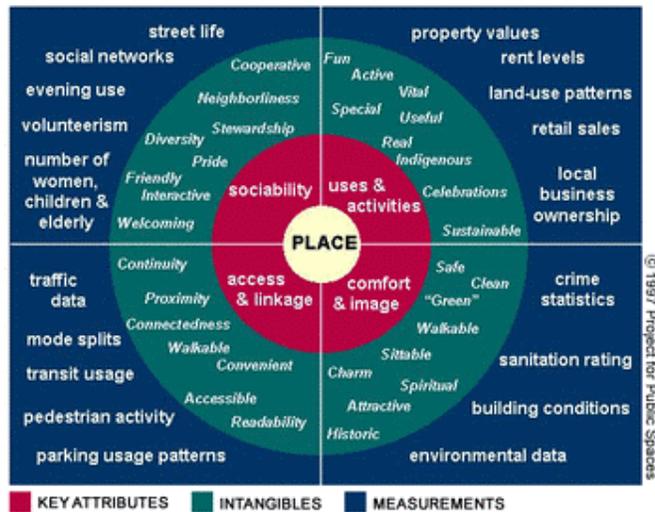


Figure 1. Characteristics of accessible public spaces, (Project for Public Spaces, 2002).

Another view about the success of public places is developed by Carr et al. (1992, p. 19-20) Being *responsive* is the basic premise of public places which are designed and managed to serve the needs of their users; being *democratic* means being accessible to all groups and providing freedom of action; and being *meaningful* means allowing people to make strong links between the place, their personal lives, and the larger world.

In fact, meaning of the public place lies in the success of its usage. The use and recognition of public places depend on location and design. Therefore, being aware of the relation among design, location, and use is very important in order to understand the meaning of outdoor public places. Hence, if a public place is to be developed it should be viewed in the framework of the entire city, which means that the identity or image of the outdoor public places should be examined in the city context. Public places are the primary needs of cities. Streets are the antecedent condition of the relationship between public spaces and the city. Scruton (1984, p.

18) states that “people can live without parks, but not without streets, they can live without greenery, but not without accessible windows and doors. The street is the most important of open public spaces”.

It is very obvious that pedestrian malls have a direct influence on public spaces in downtown. The more the number of pedestrian malls, the more inviting the downtown will be. According to Robertson (1993, p. 364) “the creation of attractively designed and well-used public spaces is a common goal of most downtown plans...Pedestrian malls, which often resemble linear park like corridor, increase the amount of public outdoor space downtown”. The volume of pedestrians determines the efficiency of public places in a city.

Access is one of the main means to increase the pedestrian traffic. Pedestrian access can create the characteristics of a public place. Increasing access, especially pedestrian access is a key factor in terms of the development of public places in urban environment. As Talen (2002, p. 275) suggests “planners should seek to remove impediments that separate people from the amenities and services they require”. Pedestrian malls are the major areas that supply the condition of pedestrian access while improving the city characteristics and the quality. Hence, the quality of public life in the city is designated by pedestrian malls.

## 2.2. Pedestrian malls in urban context

### 2.2.1. Definition and types of pedestrian malls

Walking is the most used form of transportation and an important process for socializing in crowded environments. Due to the character of this movement,

pedestrians can perceive their environment easier and better than drivers so that they have more chance to be aware of the environmental quality in an urban area. It provides flexibility in movement, as well as being beneficial and efficient, because as Robertson (1994, p.1) mentions, “society at large benefits because pedestrian transportation results in minimal harmful impacts on the physical environment and reduced use of fossil fuels”.

In contemporary cities, mall gains a new meaning; it is not only a place “lined with shade trees and used as a public walk” (Rubenstein, 1992, p. 21) but also offers a life style with its design whether users are aware or not. As stated by Rubenstein (1992, p.21) “as used today ‘mall’ denotes a new kind of street or plaza in central city business areas oriented toward pedestrians and served by public transit”. When a street is closed to traffic that can turn into a place where people stroll, sit, eat, and watch the activity going on around them. A number of continuous blocks along a shopping street, which is used by people on foot, have consisted of pedestrian malls. As Marcus et. al. (1998, p. 23) state, “in most cases a pedestrian mall has modified paving, either eliminating or narrowing the pre-existing roadway; increased planting; and some level of street furniture. It may or may not include amenities such as food sources, vendors, entertainment, or public art”.

The full mall, the transit mall, and the semi mall are the three major types of pedestrian malls. They present different types of designs. According to Rubenstein (1992, p. 21), full mall is formed by closing a street for vehicular traffic and improving the pedestrian street with new paving, street trees, street furnishings, and other amenities such as sculpture and fountains. The full mall should provide visual

continuity, a special character, and help to create an image and sense of place for the downtown. Fulton Mall: Fresno-California (See App. A for Fig. 1a and Fig. 1b), Ithica Commons: Ithica- New York (See App. A for Fig.2a, Fig. 2b, and Fig. 2c), (Rubenstein, x), Sakarya Street: Kızılay-Ankara (See App. A for Fig. 3a, and Fig. 3b), and Yüksel Street: Kızılay-Ankara (See App. A for Fig. 4), can be given as the examples of this type.

Transit malls are the most common type of pedestrian malls, and had been developed in the United States in the 1980's and 1990's. By definition, transit mall allows only public transit such as buses, or light rail, and eliminate automobile and truck traffic on an existing main retail street. One of the main aims of a transit mall is to link activities along its route involving retail, office, hotel, entertainment, and housing (Rubenstein, 1992, p. 21). Moreover, transit pedestrian malls help to create a unity in terms of a city image. Rubenstein states that “the transit way acts as a retail spine or corridor through the downtown. On-site parking is prohibited, walks are widened, and specially designed streetscape treatment is provided to create a unique image for the central city area. Portland Transit Mall: Portland-Oregon (See App. A for Fig. 5a and Fig. 5b), Nicolet Mall: Minneapolis-Minnesota (See App. A for Fig. 6a, Fig. 6b, and Fig. 6c), 16<sup>th</sup> Street Mall: Denver-Colorado, River City Mall: Louisville-Kentucky (Rubenstein, x) are among the examples.

Semi mall is obtained by reducing the amount of traffic and parking and they are generally placed on primary streets which are linked to main retail areas in the city center. New paving, street trees, street furnishings, lighting, signage, and other amenities are the elements that increase the value for pedestrians and provide the

linear character of the street, and create a new image for the downtown (Rubenstein, 1992, p. 22). Hamilton Mall: Allentown-Pennsylvania (See App. A for Fig. 7a, Fig. 7b, Fig. 7c, and Fig. 7d), Broadway Plaza: Tacoma-Washington, Harbor Centre: Sheboygan-Wisconsin (Rubenstein, x), İzmir Street: Kızılay-Ankara, Olgunlar Street: Kızılay-Ankara (See App. A for Fig. 8) are some of the examples.

Sometimes, the types of pedestrian malls can be confused due to different terminology, whereas when the literature is examined three types of malls are seen. For instance; traditional mall has the same meaning with full mall which is a street completely closed to traffic, mixed mall is equal to semi mall (or shared mall) that allows limited use by automobiles, perhaps only during certain hours, and transit mall is generally pronounced the same, it allows for buses, shuttles, or other transit, but not for private automobiles (Marcus et. al., 1998, p. 23).

In the 1960s and early 1970s most of the pedestrian malls were traditional pedestrian streets where motor vehicles were not permitted. Therefore, pedestrians seemed as “king of the road”. Nevertheless, pedestrian traffic was found inadequate to sustain high levels of street activity. Hence, cities opened their pedestrian malls to transit systems or limited automobile traffic. The assumption is that buses or cars will provide a more stable mall activity that will result in greater densities of people on the mall (Robertson, 1994, p. 45).

Although pedestrian activities have played an important role on the evolution of a city center for centuries, after the increase in vehicular traffic, pedestrian activity had been disappearing especially in capitalist countries like US. As Robertson (1993, p.

361) states the attractiveness of downtown streets for pedestrians has been reduced because of the narrowed sidewalks which permit additional lanes of traffic, insensitive building design, and a decrease in street level shops and activities. Moreover, people feel as if they are isolated because of the long distances between buildings. Therefore, downtowns have become less walkable. Then, it is agreed that a model in which both pedestrian and limited vehicular traffic work together should be preferred by city planners and these new efforts can be seen as a part of the revitalization of the city center.

Multi-functionality of environment which involves various public uses and activities improves public life. As the pedestrian malls are open to public and can be used by everyone for any activity, they act like mirrors of the community and the outdoor life in the pedestrian malls reflects all aspects of it.

According to Robertson (1994, pp. 2-3), a number of factors help to create the unfriendly contemporary pedestrian environment. These are as follows: 1. Low priority is given pedestrian transportation in relation to the automobile. 2. Increasing distances between destinations make walking less attractive. 3. The plenty of obstacles to be found on the sidewalks. 4. The overall quality of the pedestrian environment. Therefore, people can choose walking if some conditions are provided; such as, perceiving walking as an enjoyable activity, decreasing the distances between destinations, providing a comfortable and safe environment. These can be supplied by the design or redesign of various types of pedestrian malls. In order to maintain these conditions, pedestrian malls should offer “a center for exhibits, concerts, fashion shows, antique car shows, parades, band concerts, arts and craft

festivals, and other events. A mall also provides shaded areas in which to walk, sitting areas in which to relax, sculpture, fountains, outdoor dining areas, and interesting paving and night lighting effects” (Rubenstein, 1992, p. 23). Thus, as the pedestrian malls achieve their aim by providing the conditions that are discussed above, the usage of pedestrian zones will find their deserved places in the city life.

### 2.2.2. Development of pedestrian malls

Greek Market place (Agora) is the beginning of the development process of urban public spaces. Urban spaces, which had commerce and government facilities, were pedestrian-oriented before the invention of the automobile. Moreover, they were places where people gather for various activities. Mostly, the city image was created with the help of these pedestrian spaces. Some specific demands like shopping or having lunch were satisfied in festival market space which also provided amenities of sculpture, fountains, and well designed street furnishing. These mixed-use spaces were connected to various types of pedestrian malls. The early colonial town was formed by the gridiron system of street enclosed by a wall. In the planning and design of cities and urban spaces both the module (the column size determined by Roman rules of proportion) and the gridiron system are still being used. The commercial and governmental center of Rome which is called as the Republican Forum worked as a marketplace. As these kinds of larger buildings increased in time, the architects began to group buildings around squares to shape urban spaces (Rubenstein, 1992, pp. 1-3).

In the medieval era, as a result of the population increase, commercial activities created the need for market places. In the plazas, religious ceremonies, governmental

events, and theatrical productions were also placed. Medieval towns had streets with views directed toward nearby buildings or landmark elements like the church tower. For instance, Piazza del Campo in Siena, Italy constructed between 1288 and 1413 is still one of the finest piazzas in Europe. As Rubenstein (1992, p. 4) states,

“The streets leading into the piazza are narrow, and the open space becomes very dramatic on arrival. It has an ordered spatial structure and a sense of enclosure reinforced by limited sight lines. The main streets are lined with shops, and the entrances are located in relation to the placement of the Mangia Tower... The overall space has an organic form and gives the general impression of a shell... The shops, outdoor eating areas, and aesthetic features make it popular...”

Another popular outdoor world-wide space in the world is Piazza San Marco in Venice, Italy. The construction began in 830 and totally finished in 1810, because in the sixteenth century an evolution of the space started with the objective of perfecting it. By its sense of place, focal points, scaling elements such as columns, paving materials and works of art it affected the American design (Rubenstein, 1992, p. 7).

Medieval towns were carved and formed the piazzas of the Renaissance, also given a monumental scale and form. The Campidoglio in Rome, Italy which was constructed in 1538 is a link between the Renaissance in Florence and the Baroque in Rome. Three buildings define the urban space and it represents a synthesis of nature and culture, as well as providing unity and coherence of design. Today, these buildings are used as museums. During the Baroque Period, the reason why plazas were created is due to the need of displaying religious and civic structures such as Piazza di San Pietro in Rome, Italy. The overall space is composed of three areas, each has a specific name. The piazza has a small terracing and importance in terms of being a

monument. Moreover, it provides a huge outdoor space when crowds gather for specific purposes (Rubenstein, 1992, pp. 8-12).

In the seventeenth century, plazas were more enclosed isolated spaces than in the eighteenth century. The spaces were open and during the baroque period in the eighteenth century the streets in Paris, France focused on the royal palace. In the nineteenth century, Paris Boulevards played an important role in the development of pedestrian malls. In addition, in West Germany, as a result of urban congestion in a number of narrow shopping streets, there was an explosion of the construction of pedestrian malls which resulted in to 214 pedestrian malls by 1973, 340 pedestrian malls by 1977, and 800 pedestrian malls by the end of 1980s (Rubenstein, 1992, pp. 13-15).

In the early twentieth century, it was very common to close narrow medieval streets to wheeled traffic. But the attitude was changed in the mid-twentieth century, especially in the city centers; pedestrian movement was narrowed because of the increasing numbers of vehicles (Lynch, 1990, p. 87), which caused a problem for people as the time passes. Wider gathering spaces, instead of narrow sidewalks were demanded. Therefore, in this period, pedestrian malls have been designed and applied. The concept of pedestrian zones embodies not only the spaces between buildings, but also the environment in which socialization occurs. As Levent (1999, p. 86) mentions “the formation and continuation of [pedestrian] activities is strongly tied to urban environment”. Britain discovered the pedestrianization of shopping streets in 1923, whereas “high streets” were pedestrianized in the late 1960’s. In those years, Germany affects America in terms of a traffic-free system. In 1959,

Kalamazoo, Michigan, as the first downtown pedestrian mall was completed in the United States. Nevertheless, few numbers of new pedestrian malls have been built since 1980 (Robertson, 1993, p. 365).

As Rubenstein (1992, p. 15) states, after World War II, due to rapid urban growth, affluence, a large number of cars and the dense urban fabric with a relatively high residential population, pedestrian malls have been developed. “The historical quality of the area and the use of materials, graphics, furnishings, and other amenities are inviting to people and these urban spaces have been very successful. The idea of the marketplace with its mixed uses, activities, and amenities relates back to the ancient Greek Agora where the concept for these urban spaces began to develop, and continues to serve the same human needs today” (Rubenstein, 1992, p.18).

When the historical background of pedestrian malls is considered, it is seen that today’s conditions require some modifications. For instance, the development of full malls dates back to early projects in the 1960s and 1970s, but today generally semi malls and transit malls are built. It is realized that if the traffic is totally removed, enough volume of pedestrian traffic can not be reached. Thus, there should be a parking area and public transit in a walkable distance to the mall.

### 2.2.3. The effects of pedestrian malls on city image

Imageability helps people to find their ways within the city and people give meaning that legible places which has a direct influence on their movement. Pedestrian malls are the places where outdoor activities occur, and that creates movement in the city. Therefore, this dynamism has a crucial role in terms of city image. As Nasar (1998,

p. 6) reports “imageability helps us orient and find our way around, thus enhancing our enjoyment of a city. [A]ccording to Lynch, the environmental image has three parts: identity, structure, and meaning. We recognize or identify objects, we see a recognizable pattern, and we draw emotional value in relation to them”.

There are two evident and different views about pedestrian malls. One of them advocates that pedestrian malls soften the environment and make the city more human scaled, and the other one asserts that these malls make the city center old-fashioned. Actually, no matter how well they are designed, their value depends on the degree of use which creates the downtown image (Robertson, 1993, p. 364).

As Rubenstein (1992, pp. 22-23) states, there are many reasons to build a pedestrian mall: increase retail sales, to compete with suburban shopping centers, to encourage private investment by creating a stable environment for retail business. Nevertheless, one of the major reasons for building a pedestrian mall is to create a new image for the city. Therefore, any types of pedestrian malls create not only new opportunities for various uses, but also a new identity of a city. It is obvious that, a well planned and designed mall supplies an improved physical and social environment. As Isaacs (2001, p. 145) mentions “physical design is only one of the factors involved in the transactional relationship between pedestrians and their environment. Social and economic issues, urban infrastructure and individual life style choices have much to do with drawing people to a particular urban location”. Pedestrian malls reflect life styles, and preferences of people, increasing the imageability of a city and the quality of urban life.

Although it is difficult to measure ‘good city image’, Lynch (2002, qtd in Inam, p. 50-51) developed a theory of ‘good city form’ that can be adapted to an image of a city because if a good form of city is provided, it is inevitable that a city will have identity, structure, and meaning which are the components of a ‘good city image’.

Lynch’s seven dimensions are as follows:

1. Vitality: The degree to which an urban form maintains the fundamental functions, the biological requirements, capabilities of human beings, and protects the survival of the species (e.g. adequate throughput of water, air, food and energy).
2. Sense: The degree to which an urban form is both perceived and mentally differentiated and structured in time and space. Moreover, the resident’s values are connected with that mental structure (e.g. distinct identity and unconstrained legibility).
3. Fit: The degree to which an urban form suits the pattern and quantity of actions that people usually engage in (e.g. compatibility between function and form).
4. Access: Capability to reach people, activities, places; embodying the quantity and diversity of the elements that can be attained (e.g. ease of communication and transportation).
5. Control: The level of access to, use of, maintenance of and modification to urban spaces and activities are managed by those who use, work or live in them (e.g. local power).
6. Efficiency: Creating and maintaining an urban form in terms of cost (e.g. less energy demanding process).
7. Justice: In the light of equity, the method in which urban form costs and benefits are dealt out among people (e.g. equal protection from environment hazards such as cars).

As Inam (2002, p. 51) states the emergence of these dimensions comes from fundamental human values and they serve as powerful measures of what a good urban design is, they are applicable in a wide range of urban contexts. Therefore, these measures can be used while evaluating pedestrian mall as a part of the city image, as the pedestrian malls are one of the most important concerns of urban design, they should be supportive for a satisfying environment as well as for creating an image for the city.

#### 2.2.4. Design concerns of pedestrian malls

People are affected from their physical environment and any design element should take this relationship into account. In the design of pedestrian malls, a variety of design elements and criteria should be considered. Influences of pedestrian malls on environmental quality and social life should be evaluated to satisfy basic needs of people and consequently, define the appropriate design elements. The design of urban spaces for pedestrians, especially pedestrian malls, should fulfill individuals' needs and propose specific functions. Meaningful relations between people in motion and environment can be created through the design elements and strategies.

While designing a pedestrian mall two basic issues play a crucial role. The first issue is that pedestrian mall should be thought in the context of the urban environment, and the second one is that the design elements should be chosen according to the specific location of a mall, in other words, the success of pedestrian mall depends on the selection of appropriate furnishings. Rubenstein (1992, p.57) emphasizes the role of furnishings in design of a pedestrian mall stating that “the design of a mall or plaza

must consider the type, size, scale, location, and materials of all street furnishings. These elements include paving, lighting, graphic design, sculpture, fountains, bollards, seating, planters, telephones, kiosks, shelters, canopies, trash containers, and drinking fountains. The design, detailing, and choice of materials of the furnishings are important not only for design continuity but also for durability and ease of maintenance”.

In pedestrian malls, people find meanings in their environment which shape their behaviors. Some of these meanings come from our past (memory) and some are acquired through design elements (objects) which should enhance the quality of environment. As a result, it can be concluded that, design concerns of pedestrian malls are important clues for social interactions and spatial relations to improve urban environment.

#### 2.2.3.1. The influences of design elements of pedestrian malls on environmental quality

It is obvious that, design of outdoor places in urban realm affects people’s preferences. In a wider perspective, it is critical to determine how outdoor design affects on the choices of people. Bentley et. al. (1985, p. 12-13) argue that the design of a place affects the choices of people at many levels as follows:

“-it affects *where people can go*, and where they can not: the quality we shall call *permeability*

-it affects the *range of uses* available to people: the quality we shall call *variety*

-it affects how easily people can *understand* what opportunities it offers: the quality we shall call *legibility*

- it affects the degree to which people can use a given place for *different* purposes: the quality we shall call *robustness*
- it affects whether the detailed *appearance* of the place makes people *aware* of the choices available: the quality we shall call *visual appropriateness*
- it affects people's *choice of sensory experiences*: the quality we shall call *richness*
- it affects the extent to which people can put their *own stamp* on a place: we shall call this *personalization*".

To attain these qualities, the criteria of design elements of open public places should be taken into account. The main design elements and furniture of pedestrian malls which are paving, lighting, graphic design, sculpture, fountains, drinking fountains, bollards, seating, tree planters and pots, kiosks, shelters, canopies, clocks, telephones and trash containers have a direct effect on the quality of socio-physical environment. Hence, pedestrian malls offer a more extensive usage of urban open places, which plays an important role in many people's life.

One of the most important elements in the design process of pedestrian malls is the usage of the pavement of the floor. Utilizing its size, shape, color, and texture, different kinds of feelings can be created, while defining spaces such as entry, or boundaries of a shop front. Moreover, it is possible to orient pedestrian by the use of various types of paving. Marcus et. al. (1998, p.51) argue that "a change in surface that is readily apparent to the feet and eyes, such as the transition from sidewalk paving to brick, can define a plaza as a separate place without discouraging entry" (See App. A for Fig. 9a, Fig. 9b, Fig. 9c, Fig. 9d, and Fig. 9e).

The order of a pedestrian mall has a direct relation with the design of paving pattern. Another feature of paving is its sense of scale by the use of materials like brick, concrete, and stone. Durability and easy maintenance are the crucial factors in the selection of paving materials. Moreover, the slope of the paving and the way in which water runoff is gripped should be considered (Rubenstein, 1992, pp. 57-62).

The duration of activities in the mall is extended by lighting because it has a direct influence on safety and security in addition to its basic contribution, to increase visibility. Moreover, it inserts attention by accenting plantings, fountains, sculpture, buildings, graphics, and other features. Several types of light sources are available such as incandescent, fluorescent, and high-intensity discharge lamps (Rubenstein, 1992, p. 62). Selection of types of lighting depends on the design characteristics of the mall and its specific location. For example, if steps exist, sufficient light should be supplied to illuminate these areas. Light standards for pedestrians are different from street lighting such as their height and distance of their placement. As Dentay and Dines (1988, p. 510-6) mention “for pedestrian area lighting, the light source should be relatively low to the ground in order to remain in scale with human body and to provide light beneath the canopy of street trees” (See App. A for See Fig. 10a, Fig. 10b, and Fig. 10c).

A pedestrian mall needs extensive system of signs to create its identity and legibility. As cited by Rubenstein (1992, p.67) “signs are part of the overall graphic design for a city. They convey messages that are essential to the function, safety, and security of a mall. A symbol or logo can be very important in giving identity to a mall. The logo can be useful for public relations purposes”.

Signs should be recognizable in the urban scale and convey the same information in the central city area in terms of color, shape, message, and location. Both informational (e.g. maps, directories) and traffic signs should be legible. That's why their color, proportion and shape must be identical. Also, they should be placed in appropriate locations for an easy pedestrian viewing (See App. A for Fig. 11a, Fig. 11b, and Fig.11c).

Rubenstein (1992, p. 67) summarizes basic purposes of signs under four main headings as follows:

1. To create mall identity.
2. To develop traffic flow.
3. To spot commercial facilities.
4. To offer information on the direction or location of activities.

The use of sculpture for city decoration has a long history because it improves the quality of the city as well as pedestrian malls as a design element. Sculpture plays a crucial role in the city image. The atmosphere of a place is affected by the scale, form, size and color of a sculpture. Rubenstein (1992, p. 68) states that "the size and scale of a sculpture should be appropriate to its setting which in an urban area comprises the buildings and space of which it will become an integral part. A sculpture must be large enough to have an impact on its surroundings. The form of a sculpture, that is its shape and structure, will either blend or contrast with its setting". (See App. A for See Fig. 12a, Fig. 12b, and Fig. 12c).

There are some principles to place sculptures in the cities. Moughtin et. al. (1995, p. 125) claim that there are three main traditional types of arranging sculpture: “(i) the single figure, (ii) the group and (iii) the equestrian statue”. Distribution of sculptures is affected by the usage of the space in which they are located. For instance, before selecting variety of forms, it should be decided if they are used as a focal point or define a boundary or to symbolize the meaning of a plaza or a pedestrian mall. As Halprin (1963, p.87) figures out “these great sculptures are focal points which are vital elements in the hearts of cities; they are pivots in great plazas; spaces eddy around them, are pinned down by them, focus on them. Around them the life of a city moves and is made more meaningful”.

Materials of a sculpture should be durable and resistant to urban pollution. Color selection is depended on the chosen material. Orientation is very important in relation to where a sculpture is placed. Seasonal changes, background, foreground, views of a sculpture from different directions, should be considered. Sometimes sculpture can be a part of another design element such as a fountain. Moreover, sculpture is affected by night lighting which gives added interest to a sculpture. (Rubenstein, 1992, pp. 69-70).

For centuries, people have brought water into cities not only for aesthetic purposes, but also functional purposes. In a pedestrian mall, fountains work as one of the most identifiable and focal design element. Water has many qualities, and can be used to give different effects in fountains such as “quiet waters, gushing waters, running water, waterfalls, edges, jets, bowls, pool bottoms, and sculpture with water” (Halprin, 1963, pp.135-159) (See App. A for Fig13a, and Fig. 13b). Therefore,

designers have the chance to use variety of these effects, such as, quiet water that mirrors the environment, gushing water that can create sound effect, while giving a character to the mall as well. As Rubenstein (1992, p.73) states “the sound of water, its cooling effect, and its reflective qualities provide the designer with a wide range of creative possibilities”.

Seasonal changes, orientation and climatic factors are also important while designing and placing the fountain in a pedestrian mall. Lighting can be very effective to emphasize fountain like sculptures. Moreover, “fountain details, materials,... mechanical systems, and piping” (Rubenstein, 1992, p. 74) are very consequential, because, if fountains are not supported by technical equipments they can be a disaster for the quality of the environment.

Drinking fountains add interest in pedestrian malls as well as their functional purpose. Besides, a drinking fountain can act as a sculpture. Drinking fountains can be made of different materials such as concrete, metal, stone, or masonry; also, they have freeze proof types which prevent frost problem in cold climate. (Rubenstein, 1992, p. 87). In addition to this, drinking fountains as design elements have social values. In ancient cities, a well designed drinking fountain worked as a place where social life and gossip came into existence (Halprin, 1963, p. 84). Therefore, drinking fountains are not only functional and aesthetic design elements, but they also reflect cultural backgrounds which can add more social meaning to a pedestrian mall (See App. A for Fig 14a, and Fig. 14b).

Although the bollards are necessary design elements of a pedestrian mall, they should be in unity with other design fundamentals. Halprin (1963, p. 128) describes bollards as “small scaled sculptures” which are “used to channel movement on ramps and streets and to exclude wheeled vehicles in a polite way. They do not say ‘Stay out,’ they say, ‘Come in on your feet’”. They separate traffic from pedestrian zones. Sometimes, bollards are used together with chains to increase the feeling of separation or help to form a barrier. To illuminate pedestrian areas or the roadway of a semi mall or transit mall they can also be combined with night lighting (Rubenstein, 1992, p.81) (See App. A for Fig. 15).

Seating is important as a design element in terms of the functionality of a pedestrian mall. Dentay and Dines (1988, p. 510-13) argued that seating should be placed in order to “1. be sheltered from wind 2. take advantage of site views 3. be situated back of circulation paths 4. provide a variety of options for pedestrians, such as sunlight, shade, quietude, activity, formality, informality”.

Benches as one of the most common used seating elements should be appropriate to the context of the mall, and their materials should be chosen according to the durability, ease of maintenance, and resistance to vandalism. Placement of benches is a crucial design consideration, because it affects how a mall functions. According to Rubenstein (1992, p. 81) “benches are often combined with raised planters or walls , and in full malls are sometimes placed toward the center of the pedestrian street and separated from major circulation by the planters or walls”. In addition to benches, sometimes walls, steps, and tree planters are used for seating. Seating areas should have protection from the weather conditions which can be canopy of trees or a hard

landscape structure. As a result of these considerations, seating places in pedestrian malls will become more comfortable. Halprin (1963, p.118) emphasizes that "... a city can be judged by its benches; their availability for use, their design, are a clear indication of a city's concern for its citizen's comfort" (See App. A for Fig.16a, Fig.16b, Fig.16c, Fig. 16d, and Fig. 16e).

Tree planters as one the design elements that designate the quality of urban environment have many types both for trees and flowers. As Halprin (1963, p. 65) mentions "...bright splashes of color can do much to bring a quality of urbanized nature into the city". Sometimes, they can function as not only a planter, but also a seating area. If the appropriate height of planter is supplied as a seating area, people prefer to sit on tree planters, as they generally prefer to sit in shaded areas. The selection of both type and material of tree planters and pots is very important, because they have a great influence on the quality of the pedestrian mall. If they are not well drained, it can be a problem for pedestrians, such as mud on the pavement, and the entire environment (See App. A for Fig. 17a, and Fig. 17b).

Pots create a colorful and interesting environment, and reflect the atmosphere of the pedestrian mall. Moreover, they have a power to soften the environment. According to the direction of sun light, their place can be changed, and pots can be filled with seasonal flowers. These arrangements make flowers' durability to urban conditions longer. Rubenstein (1992, p. 84) notes that "flower pots can be placed in a variety of locations to add interest and color to urban areas. Pots are also versatile and may be moved and rearranged for special or seasonal displays" (See App. A for Fig. 18a, Fig. 18b, and Fig. 18c).

Tree grates can act as paving pattern of a pedestrian mall. If trees are planted directly in the base plane of a mall, they can become a part of a design element in the paving pattern. They have an important influence on pedestrian malls, because they offer a wider expanse to walk areas. Moreover, tree grates are used in order to reach the roots of a tree, and to help maintenance of the open areas around trees in paved areas (Rubenstein, 1992, p. 62).

Kiosks, shelters, and canopies are the major needs of a pedestrian mall for its sustainability. Kiosks work as focal design elements, add color, and maintain a particular mood. Also they often supply night lighting, and have been used for bulletin boards, street directories, display cases, and information booths. (Rubenstein, 1992, p. 85). Actually, using kiosks are common in our country during centuries. As cited in the work of Halprin (1963, p.73) the meaning of kiosk “comes from the old Turkish word, “Kiusck” (Köşk) which means pavilion”. These small structures have power to give our environment a character, therefore, the design and material selection is very crucial for the quality of urban environment (See App. A for Fig. 19). People can prefer to have a rest in shaded areas in hot summer days, and they do not want to get wet in winter while sitting. Hence, in order to provide protected sitting areas in pedestrian malls, shelters can be used, because climatic conditions can cause a problem (See App. A for Fig. 20a, and Fig. 20b). Moreover, bus shelters are important for people who use malls as a transit pedestrian mall. In addition to these, as mentioned by Rubenstein (1992, p.86) “...shelters become architectural features of the mall”. In other words, it can be said that shelters are the design elements that give the pedestrian mall its unique identity.

Canopies, like shelters, have been used in the design of several pedestrian malls. They provide weather protection and act as a unifying architectural design element. Sense of place can be created by appropriate choice of materials, structural system, and form. It is necessary to add lighting into the design of canopies, and additional continuity to the design can be given by lighting canopies (Rubenstein, 1992, p. 86).

Clocks, telephones and trash containers are the other design elements of pedestrian malls which have an effect on environmental quality. Clocks are both functional and aesthetic elements in an urban environment. Sometimes, people meet around the clocks which means that they can also perform as a landmark (See App. A for Fig. 21). Moughtin et. al. (1995, p. 121) mention that “the town clock is an object with a propensity for registering a strong impression on the eye and the mind of the passer-by. The clock, if carefully sited and with sensitively designed setting, is a potential landmark with a strong visual image”.

Telephone kiosks are one of the most significant urban structures, which gain one more meaning on pedestrian malls as being street furniture, in other words, in addition to their function they reflect the design characteristics of a mall (See App. A for Fig. 22a, and Fig. 22b). The color and form of public telephones should be recognizable to serve its purpose. If the sufficient importance is given to design of telephone kiosks, they can help for the identification of a pedestrian mall. Moreover, As Rubenstein (1992, p. 85) mentions, ease of maintenance and less opportunity for vandalism should be provided by the design of the public telephones with or without booths.

Trash containers enhance the quality of an urban environment as a design element. Although it is obvious that the main aim of the design and usage of trash containers is to keep the city clean, the materials of trash containers should also be considered for aesthetic and durability (See App. A for Fig. 23a, and Fig. 23b).

Plants are vital elements of a city. They soften the hard, firm surfaces of urban construction with the foliage, texture and shadow, and give people a chance to contact with nature (Halprin, 1963, p.163) (See App. A for Fig. 24a, and Fig. 24b). The Design Council (1983, p. 14) states that trees are potentially the largest insertions in the street. Moreover, shrubs and flowers should be considered in the planning process, and become a basic design element instead of justifying left-over spaces.

The solution of design and selection of tree type should be coherent, in other words selecting the appropriate species for a pedestrian mall affects the quality of design. As Arnold (1993, p.81) mentions “trees define spaces, regulate light, induce scale, and record the seasons. These aesthetic characteristics vary greatly among different species. The open space designer attempts to find the perfect compromise among the complex criteria like location, climate, and use”. Dimensions, branch structure, density of foliage, growth rate, seasonal color, visual coherence in terms of aesthetic criteria, regional determinants such as climate, topography, soil type, site use, and local determinants such as air, water, light in terms of cultural criteria, transplanting, availability, maintenance and safety in terms of operational criteria are the major criteria while selecting the plant type (Arnold, 1993, pp.83-100).

Plants have a psychological effect on people's mood like providing privacy and a sense of springtime as flowers bloom. They are used either in groups or in solitude. As Halprin (1963, p. 164) states "groupings in bosques, either pollarded or pleached, can define a space far more successfully than the linear quality of trees in rows. Treated as high edges, they enclose spaces as walls of green; grouped, they can be organized carefully into symmetrical architectonic masses or placed loosely in green square". Actually, the effect which designer wants to create is important according to site assessment of existing conditions.

In urban areas, selection of a plant type needs more attention, because urban conditions such as pollution are hard for a plant to survive (See App. A for Fig. 24c, and Fig 24d). Therefore, the ecological requirements of a plant should be carefully evaluated during the design process. For example, evergreen trees can not survive under industrial pollution; on the other hand, some deciduous trees can not resist windy conditions. Moreover, times of the year, type of the plant wood and root zone are crucial points that should be considered before transplanting.

In addition, it is very critical to apply design principles to make pedestrian mall more aesthetic and functional. Rubenstein (1992, pp. 48-54) in his work explains design principles which should be considered in a successful pedestrian mall are as follows:

**Figure-Ground** relation is the distinction of an object to the ground. For example, trees are vertical elements on a mall, such as lights, can be noticeable as figures in contrast to buildings. Clarity and identity is given to the mall with such contrasts.

**Continuity** is obtained by a series of coherent parts. By selecting a particular color, scale, form, or texture of the pavement of the floor, continuity of paving can be provided.

**Sequence** is continuity in the perception of space or objects arranged to give a succession of visual alter. It affects the ambience of the pedestrian mall, and sometimes it is used to give direction of the place.

**Repetition** is the simplest type of sequence which includes shape, color, or texture. As an example, one type of street light can be chosen and repeated throughout the mall.

**Rhythm** is a sequence of repetitive elements broken up at specific intervals. Creating design with a change using different materials can be supplied.

**Proportion** is the ratio of height to width to length.

**Hierarchy** is a system that is used to rank sizes and colors that can be related to rank the sizes of elements in a paving pattern. Moreover, in a pedestrian mall, it can give distinction to an area around a sculpture or fountain by changing the size or color of the paving.

**Dominance** is having the largest size or the most prominent position. There may be a dominant space in a pedestrian mall involving a special activity or focal elements.

**Texture and pattern:** When the size and shape of individual parts as they form a continuous surface can not be determined, there is a texture. If someone can differentiate the parts of a whole, then there is a pattern. Especially in walk designs for creating color, contrast, and interesting pattern is prominent.

**Transparency** gives depth by overlaps or diffusion of vision. If the design elements overlap and change in terms of color, environment can become more interesting.

**Direction** is an area that gives order to elements or a line along which things are located.

All these design principles influence each other. Thus, urban designers should consider each design principle in relation to its context. Besides, success of a pedestrian mall is also determined by the sense of place. If the atmosphere of a mall attracts people that means pleasant environment is obtained by the effective use of design principles. Successful pedestrian malls can encourage face to face interactions to support public life. Moreover, they should encourage human activities which help to provide a lively urban environment. Successful pedestrian malls are the most important components of a healthy urban life. Therefore, they should answer the needs of the disabled people because the basic premise of an open public place is the provision of equal services and facilities to all citizens.

#### 2.2.3.2. The influences of pedestrian mall design on social life

Pedestrian malls are social environments which are created by human activity, communication and face to face interactions. They offer people to live together with different social groups. As Levent (1999, p. 30) states, with the help of pedestrian activities "...the chance of face-to-face communication increases, so that people could gain a lot of messages and information about the others and the physical environments. These messages and information help people to test/judge their social roles and positions in the society and to be more socialized". Actually, the relations among people define social life in pedestrian malls in the context of urban realm.

In the urban realm, pedestrians can be more aware of the environmental features. In other words, due to their type of movement, which is walking, they have multifaceted perceptions. Thus, pedestrians can realize the city and social life on it in a more detailed way than drivers. Moreover, spatial configuration of the mall has a direct influence on the socialization process. Pedestrian malls are both physical environments and social settings. Indeed, their essence comes from the urban public spaces where social activities take place. Pedestrian malls are the significant samples of public spaces which have direct power on social life. Gehl (1987, pp. 11-14) outlined three major components of the usage of these spaces: 1. necessary or compulsory activities which are not affected so much from the physical conditions, such as walking to work, shopping, 2. optional activities which are influenced by exterior physical conditions, in other words, chosen only if the conditions and the place are pleasing such as strolling, sunbathing, 3. social activities which are “all activities that depend on the presence of others in urban public spaces”, such as gazing at people, talking, and other community events.

One of the most valuable functions of a mall is the social contact of people of different socio- economic status. Hence, pedestrian malls as an open public space act as a mirror of ourselves; reflect our culture and values. Design elements and principles should always be taken into account, because social dimension of pedestrian malls are directly affected by them. As a result, liveliness of social life on pedestrian malls depends on the network of spatial configuration, interaction and communication among people.

Urban identity changes in relation to the values of society, because as Proshansky et. al. (1978, p. 108) mention “the concept of ‘built environment’ is deeply rooted in our associations and beliefs about urban life. That ‘life’, of course, has been the nexus for the development of our complex industrialized society and with it has emerged in its urban residents very strong belief in and attachment to this way of life”.

In fact, the essence of pedestrian mall as public places lies in the socialization of people. Proshansky et. al. (1978, p. 111) state individuals should feel a sense of belonging and identification with an urban way of life. The differences among identities result in the complex social roles that not only separate what individuals do, believe, and think, but also the specific pattern of cognitions of places, environment skills, and person/physical setting relationships. Therefore, the design, construction and use of pedestrian malls would have to be considered in the light of this plurality.

To understand the meaning of pedestrian malls, the communication and interaction between individuals and environment should be realized. As Cassidy (1997, p. 70) claims “we experience the environment through all our available senses at the same time, and it is this accumulation of experiences that produces a physiological and psychological effect”.

Activities, events, and programs are the social factors which should be considered into the design and management of the pedestrian mall. City centers are busy places providing different activities, features, and functions. Improvement of social environment can be achieved with the help of these elements which will also lead to

improved economic patterns. Promotional events such as puppet shows, car shows, fashion shows, art exhibits, craft exhibits, and special programs such as festivals, band concerts can be held. Moreover, outdoor restraints, information booth, fountains, sculpture, children's playgrounds, and clock towers, and related items that add to particular sense of place can be added (Rubenstein, 1992, p. 40), because these features play an important role in the socialization of individuals, in other words they answer the needs of people. All these aim is to increase pedestrian traffic and create interest in pedestrian malls to draw people to it by providing a place for socializing.

Pedestrian malls contribute to make a city more walkable. Human scaled environment makes the city more pedestrian friendly, also accessible to people with disabilities. Improvement of downtown conditions, both physically and socially, is very important and pedestrianization plays an important role in enhancing the socio-spatial quality. As Applied Science Associates et.al. (1989, p. 1) mention "its premise is very simple: if you make the streets more walkable, pedestrians will use them more, street-level business will improve, and so will the overall quality of life".

To create a successful pedestrian mall; social and cultural factors are crucial as well as design principles and attributes of a mall. Nasar (1998, p. vii) states that "cities can evoke a sense of delight and pleasure. Their ambiance arises from social and cultural factors". As the pedestrian malls are the major components of a city, a successful pedestrian mall can reflect the social and cultural norms of a city.

According to USDT Federal Highway Administration (1999, p.1), successful pedestrian malls have the following attributes:

“-narrow street right-of-way;

- concentrated shopping and commercial land uses within walking distances;
- traffic generators, often large department stores, at opposite ends of the mall;
- good pedestrian amenities (benches, street maps, displays, activity programs);
- outdoor activities like parades, street fairs, and other similar public events to encourage pedestrian activity and establish an area identity;
- nearby concentration of residential or office uses;
- continuity of uses along the length of the mall;
- diversity of sights and sounds;
- presence of people on the sidewalk;
- open space areas;
- activities that extend beyond normal office hours. Mixed-use zoning promotes a balanced use of the area's resources over extended periods of time;
- good accessibility by public transit, bicycle and by private automobile. The great success of German pedestrian malls is linked to excellent public transit systems built during post-war reconstruction;
- agreement of commercial interests and local residents, from the start, is essential for the success of the project. Merchants often oppose pedestrianisation schemes until they hear of the economic benefit. Another factor is the perceived importance of car drivers as customers which can be over-estimated by merchants;
- historical interest adds to the interest of the area. For example, the historical district of Québec City, restored with great success, has become a UNESCO World Heritage Centre, and a favourite destination among tourists. Its pedestrian-only areas are linked to a large urban park by a boardwalk that offers spectacular views of the St. Lawrence River”.

As a result, pedestrian malls should not be considered as places which offer shopping. Actually, they are more multifaceted formations. Their attractiveness comes from the variety of activities which occur according to seasonal changes. Pedestrian density augments the diversity of these activities.

### **3. DIFFERENT ASPECTS OF SHOPPING MALLS AS INTERIOR PEDESTRIAN PLACES**

According to Gottdiener (1995) malls can best be understood as the intersection of two distinct structural principles; one is “the materialization of the retailer’s intention to sell consumer goods at a high volume under present day relations of production and distribution” and the other is “the physical space within which individuals come to participate in a certain type of urban ambiance which they crave”. Therefore, a double articulation of formal design elements regulating the physical, material vehicle of mall construction and the representations of the consumer experience within the constructed space is represented by the mall (pp. 84-85).

Shopping malls should deal with both social and physical aspects of environment as pedestrian places. As Shields (1992, p. 11) states “shopping as a leisure activity embraces not only the literal forms of consumption which involve purchase and economic change. In addition, it is elaborated by practices of browsing, looking”. Therefore, for the future planning of malls emphasis should be on social and physical connections, in other words, the links “between different generations and genders, between different ethnic groups; between people from different parts of the city, and between people with diverse social backgrounds and personal interests. The mall should become, and should be seen as, ‘The Link’” (White and Sutton, 2001, p. 74). Actually, if malls could create that kind of bridge, there will be no doubt about their working as a system of pedestrian environment.

The ‘postmodernism’ debate exists at the intersection of contemporary cultural change and the political economy of commodity exchange. This dispute consists of the “changing role of consumption sites, such as shopping centers, market places, malls, museums and redeveloped downtown commercial areas with their pedestrian streets and interior arcades” (Shield, 1992, p. 2). Therefore, the importance of consumption for society is in change which means postmodernist consumption sites are shaped by new architectural forms, in which consumption and leisure activities are combined.

### 3.1. Shopping malls as a social environment

Commercial activity in terms of exchange of goods in the history can be traced back to earliest period when human beings played the ancient forms of social life. After the development of social organization and means of production, commercial activity began to develop. Most of the commercial buildings located in cities, because regular and continuous commercial activity could be improved only in urban centers. In other words, commercial goods of variety and high quality could be produced only in an urban environment (Cezar, 1983, p. 19). However, through the change in life styles, shopping malls which are the dominant examples of commercial buildings moved to suburban areas.

Shopping as a commercial activity modifies its meaning; it involves social dimension as well as consumption. Shopping is an everyday activity and a social practice. It can be said that shopping is a reflection of life-style. Miller et. al. (1998, p. 10) argue that “consumers gather around objects which define their identity and become centerpieces of particular routines of sociability”. Thus, the most important duty of

shopping malls is to answer this identity need of people; because, otherwise they can not become meaningful social spaces.

Nowadays, although one of the main duties of cities is to provide public spaces for social interactions, they become intimidating environments due to the perceived “social fear” (Jewell, 2001, p. 353). It is hard to live peacefully in public urban areas, so people have begun to look for substitute places where socialization can occur. Shopping malls are not only the physical places but also gathering places which offer social relations. As Jewell (2001, p. 354) claims “by manipulating what we perceive as the threat of crime in the urban environment, and our insular state of passivity, the mall ruthlessly exploits our communal fears as the basis of its experiential ideas”. Then, shopping malls offer environments resembling city centers with social relations in a new structure. They say ‘come and do shopping, then you will have a chance to have social interactions’, so to have social relations, the first premise is consuming in shopping malls unlike the urban environment. Miller et. al. (1998, pp. 26-27) see malls as “places which perennially reconstitute these [social] relationships through various practices of shopping and identity”. Moreover, a number of pathways leading to emotional satisfactions are felt by most subcultures of age, gender or class of amusement society, because these pathways converge in the mall (Langman, 1992, p. 65).

Gottdiener (1995, p. 82) states that the fundamental changes in socio-spatial organization which affects the urban environment can be summarized by the concept of “deconcentration” such as the general dispersal of population and economic activities throughout the metropolitan region. Since the 1950s, due to a general

dispersal of commercial, cultural, political, manufacturing, financial, and recreational activities, the massive movement of population in the United States to the earlier peripheral areas of the metropolitan region has been observed which has changed the morphology of late capitalist space in a fundamental way. As a result of these changes, throughout the multi-centered metropolitan region, the new relations are scattered.

Despite previous central cities remain, their functions have been changed and reorganized toward a progressively more specialized role in the global economy, at the same time other functions are changed in an expanding network of deconcentrated mini centers throughout the region, the nation, and the world. These new mini centers which are the new form of spaces are called “suburbia”, for social communion there are not enough spaces. The separation of home from work; of schools from the local neighborhood; of sociability and leisure activities from the nearness of neighborhood life structured everyday life. Crime and other negative effects of daily living decrease the enjoyment of the use values of parks, plazas, and city public space. Within such environment, people begin not to prefer socialization in a common public ground which was provided by the old city center. Due to fear or inconvenience, public spaces are discarded. Therefore, the fully enclosed, climate controlled shopping areas known as ‘malls’ become the places where social communion occurs (Gottdiener, 1995, pp. 82-83).

Too much is said about shopping malls’ comfort and security; whereas the critical question, indeed, is how much they serve as a public forum in spite of being controlled environments. The first definition of the ‘mall’ emphasizes that it is a

“street or shopping area closed to vehicles” (Jewell, 2001, p. 328), but not states that some sections of society can not enter, such as homeless or street urchin, these shopping areas. Hence, there exists contradiction between, the early definition, what malls offer in theory and what create in practice.

It is very obvious that urban realm can not offer purified environments as shopping malls do, yet, on the other hand, it should be considered that shopping malls reflect the cultural and social environment or embrace the components of modern life. As Jewell (2001, p. 323) questions “if we really believe that architecture is a social art, how can it ever expect to be effective if it ignores the cultural context within which it practices?” Actually, shopping mall embodies experiential values. Although if shopping malls are taken as organisms, they accommodate some social meanings, but it should be taken into account that being safe, comfortable, and sheltered is not enough to create a social value and an image.

One of the most important components of urban environment is diversity which gives its characteristics, in other words its identity. Nevertheless, it is hard to mention identity of a shopping mall, because “the mall, however, through its determination to pursue the status of ‘global product’, now finds itself faced with a crisis of identity” (Jewell, 2001, p. 329). Shopping malls are universal by means of values in the environment, because they do not offer any sign which belongs to a cultural identity of a society. For instance, in Turkey, during the month of Ramadan, some authentic sitting places are organized, and narghiles and some traditional foods are served in a small section of the shopping malls. However, it is not enough to describe our cultural characteristics. The distinctive characteristics of locality can

create a place. In fact, this is a paradox, because the shopping mall denies social logic of place. Shopping malls are mostly global, in other words they are 'stereotypes'. Therefore, experiences which shopping malls provide for people are more universal. As Jewell (2001 p.332) states "what we ultimately identify in the image of the shopping mall is not a place, but ourselves", which means that no matter where shopping mall is located, because it does not create a sense of place, people only recognize their selves, do not discover the distinctiveness of a place. As suggested by Miller et. al. (1998, p. 20) identity is described as "a social process that shifts according to social context..., [and] the way that identities can be expressed in relation to particular places and particular goods. In other words, we approach identity as *discursively constituted* social relation".

Although mall can not be thought as a totally public space, it is a "quasi-public space which brings people together" as it creates some sort of behaviors in the social context and "by creating a kind of urban ambience in a quasi-public space, the mall enables a variety of behaviors not all of which are instrumentally linked to the purchase of commodities" (Gottdiener, 1995, p. 94). To sum up, nowadays, people come to the mall basically for two reasons; first, they are driven by consumerist fantasies and the second to find a common ground for sociability in a society with limited opportunities for public interactions (Gottdiener, 1995, p. 97).

Although street life is exciting, it has some negative features. Sometimes people look for different things in public spaces at different times of the day, week or year. Actually, the essence of the scenario of mall is originated from the variable choices of people. People want to live the urban ambience in a more controlled, purified, and

safe environment, although it is somehow artificial. Malls provide a kind of isolated and comfortable utopian world, especially in suburbs and they have begun to function as a city center. This development creates competition between the traditional city center and the contemporary world-shopping mall.

Jewell (2001, p. 326) observes the essence of this competition and states that shopping mall "...become a convenient 'lifestyle choice' that concentrates desirable elements of consumption within a single protective and intelligible environment. The mall describes and offers itself an 'alternative' to the city centre..., though perhaps a more convenient word would be 'competitor'. The essence of this competition lies in the continued use of the car as the major mode of transport in developed countries". If the public transport becomes more efficient, the importance of urban environment can enhance. Hence, shopping malls can be built in the city and work with plazas, parks, or pedestrian malls which can help to create a more integrated pedestrian environment by means of interior and exterior places.

### 3.2. Shopping malls as a physical environment

Knowing historical background is imperative to understand why and how today's shopping malls have evolved, in other words why they have taken their present form, what their successes and failures are. As Langman (1992, p.40) states "every historical epoch has distinct ways of organizing time, space, behavior and subjectivity. These converge in its principal architectural sites and public spaces that articulate cultural texts of meaning, identity and power". During 1920s and 30s, early shopping centers were developed in California because the advantages of placing groups of stores around or within the parking areas were discovered. The golden era

of the shopping mall construction was from the early 50s to the late 60s. Department stores began to organize their own centers, but developers realized the important role of planning by the middle 50s. About 10,000 shopping centers of every size and shape had been built by the end of 60s. The department stores which had their appeal and location were the magnets. After that period, two level storey centers were fashionable; they reduce the distance on forbiddingly long ways between stores. (Harris, 1975, pp. 320-22).

Domestic values and physical order of suburbia are being reinforced by shopping mall design. The malls look inward, turning their back on the public street and set in the middle of nowhere, like the suburban house which rejected the sociability of front porches and sidewalks for private backyards. On the other hand, “while Islamic bazaars and Parisian arcades reinforced existing street patterns, malls-pedestrian islands in asphalt sea-further ruptured an already fragmented urban landscape. As suburbs sprawled, so did their only public spaces; the low rise, horizontal forms of suburban centers reversed the tightly vertical order of traditional urban space” (Crawford, 1992, p.21).

The mall typology was emerged, with its arcades, department store, and the like, by a heritage of the birth of industrial capitalism in the 19<sup>th</sup> century. Australian architect Victor Gruen contextualized the phenomenon of the shopping mall within the landscape of 1950's America. Gruen made the definition of the mall as ‘a place that not only provides suburbanites with their physical living requirements, but simultaneously serves their civic, cultural and social community needs, it will make a most significant contribution to the enrichment of our lives (Jewell, 2001, p. 319).

Southdale Shopping Center near Minneapolis which is the work of Gruen has been extensively imitated and adapted in the last two decades. Gruen, also mentioned that shopping centers ‘can provide the need, place and opportunity for participation in modern community life that the ancient Greek Agora, the Medieval Market Place and our own Town Squares provided in the past.’ (Harris, 1975, p. 320).

Shields (1992, p. 3) states that the luxurious arcades built for the European bourgeoisie in the 19<sup>th</sup> century and the emporia or department stores in which mass produced household commodities and clothing became available in settings designed as places of consumption are the two roots of the genealogy of the mall

There is variety of solutions for shopping mall design, there is no standardized formula. However, one rule definitely operates is that “the design must not be over dominant but must form a framework unifying the retail interests and emphasizing their attraction throughout” (Beddington, 1991, p. 28). Shopping malls are different from shopping centers in terms of their plan, size, and architecture. As Shields (1992, p. 4) mentions, “in the malls, the plan becomes more complex ..., everything is larger, the architecture more monumental..., the major ‘anchor stores’ multiply and the functions increase... -in short almost any urban activity one can imagine”.

As Gottdiener (1995) summarizes “the mall is a distinct architectural form that dates back several thousand years to the cities of the Mediterranean. Several hundred years ago, a fully enclosed mall that is quite massive in scale was built as the grand bazaar of Istanbul. The mall form consists of an enclosed area of separate shops integrated by pedestrian walkways, eating establishments and quasi-public mini spaces. They

are machines for the realization of capital – that is, the transformation of manufactured goods and services by consumption” (84).

According to Langman (1992, pp. 42-43) there are three defining characteristics of mall. The first one is being an enclosed aggregation which is more or less *isolated* from the larger environment. The second characteristic is, within its boundaries, everything is rigorously *controlled* and creates a world of fantastic images and displays. The third feature is being a dream-like *fantasy* “which is the place of brazen contradictions of time, place, and subjectivity that exist as much in imagination as in reality”.

In order to understand the strategy of shopping mall development better, it is necessary to identify the physical elements within its structure. Several techniques are used in the design stage of malls. Gottdiener (1995, pp. 90-94) categorizes five strategies in design process of the shopping malls. First, all activities in malls are turned inward; they have blank walls on their outsides. The occasional logo of the department store can be seen from the parking lot in order to break the monolithic pattern of bricks and steel; in fact, they look like concrete bunkers. To dishearten loitering outside the mall and to speed up the shoppers who will leave or return to their cars is the main purpose of this design strategy. Public space is replaced by the design of the mall which creates a self-enclosed, besieged and regulated environment. They give the impression of the medieval castle. “Thus, while the world outside may be filled with the vagaries of urban life in a society characterized by crime, uneven development, and social stratification, the experience within the

mall is sheltered by blank, fortress-like walls and by the auspices of its feudal-seeming proprietor, the mall management” (Gottdiener, 1995, p. 90).

A second feature of the mall design is to welcome consumers as they enter the main area. In many shopping malls, entrance is a large open area like a town square. It involves some form of special attraction, which is not directly related to shopping itself. The sign function of the city as a ridiculous center has been recycled by designers within the mall (Gottdiener, 1995, p. 90).

Thirdly, malls also dedicate an important amount of space to fast-food restaurants that are often aggregated into “food courts which also resemble town square ludic centers, especially evocative of Mediterranean- style built environments. In almost every mall such spaces are located. They frame the seating area interspersed with plants and perhaps with fountains centering around a large area filled with light from skylights. A charged urban ambiance which draws shoppers to pause, to see, and to be seen is being captured by the entire ensemble. The availability of snacks and fast food is an essential characteristic of the mall” (Gottdiener, 1995, p. 91).

Another aspect of the shopping mall is its being open space of social communion, yet it is only a quasi-public space, and a well ordered space. People who live in an environment with few public spaces and low density demographics like in suburbia can realize the lack of social interaction and order, and then enter the mall. Except the places designated for hanging around, pedestrians are discouraged loitering within the mall in contrast to the public space in many towns. Therefore, only an illusion of civility is provided, “...as the urban ambiance is harnessed to profit

motives of privately controlled space which is predicated on the constant flow of a large volume of people” (Gottdiener, 1995, p. 92).

The fifth characteristic is the sign systems which are found in the shopping mall. Commercials and demonstrated needs derived from contact with others saturated everyday life. Desire is attached to particular brands, logos, signifiers. Thus, consumers enter the mall in order to purchase specific brands and specific types of commodities. Crawford (1992, p. 12) states that even before the shopper enters the mall, the process of shopping begins in this commercialized social environment.

Engineering of pedestrian flows among the stores is the final feature of syntagmatic design elements. As Crawford (1992, pp. 13-14) mentions “all the familiar tricks of mall design-limited entrances, escalators placed only at the end of corridors, fountains and benches carefully positioned to entice shoppers into stores-control the flow of consumers through the numbingly repetitive corridors of shops”. The overall floor plan is defined by their location, and the specialty shops are placed between the big stores. Actually, the number of large department stores determines the classification of malls. There are usually at least two big department stores which orient the mall’s paths on a linear axis and allow designers to “anchor down” the mall. People have to walk from one to the other due to the location of two stores at opposite ends. Hence, by this design strategy, customers pass all the lesser known shops between two stores. Moreover, concrete planters and trash bins, benches, the zigzagging of store layouts, and blank walls are the obstacles that break up the paths jut out into traffic and require detours toward other shops. To sum up, the shopping mall “...is designed to provide as much free reign as possible, within the confines of

its castle-like introversion, for advertising signals and free-floating signifiers of the image-driven culture to operate on and entice the pre-conditioned minds of the customers to consume” (Gottdiener, 1995, pp. 92-94).

### 3.3. Shopping malls and pedestrian malls as components of integrated pedestrian environment

In the contemporary world, design trends which encourage shopping centers turn out to be more urban with their main design concepts. It can be argued that there are positive aspects of indoor pedestrian places, such as providing weather protection, security, convenience, and making pedestrian access easier. Even if it serves important utilities, indoor pedestrian places also lead to negative consequences which can be listed as social stratification, reducing street activity, decline of streetscape, deprivation of city image, and poor aesthetic quality of the facades of buildings.

Interior pedestrian places have been developing in their designing, building, and using processes since World War II especially in Western Europe and North America. After this development, designers and architects should decide which design concepts and directions should be followed and the new questions are “what will this role be, and how will it relate to the existing city?” (Bednar, 1989, p. 215). Therefore, preserving and developing the existing pedestrian links and intensification of street life are the primary concepts while integrating interior pedestrian places to urban realm.

According to Bednar (1989, p. 222), it is believed that by removing unfriendly conditions from the streets to safe harbors, vulnerable pedestrians could be protected.

Interior and exterior pedestrian spaces are joined together by systems dedicated to efficient pedestrian movement. This strategy will allow the city center to compete with the suburban super mall assurances. Although this argument is lucid, there are some other alternative solutions:

1. Public transit can be improved to limit private automobile use in order to control traffic congestion.
2. Perimeter zones and deliveries could be allowed only during off hours not to restrict traffic flow.
3. Building density could be limited so as to prevent crowding, although crowding by itself is not a cause of the street crime.
4. Public education can be supplied, as a lack of regard for the public realm causes vandalism and littering,

Historically, the street is the most dominant spatial and organizing component as well as being a functional ingredient of the city. If interior pedestrian places are designed as adjunct spaces to plazas, sidewalk, and parks, there will be a link/connection between them by means of spatial and visual clues. Thus, smooth transitions should be provided between the interior and exterior pedestrian places. As Beddington (1991, p. 18) states, shopping malls in city centers need to be integrated into existing environment by means of architecture.

Following the above discussion, the following section aims to present shopping mall and pedestrian mall as pedestrian places. Each of these systems is analyzed as complementary parts of a whole which enhances the quality and continuity of city, and improves the interaction between people whilst socializing.

### 3.3.1. Integration of closed and opened malls

Limited access and controlled use are the consequences of the privatization of space.

In the nineteenth century, with the use of glass and steel enclosure systems, new opportunities for creating new types of interior places were expanded. Architects have a chance to design and build spaces completely protected from the weather allowing the visual transparency and daylight availability of exterior spaces.

Gallerias, conservatories, exhibition halls, train sheds, indoor markets, and winter gardens are all designed by the invention and development of this architectural system which tried to increase opportunities to develop a public life (Bednar, 1989, p. 8).

In the last quarter of the century, interior pedestrian places have been rediscovered.

As a result of high density urban development and improved technologies, new types of pedestrian places have been formed. The contemporary pedestrian's use and experience of the city is changed due to the new retail gallerias, shopping centers, festival market places, multiuse centers, public atria, winter gardens, skyways, and concourses (Bednar, 1989, p. 8).

The role of shopping as a public activity in urban life has been an essential social question which has been debated throughout the history. In spite of pollution, traffic, and fear of crime, one of the major activities of the pedestrian is shopping in urban areas. Hence, shopping has never lost its value in the process of city growth and development both in closed and open areas. Indeed, the purpose of pedestrian places is not only to provide shopping but also to constitute the integration between the interior and exterior places.

In order to realize what the integrated environment is, the most essential issue is to examine the relation between exterior urban places and interior places and their functions in the pedestrian life. Although urban shopping malls have not been excessively developed in our country, it is not hard to observe that when shopping malls satisfy demand in suburbs, new opportunities will be looked for. In our country, there are few numbers of shopping malls in city centers, hence our next step is expected to build more shopping malls, and integrate it with the existing city pattern as the United States has been doing. As Bednar (1989, p. 11) states “the suburban shopping mall has been transformed into an urban counterpart of greater density, connected to existing stores with ready access to parking garages and public transit systems”. Therefore, pedestrian linkage system, especially with the surrounding shopping malls gains more importance. In other words, the lack of connection to the environment of pedestrian spaces is perceived as a significant problem.

The aim of the shopping mall was to reproduce the single element missing in suburbia which is the ‘city’, and also to “create essentially a fantasy urbanism devoid of the city’s negative aspects: weather, traffic, and poor people”. Nevertheless, “as the mall incorporated more and more of the city inside its walls, the nascent conflict between private and public space became acute”. New urban shopping malls brought their suburban ‘values’ into the city. As a result malls have begun to provide safe urban spaces with homogenous client as they did in suburbia (Crawford, 1992, pp. 22-23). Therefore, the goal which should be achieved by urban designers is to provide continuity between the exterior and interior. In this way, pedestrian

circulations can become efficient and lively. As Bednar (1989, p. 30) summarizes “successful urban design and development is the by-product of an integration between the old and the new, between the exterior and the interior, and between the public and the private”. As a result, it is obvious that integrated networks of pedestrian places make city more effective and dynamic. One of the most widely used systems to integrate exterior with interior is the atrium. According to Bednar (1986, p. 35) “covered pedestrian spaces ...atria add to the inventory of public spaces available to the pedestrian, joining inside and outside and enriching the urban space”. Actually, “versatile and useful” urban design elements are crucial for the cities which try to enhance the pedestrian life and combine the indoor place with the outdoor space.

For instance, White and Sutton (2001, p. 76) suggest some landscape elements, such as appropriate small shrubs and non screening trees in order to ensure a ‘cool’ and ‘green’ effect balance to existing or proposed paving, to make settings more inviting and conducive to casual community. Actually, this point of view is opposed to the approach which claims that nothing should be placed to the outside of malls, yet, it is obvious that a greater sense of intimacy and closer social interactions can be supplied by the transformation of mall within a well defined ‘manageable’ environment. Moreover, the overall character of the mall as a community oriented space is increased. According to White and Sutton (2001, p. 75) “...it [shopping mall] should be transformed into ‘community space’ by making it more amenable as a place to congregate, walk and sit. The city could ensure that through its physical design the mall provided a convivial atmosphere that was safe, inviting and as secure as possible for all. This could be achieved through the adaptation of specific measures”.

Streets, squares, playgrounds, and parks are the most common public areas in cities. Nevertheless, neighborhood organizations, teenage gangs, or street people have sometimes conquered these settings. Hence, many groups of the public have been effectively excluded from the access to urban public settings. These urban places and spaces do not provide necessary facilities so that they become inaccessible to the handicapped or different age groups which, as a result, deny the broadest possible concept of “public” (Altman and Zube, 1989, pp. 1-2). Then, shopping malls which are protected places begin to act as public places although they are “privately owned areas”. Therefore, if designers and architects consider the principles of public places as a setting for public life, then integrity of a pedestrian environment in the city can be easily formed.

Indoor malls are not naturally occurring passages. By vacuuming the commercial and service life of the streets, shopping malls tend to deprive street life in their area and reconstructing it in a building’s interior which results in privatizing public life and robbing the street of it. Nevertheless, the street is a traditional locus of public by itself. Public environments are firstly used for the common good, secondly it should be accessible to and shared by a diversity of people and open to general observation, and thirdly it should work as an arena for a social life that can be apart from friends or family (Brill, 1989, p. 8-22).

### 3.3.2. Examples of integrated pedestrian system from the world

The examples which follow as urban design case studies demonstrate the role of interior pedestrian places in shaping the physical character of city centers. In each

example, the significant point is the relationship between interior places with traditional exterior places in terms of pedestrian systems and environment.

First example is Chester which is a well preserved picturesque British town. It offers rich opportunities for shopping and shopping is a primarily a leisure activity in historic Chester (See App. B for Fig. 1a). There are not only department stores but also tiny shops which sell everything from luxury goods to local crafts in both exterior and interior environments. Chester is a marvelous example of an integrated pedestrian environment which has been formed over seven centuries (See App. B for Fig. 1b). The combinations of contemporary shopping mall and a traditional streetscape, second level walkways (the Rows), a skylit Edwardian arcade have few examples in terms of its qualities of human scale, physical continuity, and architectural character (Bednar, 1989, p.189).

The Rows of Chester constitute a unique system of elevated pedestrian passages which were preserved and extended. Stairs at frequent intervals along the street obtains easy access (See App. B for Fig. 1c). Pedestrians walking along these passageways are protected from traffic as well as the rain. Two blocks of these street frontages is an enjoyable pedestrian environment due to the prohibition of cars (See App. B for Fig. 1d). The one block arcade has a direct connection to the shopping center. The architectural style of the Rows reflects the history of Chester. Pedestrians have a chance to have a unique experience due to the variations in materials, colors, and ornamentation (See App. B for Fig. 1e). Its purpose is to display goods for not only viewing by those walking by but also pedestrians on the street or on the opposite one. It also creates a place for socializing. Opportunities of window

shopping or socializing are being enhanced by these spatial arrangements (Bednar, 1989, pp.190-191).

The center has three entrances for pedestrians which are Eastgate Street leading to Newgate Row, Pepper Street leading to Paddock Row, and Bridge Street via St. Micheal's Row to St. Micheal's Square. Except Newgate Row, pedestrian levels are above the street (See App. B for Fig. 1b). Truck service and storage areas are located at street level, and there is a car parking area on the roof. Shopping center has no visible presence in the city, in spite of involving 16.072 square meters of gross area and 514 parking spaces. It has a praiseworthy characteristic in a sensitive historic context. Actually, the importance of Grosvenor Precinct-the shopping center-is its high level of integration with the exterior rather than its interior design. The appearance of center had become out of date, hence shops were relocated in response to contemporary shopping patterns and altered pedestrian routes. As a result, variety of pedestrian movement has become remarkable. Virtually, the historic arcade and the interior mall supply different kinds of shopping environments to complement the others. Hence, pedestrians can have a chance to choose from a variety of routes based on their inclinations or on the weather. Bednar (1989, p. 193) summarizes that Chester features an integrated pedestrian environment,

In shopping, the quality of the pedestrian experience is as important as the shops. Chester's architectural character-with its balance of stylistic continuity and historic variety-is a pleasure behold. All of the town's buildings share railings, columns, stairs, windows, and doors of similar scale and detail, allowing the buildings to relate well to each other. People respond positively to this setting. Being in an actively used environment that spans nineteen centuries is a rare human experience. The result is a pedestrian environment that is profound and stimulating, joyful and intense, and social and personal.

Chester as an integrated pedestrian environment emphasizes the importance of some values in terms of urban design and interior architecture:

1. The value of continuity between exterior and interior pedestrian systems through multiple access points,
2. The value of voluntary cooperation which is resulted in the development of these systems over centuries,
3. The value of a stable relationship with the street for purposes of orientation and view (Bednar, 1989, p. 193).

Bednar (1989, p. 12) focuses on Nolli's radical image of Rome's spatial structure as one of the best examples of an idealized vision of the pedestrian's experience of the city as a connected chains of exterior and interior spaces. Between these two realms, whether these spaces are public or semi public, the pedestrian moves freely in the city. Thus, pedestrians realize their intrinsic difference as openness and enclosure. Two realms are entwined in memory and experience. Although each street, square, court, garden, nave, and rotundas is different in terms of form and shape, they are connected together through physical movement and mental image (See App. B for Fig. 2). As Miller (1998, p. 20) et al. mention identity is not fixed and singular, it is plural and dynamic.

... "Nolli map" provides some important revelations about the nature of public space important revelations about the nature of modern pedestrian places: First, the vast majority of public space is in the form of wide streets given over to motorized traffic. Streets are laid out in a geometric grid that isolates blocks of land occupied by buildings. Pedestrian sidewalks follow each street on both sides and often penetrate the block, thus forming passages between buildings and/or through them. Most of the interior space at street level is private or semipublic. (Bednar, 1989, pp. 12-13).

Another example of the integrated pedestrian place can be Washington D.C. because it has a strong legacy of having important interior places. For instance, the museums, government and cultural buildings, commercial buildings of Washington D.C. are significant interior public places. Tradition and legacy play a significant role on the formation of these interior public places because most of them were built before the twentieth century according to the demands of day lighting. They were often designed around large courtyards. Therefore, courtyards were easily converted to public atria by covering over them. Great emphasize is given to the area between Pennsylvania and New York avenues, where especially buildings with interior pedestrian places are located. There exists an appearance coordination created by collaboration between developers and architects, in spite of building each of these projects independently.

Earth's surface as the ultimate basis for vertical orientation, which is called as reference plane, has always been perceived by human beings. We walk upon the earth and value its solidity as creatures of the earth. The sidewalks, squares, and parks of the city are constructed on the altered earth's plane, in other words, streets lie and buildings stand upon is the common ground. If we are above or below the earth's surface, we can feel a disorienting nervousness. For instance, the top of a skyscraper can be vertiginous to someone or a subterranean tunnel can be a fearful place (Bednar, 1989, p. 145).

Eldon Square in Newcastle, UK can be given as an example of integrated pedestrian environment. It was structured around the pedestrian malls which constitute the

arteries of movement. Moreover, it connects existing shopping areas of Newcastle with new bus concourse, car parks, and new underground station. Moreover, part of the city streets formed the shopping mall (Beddington, 1991, pp.157-158) (See App. B for Fig. 3a, Fig 3b, Fig. 3c).

Skyways and concourses are the two main conceptual schemes which are being used nowadays (See App. B for Fig. 4a, Fig. 4b, Fig. 4c, Fig. 4d, and Fig. 4e). A separate pedestrian level is being created by both of these systems. The difference is that the skyway links buildings with bridges that cross streets, but in the concourse system below street tunnels provide pedestrian passages. In both systems, although safety and convenience are ensured, pedestrians have no longer chance to confront with street level. Therefore, a virtual “second city” is being created by these pedestrian systems with serious economic, social, political, and aesthetic implications. “Many urban designers are espousing a return to the street as the basis for organizing a city’s pedestrian space. Access to skyway and concourse systems begins and ends at the street level; and those systems that make these connections will, in the long run, be the successful ones” (Bednar, 1989, pp. 145-146).

The attempt is not turning every pedestrian system to traditional streets, squares or pedestrian malls, because there are some important advantages of indoor pedestrian systems which are described above, but to develop the most suitable pedestrian system for the city without losing its spatial and social qualities. The Potteries Shopping Center in UK is a marvelous example to describe what a pedestrian integrated environment is (See App. B for Fig. 5a, and Fig. 5b). It is an urban development which has the concept of attracting new retailers to the city, to the benefit of existing shopping as well as “guiding pedestrian movement through

existing streets to magnet shops within the new center with advantage to both” (Beddington, 1991, p.179) (See App. B for Fig. 5c).

Bednar (1989, p.214) claims that retail arcades, shopping centers, atrium buildings, festival marketplaces, plaza atria, winter gardens, skyways, and concourses are being designed and built in greater numbers than ever before as the spatial organizers of retail, business, convention, and cultural functions; as interior pedestrian places and have improved the pedestrian life of urban centers.

Continuity of the pedestrian sequence can be supplied by additional partially enclosed spaces, such as colonnades, pavilions, porticoes, and covered streets. Therefore, both a physical linkage and a visual relationship between the centers of blocks and their perimeters can be created by pedestrian systems as well as between interior and exterior pedestrian places (Bednar, 1989, p. 220).

The concept of ‘open mall centre’ has a crucial role in terms of the unity of open and closed pedestrian places. As Beddington (1991, p. 21) mentions “many highly successful centers in the UK and Europe...offering a spread over a large ground area-either where greenfield sites are available at an economic price, or in central redevelopment schemes-giving scope for urban design on a wider scale than is possible within the technical and economic restrictions of a totally enclosed center”. Either shops units or other buildings form the perimeter of the open malls and arcades. Therefore, elevation of the center street must be designed with the relationship of the surrounding area (See App. B for Fig. 6a). Open malls must be coordinated with the street furniture, soft and hard landscape, lighting and signage

system. As a result, the character of the downtown can be reflected and enhanced (See App. B for Fig. 6b). According to Beddington (1991, p. 23), the main characteristic of the open mall is "...pedestrianisation in a planned shopping area; the provision of clear, attractive and untiring circulation routes along sheltered walkways past and into the shops offering stimulus and relaxation, with seating, refreshment, toilet and other facilities available, and interesting features punctuating the routes".

Atria play an important role in the integrity of urban life. One of the greatest examples of commercial atria is at The Gallery at Market East (See App. B for Fig. 7a, and Fig. 7b). With full-width skylights, brick pavers, street lighting, full size trees, water features, and landscaping the linear atrium has been planned as the pedestrian street (See App. B for Fig. 7c). In addition to its architectural vitality, it has also become a great financial success. (Bednar, 1986, p. 57). One Market Plaza consists of one block complex of offices and retail in San Francisco designed by Welton Becket and Associates. Main entrance of the building is the Bliss and Faville's 1916 Southern Pacific Building and faces Market Street. "The U-shaped courtyard of this building was made into a partial atrium, from which a pedestrian galleria now extends through the block to Mission Street. A twenty-eight-storey and a forty-two-story office tower straddle this galleria, rising out of a six-storey base of office and retail, with open-air terraces on the roof" (See App. B for Fig. 8). It is one of the most important examples of atria by means of supplying integration. Shops can have double frontage by the pedestrian arcade on all four street sides and "the skylighted pedestrian spaces on the interior of the block tie the elements of the complex together" as well as providing a cordial amenity (Bednar, 1986, pp. 51-52)

Bednar (1989, p. 216) also explains that there are some methods which can make interior pedestrian places outward-oriented rather than inward-oriented: such as relating development on adjacent blocks; to the surrounding streetscape; or to open, exterior spaces. This aim is accomplished by large, glazed facades and/or entrances. For instance, The Gallery at Harborplace in Baltimore allows pedestrians to see inside and shoppers to see outside via café terraces by its large, glazed corner entrance. In this example, integration of exterior and interior pedestrian place is provided through visual transparency. Another example is A&S Plaza in Manhattan (See App. B for Fig.9) which is a new design concept called the *edge-atrium* intending to relate the traditional centroidal atrium to the street better by extending the atrium to the building's façade. This design concept is a tool to enliven the street with visual activity and access. "At the street scale, the edge-atrium enables pedestrians to see directly into this dramatic space, to comprehend the scope of the center, and to view the shops and food court within. At the sidewalk scale, the character of the interior place invites pedestrians inside with architectural elements and granite paving that extend through the glass façade" (Bednar, 1989, p. 217).

Galleria Vittorio Emanuele (Piazza del Duomo) in Milan was designed by the architect Giuseppe Mengoni in 1861, and was built between 1865 and 1877 as a shopping mall. It is built in Neo-classical style and the construction system is masonry buildings with iron and glass roof. With domed octagon at center, two intersecting streets make a cruciform plan. Glass-roofed arcade with shops and cafes forms an early formal covered street. Therefore, in Galleria people can easily have visual contact with the outdoor (See App. B for Fig. 10). Hence, this atrium works as

a 'link' between indoor and outdoor in terms of an integrated environment for pedestrians (World Famous Buildings, 1999, p. 1).

## **4. THE FIELD RESEARCH ON TWO SHOPPING MALLS IN ANKARA: AKKÖPRÜ MİGROS AND KARUM SHOPPING MALLS**

This study aims to examine the importance of integrated pedestrian environment in urban realm within the framework of shopping malls and pedestrian malls. In this context, a field survey is designed in two shopping malls, to propose a model which combines the benefits of both open and closed malls, in other words, addressing an integrated environment which has more advantageous in terms of citizen's expectations and city image.

### **4.1. Types of pedestrian malls in Ankara**

When motorized vehicles increased in number, pedestrian movement turned out to be a problem. In Ankara, most of the pedestrian malls are located in Kızılay District (See Fig. 2). The reason of this development is its being the city center and the densest area of the city. Olgunlar Street in Kızılay is an example of a semi-mall, and Yüksel Street and Sakarya Street are the examples of full-malls (See Table1). In Ankara there is not an example of a transit-mall. Moreover, in 1980, İzmir Street in Kızılay was planned as a full-mall, but with the changes in urban life, it lost its identity as a full pedestrian mall. In addition, Tunalı Street in the beginning of 1990s worked as a semi-mall by reduced vehicular traffic, especially on Sundays, and not allowing parking between certain hours, whereas nowadays it serves as a street.

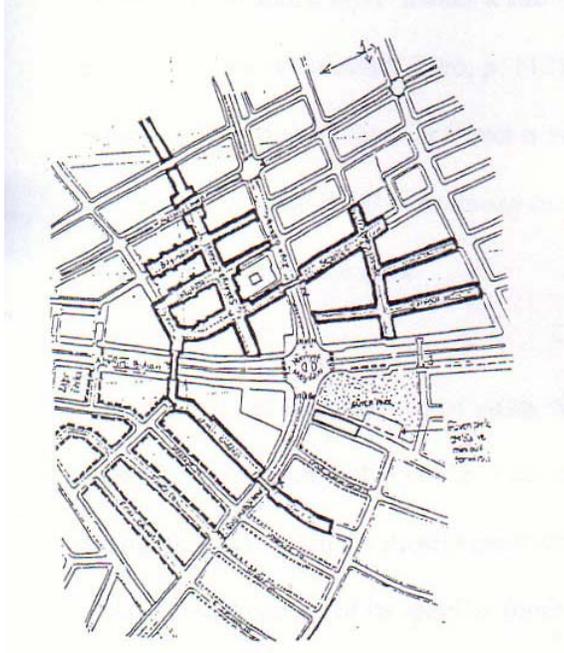


Figure 2. Pedestrianized areas in Kızılay District (Levent,72).

Table 1. Pedestrian malls in Ankara.

| Full Pedestrian Malls | Semi Pedestrian Malls  | Transit Pedestrian Malls |
|-----------------------|------------------------|--------------------------|
| Sakarya Street (1979) | Olgunlar Street (1985) | -                        |
| Yüksel Street (1983)  |                        |                          |

While constructing Olgunlar Street, the main aim was to develop an outdoor place for exhibition and fast food amenities (See App. A for Fig. 8). The improvement process is seen after 1985 with the new development plan of Çankaya Municipality. Olgunlar Street has become a semi-mall which is provided by a restricted traffic and parking. Eastern part of Olgunlar Street is still open to vehicular traffic, but in the western side new paving, trees, street furnishings, lighting, and signage were placed which help to increase its value for pedestrians and emphasize the linear character of the street.

The street connects some of other streets to the main artery of the city- Atatürk Boulevard. In addition, it “makes a strong connection between Batı and Kızılırmak movie theaters” (Mahmud, 1996, p. 112). In the entrance there are some kiosks which sell fast-food. Olgunlar Street is surrounded by benches and office buildings on one side and the Belgian Embassy on the other side. Moreover, there are bars along both sides of the road.

There are not enough trees to sit under which is one of the reasons why this street looks bare. As Mahmud (1996, p. 112) states “there are rows of sitting arrangements along the pool which are mostly used while eating. This place is less crowded than other places because of its specific function, that is, the book stalls and food kiosks”.

Although the street was planned to turn into an open exhibition place and fast food facilities as well, the major aim of the street being an exhibition place, can not be obtained. Nevertheless, it serves another specific purpose which is selling books under pergolas and kiosks. The books sold here are generally second hand or cheaper ones and the reason of that mostly students more prefer that place.

Yüksel Street is an example of full/traditional pedestrian mall that was first pedestrianized in 1983 by closing the street for vehicular traffic and improving the pedestrian street with new paving, street trees, street furnishings, and other features such as sculptures and fountains. It has a special character, especially with its plantation that creates a visual continuity and a good perspective to the avenue directly (See App. A for Fig. 4).

Yüksel Pedestrian Zone became one of the main pedestrian zones in Kızılay which is supported by Karanfil Street and Konur Street. Moreover, Yüksel Street connects Selanik Street and Atatürk Boulevard. The area is surrounded with 6-7 storey buildings. Restaurants, coffee shops, book stores, game stores are the sites for dominant activities which occur in Yüksel Street. Although Yüksel Street is closed to traffic, there are cars parked on the mall, and it has a negative effect on the image of the mall turning out to be an obstacle for the pedestrians.

This place is well-known with natural canopy trees, used as a gathering and sitting place. Benches are not sufficient whereas landscape elements, stairs, walls, and sometimes curbs are used as seats. Although there are not adequate and well distributed seating elements and no physical arrangements to protect people from unpleasant weather conditions, the spatial configuration of the place is suitable for creating social interactions. As Mahmud (1996, p. 108) states “the type of vendors is a little different from other places in that they are sometimes university students selling handicrafts items. *Dost* Bookstore is a popular landmark for this area and a meeting place for young people. This is the place where people come to discuss and even protest various political issues”.

Due to its location, Yüksel Pedestrian Zone has always involved in sufficient amount of pedestrian activity. As Levent (1999, p. 75-76) claims “significant amount of pedestrians are using Yüksel Pedestrian Zone only for locomotion [transition]. Especially at peak hours, almost all pedestrians are walking through it. The central areas between buildings in Yüksel Pedestrian Zone are not adequately used for communicative purposes, because standing people for communication are easily

disturbed by people in locomotion [transit]. This phenomenon pushes the communicative activities to the facades”. Yet, the pedestrian axis is wide enough and the proportion between the height of buildings and wideness of the mall is scaled well. Thus, sometimes sub spaces are created by using the width of the axis.

Sakarya Pedestrian zone is also an example of full pedestrian mall located in Kızılay. Sakarya Street is the main arterial intersecting Selanik, İnkılap, Bayındır, and Tuna Streets and constitutes the part of the pedestrian area is between Ziya Gökalp Avenue and Atatürk Bolulevard (See App. A for Fig. 3a, and 3b). Pedestrianisation projects started in summer 1978 with the planning of Selanik, Tuna, and İnkılap Streets with Sakarya. These streets were closed to vehicular traffic in spring 1979, and planning continued. The furnishing was finished by autumn of the same year. Moreover, in 1979, planning process of İzmir Street, which is an example of a semi-mall in those years, was started. In spring 1980, İzmir Street was closed to vehicular traffic. The importance of Sakarya Pedestrian Zone is being the first attempt to bring pedestrianisation and pedestrian areas to legal concerns. (Torlak, 1983, pp. 177-178).

The business and commercial buildings are found together along Sakarya Street. It has not offer more for the habits of work, daily life, and consumption for the rest of the city. Nevertheless, it can not be denied that after pedestrianisation, the area became more inviting with the elimination of traffic and the improvements such as new paving, planting, furniture and building renovations. As cited by Torlak (1983, p. 220) “the character and momentum of the concept must have a continuity in the developing of other related areas within the CBD”. There are still some main problems on Sakarya Street, such as “the parking problem” as only office workers

and shop owners can find parking place since they come early, and the lack of harmony and the rhythm of buildings in terms of architectural quality (Torlak, 1983, p. 184, 200).

#### 4.2. Types of shopping malls in Ankara

Table 2. Shopping malls in Ankara.

| Suburban Shopping Malls | Urban Shopping Malls |
|-------------------------|----------------------|
| Galeria (1996)          | Atakule (1989)       |
| Bilkent (1998)          | Karum (1991)         |
| Akköprü Migros (1999)   | Beğendik (1993)      |
| CarrefourSa (2001)      |                      |
| Armada (2002)           |                      |

There are eight main shopping malls in Ankara; five of them are suburban shopping malls-Galleria, Bilkent, Akköprü Migros, Armada, and CarrefourSA-and three of them are urban shopping malls-Atakule, Karum, and Beğendik (See Table 2 and Fig. 3).

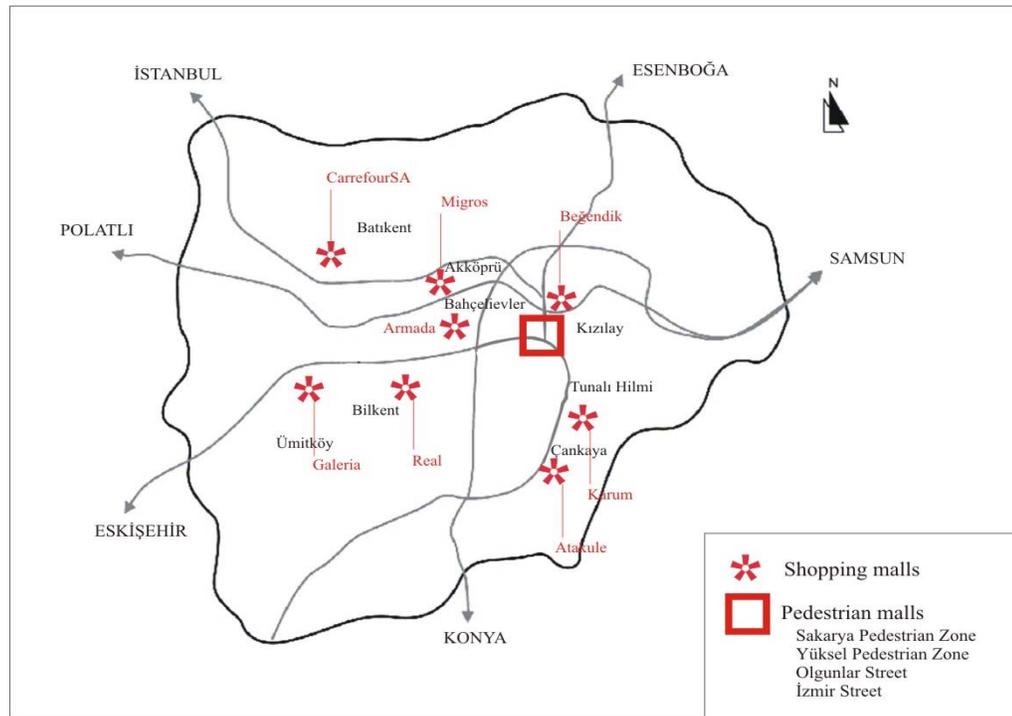


Figure 3. Map of Ankara showing shopping malls and pedestrian malls.

Akköprü Migros Shopping Mall, located at the intersection of Istanbul Road and Konya Road, and Karum Shopping Mall, constructed at the new center of Ankara in Kavaklıdere, are selected for the field survey. Migros Shopping Mall is taken as an example of suburban shopping mall since it is the biggest in Ankara, and Karum Shopping Mall is considered as an example of urban shopping mall. Both attract huge numbers of heterogeneous users.

#### 4.3. Field survey

In the following sections, major site characteristics, methodology of the field survey, and the results of the survey will be explained and discussed.

##### 4.3.1. Site characteristics: Akköprü Migros and Karum

Akköprü Migros Shopping Mall is a suburban shopping mall located on 126.609 m<sup>2</sup> area at the intersection of Istanbul Road and Konya Road. It is opened in September 1999, and is the biggest shopping mall in Turkey. Ziya Canbazoglu, Meda Architecture Company, is the architect of this project. The construction process began in 1997, and finished in the September of 1999 (See App. C for Fig. 1a, Fig. 1b, Fig. 1c, Fig. 1d).

One of the phases of the project, which is to create a green and landscaped area of 10,000 m<sup>2</sup> on the upper ground floor near the car park, has not been completed yet. The capacity of car parking area is 2000 cars for open and is 1000 cars for closed parking areas (See App. C for Fig. 2a, and Fig. 2b). There are seven gates, one of them is the main entrance placed on the ground floor, especially for the shoppers who use subway and open air parking lot, and other six gates placed on the basement

floor for those use closed car parking area. The largest Migros Store Hypermarket of Turkey is placed on an area of 14,440 m<sup>2</sup> in the shopping center. There exist 130 shops in the mall. The project also consists of 10 movie theatres with the highest number of cinemas in a mall, including a 3-D Max theatre.

In addition to these, a multi-purpose hall for 500 people is available for different usages such as theatre, opera, ballet, children's theatre, or concert hall. The first floor houses art gallery spaces and some kiosks. The architect of the project mentions that the entrance axis of the building has been planned as large as a town square with access from the parking lot.

Water in the entrance area has been functionally integrated into the structure. In the interior of the mall, palm trees are the significant elements of plantation. Two sets of elevators on each side of the main Shopping Mall offer a solution for old and disabled people (See App. C for Fig. 2c, Fig. 2d, Fig. 2e, and Fig. 2f).

Demonstrations and concerts have been done on the entrance of the building which is considered to work as a town square by the designer of the project when the weather conditions are suitable. Access is possible from almost all regions of the city by the underground and currently, the mall attracts a heterogeneous user group.

Karum Shopping Mall is located at the new center of Ankara which can be called as an example of an urban shopping mall (See App. C for Fig. 3a, and Fig. 3b). It functions as a node due to being at the intersection of major paths of the city such as Tunalı Hilmi Street, Arjantin Street and Iran Street. Actually, Kavaklıdere region functions as the centre of districts like Esat, Gazi Osman Paşa, Çankaya and Ayrancı, because it is within the limits of a walking distance from these regions (See App. C.

for Fig. 4a). Thus, when choosing a place for a shopping center, this important issue for the liveliness of the city was taken into an account. Moreover, Karum functions as a landmark where people meet friends and uses its location in order to give directions (See App. C. for Fig. 4b). In addition, it has a wide range of user profile from various age, education and income levels.

Karum is placed on 62.000 m<sup>2</sup> area, with 27.000 m<sup>2</sup> shopping and office spaces, 23.000 m<sup>2</sup> lobby, and 12.000 m<sup>2</sup> of this area is a parking lot. There are two parking areas with the capacity of 200 cars which serve the residents/working people of the centre. Apart from these parking areas, there is a parking lot for visitors with the capacity of 700 cars occupying four floors. There are six entrances of the mall which are composed of one main entrance, four side gates and one parking gate. The building has nine floors: three of them are shopping floors-ground, first and second, four of them serve as office floors and the other two floors function as the car parking area.

Koray-Kavala Investor Group planned Karum Business and Shopping Center together with the project of the Sheraton Hotels and Towers in 1986. After five years, in October 1991, Karum opened as “a new center in Ankara”.

Karum is an example of “commercial atria” (See App. C for Fig. 4c and Fig. 4d). One of the most stimulating values of atria is their contribution toward the development of meaningful pedestrian sequences in the city (Bednar, 1986, p. 37). In Karum, an illumination system functions according to the rate of outdoor light at the first row of circulation pattern, apart from this, the secondary circulation corridor

is illuminated by artificial lighting. The most significant feature of the architecture is the elliptical atrium placed in the centre of the building.

“Karum has a color scheme of white, cream, tints and shades of beige, and gray, while there are no saturated hues in the space organization, except the ones provided by signage and display of shops. Light-colored, polished marbles with high reflectivity, glass, and metal are the materials used within the mall space” (Çalgüner, 1999, pp. 67-68). Moreover, on the ground floor there is a gallery which encourages people to socialize by providing cafes and area for demonstrations. There is no clear interior planting design, only cafes place their pots to define boundaries.

#### 4.3.2. Methodology of the field survey

The field survey was conducted in two shopping malls to understand the differences between suburban and urban shopping malls and their impacts on the usage of pedestrian malls and streets, in addition to see the changes in people’s choices after they began to use malls.

The target population of the research has been determined as shopping mall users in Akköprü and Karum. A pilot study was carried out with ten respondents at each site to collect different environmental adjectives, and Nasar’s (1998, p.153) bipolar adjectives were examined to be used in the questionnaire.

During the field survey, respondents were selected with stratified sampling. Equal number of male and female subjects was aimed. Although teenagers use Karum more frequently due to its location, it does not create a ground for the study. People under 18 were excluded from the study to prevent biases, because the reason why they

come to shopping malls can be highly related with the preferences of their parents. This aspect needs to be analyzed in detail in further studies. Interviews were conducted with 60 mall users; 30 people from Karum, and 30 people from Akköprü Migros. Data about respondents' sex, age, frequency of the mall visit, transportation mode and the district that they come from were collected. The study was conducted at weekends between 10 a.m. and 7 p.m. so as to avoid the bias due to differences between the usage patterns of working and non-working people.

As well as the questionnaire, some observations were also done to investigate the profile of users and get the picture of the overall environment in each site. Observations were done by watching people; monitoring their activities, taking photographs of the mall and the users participating in different activities.

The questionnaire was designed so that most of the questions were open-ended in order not to skip ideas of users, in other words, to avoid restricting the responses. The duration of the questionnaire was about 10-15 minutes. Questions were prepared in the form of a short interview and questions were asked by the researcher (See App. D for Turkish and English versions of the questionnaire form).

The first part of the questionnaire was composed of the demographic information of the user such as sex and age, and questions asking about the frequency of the mall visit, transportation mode and the district they come from. The next part consisted of three open ended questions which asked the reason of mall visit (at the date of interview and in general), positive and negative opinions about the mall. In the third part, design elements in shopping malls were listed and the respondents were asked

to comment on their significance. Moreover, the respondents were requested to evaluate the design elements in a particular shopping mall (Akköprü Migros or Karum). The fourth part of the questionnaire consisted of 19 pairs of environmental bi-polar adjectives. The respondents were asked to evaluate if the listed adjectives were relevant for the shopping mall. Therefore, the third and fourth parts, which contained no open-ended questions, investigated the impacts of the shopping mall on people and their evaluations on design elements.

The last part was composed of open-ended questions; which examined the places used by respondents before the emergence of shopping malls, the reasons of using these places, and the frequency of usage of them. If shopping malls had replaced the previous places they used to shop was also questioned. Thus, the fifth part aimed to explore whether the pedestrian malls were still being used, reasons and benefits of their usage etc. which was expected to facilitate understanding the relation between shopping malls and pedestrian malls during the evaluation of results.

#### 4.3.3. Evaluation and discussion of the results

Interviews are conducted with 60 shopping mall users; 30 people from Karum, and 30 people from Akköprü Migros. Demographic data showed that sex, and age profiles were similar in Akköprü Migros and Karum. Therefore, the results are more compatible.

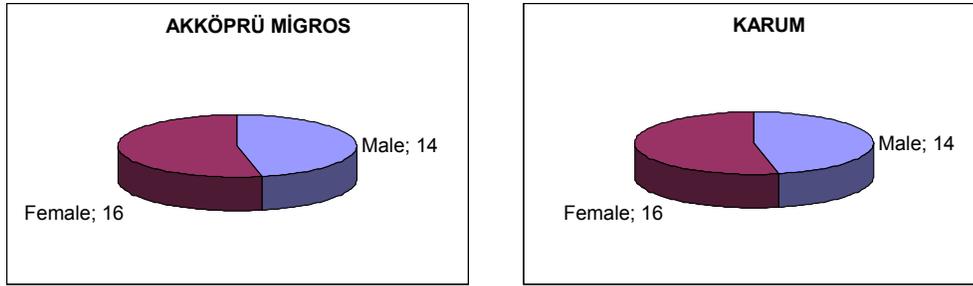


Figure 4. Demographic information of the respondents – Sex.

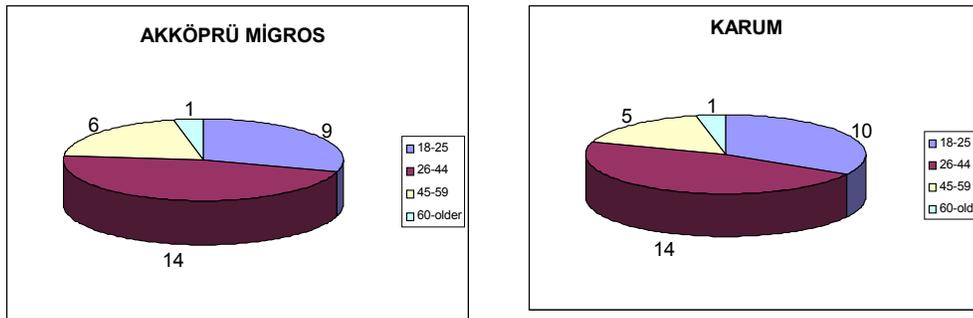


Figure 5. Demographic information of the respondents – Age.

Both in Akköprü Migros and Karum, among 30 respondents 16 of them were females and 14 were males (See Fig. 4). Ages were categorized into four groups, and the highest population was at the interval of 26-44 which covered the 14 of 30 respondents in both shopping malls. (See Fig. 5).

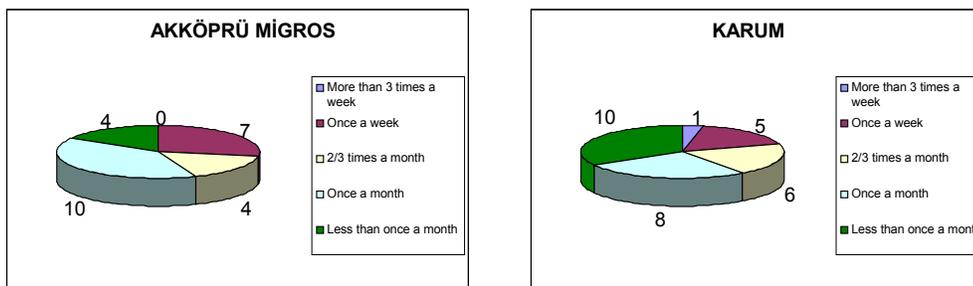


Figure 6. Frequency of the mall visit of the respondents.

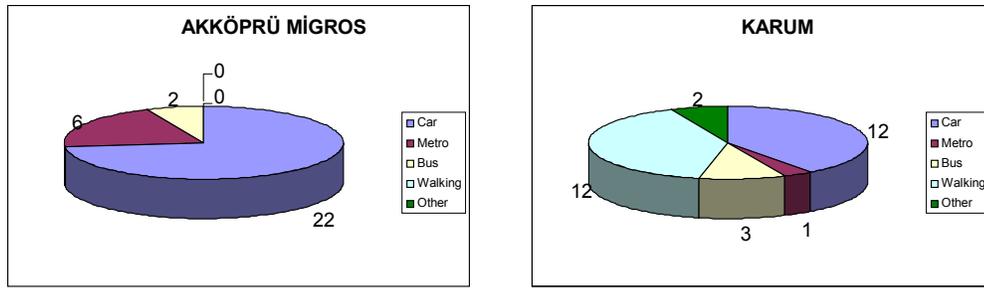


Figure 7. Transportation mode of the respondents.

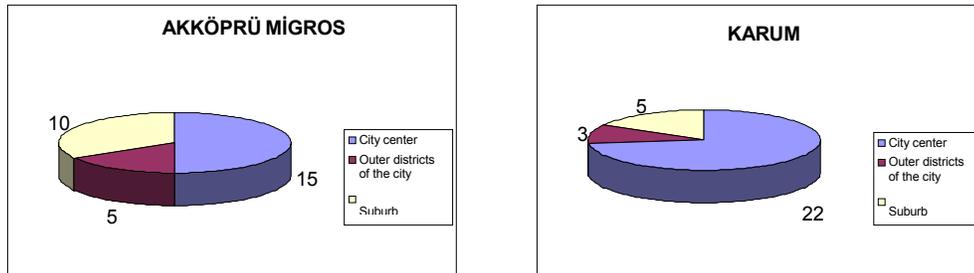


Figure 8. District which respondents come from.

The greatest number of respondents visit Akköprü Migros once a month (10 of 30), whereas in Karum the frequency of visit by the highest population is less than once a month (10 of 30). (See Fig. 6). The number of respondents who prefer car (22 of 30) as the transportation mode is the highest, in Akköprü Migros. In Karum, number of people who walk and use car is the same. It was observed that none of the respondents come to Akköprü Migros by walking and that 6 of them prefer to use the underground (See Fig. 7). There exists a significant difference between Akköprü Migros and Karum in terms of the district which respondents came from; in Akköprü Migros, the number of respondents who came from outer districts of the city (5 of 30) and suburbs (10 of 30) is the same as the number of people who came from city center (15 of 30). In Karum the highest population of the respondents came from city center (22 of 30). It can be stated that, due to the Karum's location, being in the city center, it attracts people who live in the city center more. Although in Akköprü

Migros half of the respondents came from the city center, people who live in suburbs prefer Akköprü Migros more than Karum.

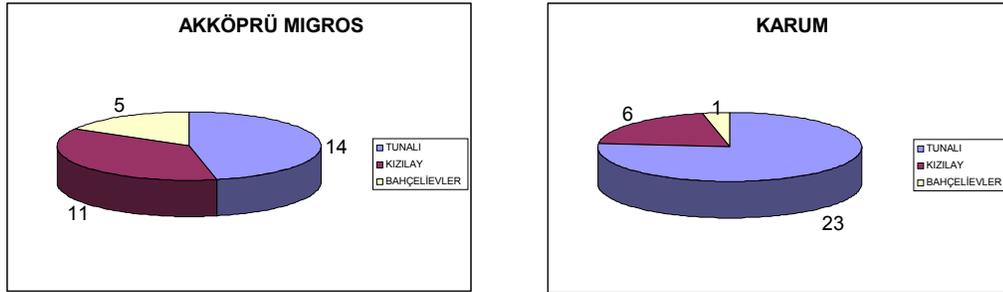


Figure 8. Previously used spaces.

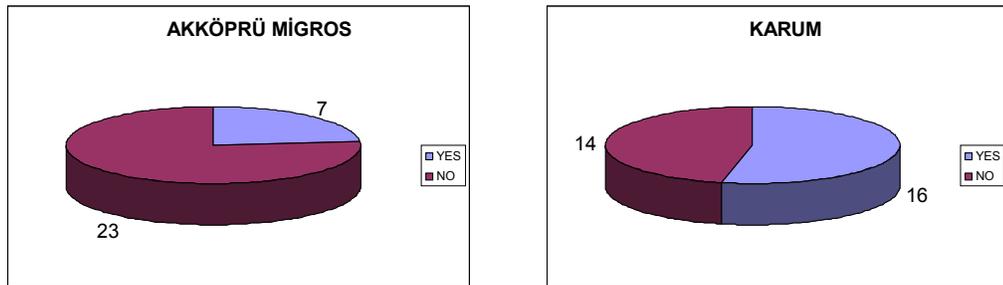


Figure 9. Replacement of shopping malls to previously used spaces.

Most widely used open spaces stated by the respondents are Tunalı (14 of 30), and Kızılay (11 of 30) in Akköprü Migros, whereas in Karum, 23 of 30 respondents used to visit Tunalı (See Fig. 8). 23 of 30 respondents in Akköprü Migros 16 respondents in Karum mentioned that shopping mall replaced the previously used spaces (See Fig. 9).

Table 3. Positive opinions of the respondents.

|                             | Akköprü Migros | Karum | Total |
|-----------------------------|----------------|-------|-------|
| Weather protection          | 7              | 6     | 13/60 |
| Safety                      | 5              | 5     | 10/60 |
| Ambience                    | 15             | 6     | 21/60 |
| Modernity                   | 5              | 5     | 10/60 |
| Quality of shops            | 11             | 6     | 17/60 |
| Variety of shops            | 13             | 15    | 28/60 |
| Planned form                | 6              | 6     | 12/60 |
| Pedestrian amenities        | 7              | 9     | 16/60 |
| Legibility                  | 4              | 0     | 4/60  |
| Controlled environment      | 0              | 3     | 3/60  |
| Purified social environment | 0              | 0     | 0/60  |
| Public peace                | 0              | 0     | 0/60  |
| Leisure activity            | 6              | 3     | 9/60  |
| Maintenance                 | 7              | 2     | 9/60  |
| Parking lot                 | 1              | 2     | 3/60  |
| Green area near it          | NA             | 3     | 3/60  |
| In city center              | NA             | 15    | 15/60 |
| Other                       | 0              | 4     | 4/60  |

When the positive opinions of the visitors about Akköprü Migros and Karum are examined major difference exists in “variety of shops”, “ambience”, and “pedestrian amenities”, and the most significant reason why they like shopping malls is the “variety of shops” (See Table 3).

Table 4. Negative opinions of the respondents.

|   | Akköprü Migros | Karum | Total |
|---|----------------|-------|-------|
| Crowded                                 | 12             | 10    | 22/60 |
| Not a public environment                | 0              | 4     | 4/60  |
| Lack of greenery                        | 10             | 8     | 18/60 |
| Far from city center                    | 8              | NA    | 8/60  |
| Escaping the joys of climate            | 1              | 0     | 1/60  |
| Transportation problem                  | 0              | 2     | 2/60  |
| Seperated from the external environment | 6              | 5     | 11/60 |
| Being global                            | 0              | 0     | 0/60  |
| Being introverted                       | 2              | 4     | 6/60  |
| Control over human                      | 0              | 0     | 0/60  |
| Shopping fatigue                        | 4              | 3     | 7/60  |
| Fantasy world                           | 0              | 3     | 3/60  |
| Not having natural elements             | 3              | 6     | 9/60  |
| Being expensive                         | 5              | 8     | 13/60 |
| Other                                   | 2              | 0     | 2/60  |

“Being crowded”, “lack of greenery”, and “being expensive” are the major negative opinions of the visitors in each shopping mall; also it is observed that users are mostly suffered from the shopping malls’ being “crowded” (See Table 4).

Users suffer from the shopping malls’ being crowded, being expensive and lack of greenery. These negative aspects can be reduced by working with outdoor amenities. People can use natural outdoor green areas instead of artificial greenery and can live the joy of seasonal changes, retail shops can be added through the axis of shopping malls, and the crowd can be dispersed by usage of indoor and outdoor spaces in balance.

Table 5. Importance of design elements.

|                         | <b>Akköprü Migros</b> | <b>Karum</b> | <b>Total</b> |
|-------------------------|-----------------------|--------------|--------------|
| <b>Benches</b>          | 20                    | 13           | 33/60        |
| <b>Lighting</b>         | 18                    | 15           | 33/60        |
| Storefronts             | 10                    | 6            | 16/60        |
| Pavement                | 10                    | 7            | 17/60        |
| Sculptures              | 5                     | 5            | 10/60        |
| <b>Planting</b>         | 14                    | 6            | 20/60        |
| Pots                    | 0                     | 0            | 0/60         |
| Kiosks                  | 1                     | 4            | 5/60         |
| <b>Signage system</b>   | 12                    | 7            | 19/60        |
| Clocks                  | 3                     | 5            | 8/60         |
| <b>Trash containers</b> | 12                    | 12           | 24/60        |
| Fountain                | 6                     | 4            | 10/60        |
| Parking lots            | 2                     | 12           | 14/60        |
| Entrance                | 7                     | 8            | 15/60        |
| <b>Elevators</b>        | 14                    | 12           | 26/60        |
| Stairs                  | 6                     | 10           | 16/60        |
| Other                   | 2                     | 2            | 4/60         |

It is analyzed that, users give most importance to “benches”, “lighting”, “elevators”, “trash containers”, “planting”, and “signage system” as the design elements. In both of the shopping malls, “benches” and “lighting” are the major design elements that take users attention (See Table 5).

As a result, it can be stated that people are not as much interested in single design elements as the overall atmosphere. Although the atmosphere is created both by social interactions and physical environment, users give more importance to socialization which is one of the keystones of urban life. In addition, people still use previous open spaces; they are not totally left.

Chi-square analysis is used to evaluate statistical relationships between responses. Findings of this analysis are discussed below to examine statistically significant relationship between responses.

Purpose of visiting shopping malls versus purpose of visiting previous open spaces was analyzed (See App. E for the results). People doing shopping previously in open spaces do shopping also in shopping malls (for the whole sample:  $\chi^2=39.765$ ,  $df=1$ ,  $p=0.000$ ). In both Migros and Karum, this relationship is again significant ( $\chi^2=17.500$ ,  $df=1$ ,  $p=0.000$ ;  $\chi^2=18.462$ ,  $df=1$ ,  $p=0.000$  respectively for Migros and Karum).

The same kind of relation is also found for the activities, such as strolling (for the whole sample:  $\chi^2=25.974$ ,  $df=1$ ,  $p=0.000$ ), eating (for the whole sample:  $\chi^2=44.211$ ,  $df=1$ ,  $p=0.000$ ), watching people (for the whole sample:  $\chi^2=34.737$ ,  $df=1$ ,  $p=0.000$ ), and spending leisure time (for the whole sample:  $\chi^2=34.656$ ,  $df=1$ ,  $p=0.000$ ). In both Migros and Karum, these relationships are again significant for strolling ( $\chi^2=16.279$ ,  $df=1$ ,  $p=0.000$ ;  $\chi^2=13.696$ ,  $df=1$ ,  $p=0.000$  respectively for Migros and Karum), eating ( $\chi^2=21.667$ ,  $df=1$ ,  $p=0.000$ ; no chi-square statistics are calculated as none of the respondents use Karum for eating purpose), watching ( $\chi^2=30.000$ ,  $df=1$ ,  $p=0.000$ ;

$\chi^2=13.929$ ,  $df=1$ ,  $p=0.000$  respectively for Migros and Karum), leisure ( $\chi^2=13.929$ ,  $df=1$ ,  $p=0.000$ ;  $\chi^2=15.093$ ,  $df=1$ ,  $p=0.000$  respectively for Migros and Karum) (See App. E for the results).

Consequently, it can be stated that people are using Akköprü Migros and Karum Shopping Malls for the same reasons why they used open spaces before the construction of shopping malls. In other words, when the reasons of visiting shopping malls and previous open spaces are analyzed, it can be claimed that people use these pedestrian places for the same purposes such as shopping, strolling, eating, spending leisure time, watching people, whether they are closed or open. Therefore, these activities combine indoor and outdoor spaces which mean continuity can be created through these activities while designing an integrated pedestrian environment. They can be the tool for a designer to make a link between the outdoor and indoor in terms of spatial configuration.

Satisfaction from design elements in the shopping mall versus frequency of using previously used open spaces was evaluated (See App. E for the results). In this part, it has been questioned whether the sufficiency of design elements in Akköprü Migros and Karum Shopping Malls has an effect on the frequency of visit to previously used open spaces. If the users are satisfied from the design elements, it is expected that they visit these spaces less frequently. Chi-square results indicate that users that find some design elements insufficient and still use previous open spaces frequently.

People who satisfied from store fronts (for the whole sample:  $\chi^2=5.589$ ,  $df=2$ ,  $p=0.061$ ) and signage systems (for the whole sample:  $\chi^2=9.202$ ,  $df=2$ ,  $p=0.10$ ) do not use previously used open spaces.

In both Migros and Karum, this relationship is again significant(See App. E for the results). In Akköprü Migros, statistically significant results have been found for pavement ( $\chi^2=5.049$ ,  $df=2$ ,  $p=0.080$ ), signage systems ( $\chi^2=8.655$ ,  $df=2$ ,  $p=0.013$ ), and stairs ( $\chi^2=9.094$ ,  $df=2$ ,  $p=0.011$ ). In Karum, people who found some design elements such as store fronts ( $\chi^2=9.231$ ,  $df=2$ ,  $p=0.010$ ), sculpture ( $\chi^2=7.129$ ,  $df=2$ ,  $p=0.028$ ), and entrance ( $\chi^2=7.124$ ,  $df=2$ ,  $p=0.028$ ) sufficient, usually visit Karum instead of previously used open spaces.

Thus, store fronts, sculpture, and entrance are significant design elements for urban shopping malls, if the users are not satisfied with those elements; they prefer to use previous open spaces more frequently. The same is also true for suburban shopping malls in which the most significant design elements are pavement, signage system, and stairs. Nevertheless, when the importance of design elements was asked, it was found that most of the users were not aware of the design elements. Although they mentioned that benches, lighting elements, elevators, trash containers, planting, and signage system were important (See Table 5), they were interested in the overall ambience of the place more.

Atmosphere versus frequency of visit to previously used open spaces was analyzed. It is hypothesized that atmosphere of shopping malls may have an impact on the frequency of visit of previously used open spaces. Findings demonstrate that respondents who evaluate some of the features negatively usually prefer using the previously used open spaces (See App. E for the results). People, who evaluate atmosphere as friendly (for the whole sample:  $\chi^2=8.987$ ,  $df=4$ ,  $p=0.061$ ), comfortable

(for the whole sample:  $\chi^2=7.946$ ,  $df=4$ ,  $p=0.094$ ), and natural (for the whole sample:  $\chi^2=8.630$ ,  $df=4$ ,  $p=0.071$ ), use shopping malls more frequently.

This relationship is also significant for Akköprü Migros (See App. E for the results). Respondents found Akköprü Migros exciting ( $\chi^2=8.330$ ,  $df=4$ ,  $p=0.080$ ), comfortable ( $\chi^2=7.834$ ,  $df=4$ ,  $p=0.098$ ), modern ( $\chi^2=5.000$ ,  $df=4$ ,  $p=0.82$ ), interesting ( $\chi^2=11.048$ ,  $df=4$ ,  $p=0.026$ ), active ( $\chi^2=7.809$ ,  $df=4$ ,  $p=0.099$ ), natural ( $\chi^2=17.240$ ,  $df=4$ ,  $p=0.002$ ), colorful ( $\chi^2=8.416$ ,  $df=4$ ,  $p=0.077$ ), attractive ( $\chi^2=9.081$ ,  $df=4$ ,  $p=0.059$ ), prefer to visit Akköprü Migros more frequently. In Karum, the same kind of relationship is also found for the attributes such as, well-maintained ( $\chi^2=8.036$ ,  $df=4$ ,  $p=0.090$ ), hot ( $\chi^2=8.036$ ,  $df=4$ ,  $p=0.090$ ), attractive ( $\chi^2=9.209$ ,  $df=4$ ,  $p=0.056$ ) (See App. E for the results).

Thus, Nasar's (1998, p.153) bi-polar adjectives are important attributes for shopping malls that affect user preferences. When the relation between the evaluation of the atmosphere and the frequency of visit to previous places were examined, and it was seen that atmosphere of the place had a direct influence on the preferences of users. Because, respondents who found some features of the atmosphere negative, prefer using the previous open spaces. People find meanings in their environment which shape their behaviors. Some of these meanings come from our past (memory) and some are acquired through design elements which enhance the quality of environment. The negative attributes such as being boring, uncomfortable, old-fashioned, uninteresting, inactive, unnatural, colorless, unattractive, unkept, and cold used by respondents for shopping malls should be reconsidered to create a connection with the city.

Atmosphere versus replacement of previous open spaces was evaluated (See App. E for the results). Within the questionnaire, respondents were asked to evaluate whether shopping malls replaced the use of open spaces or not. In this part, it was questioned if atmosphere had an effect on the replacement of open spaces by the shopping malls. Respondents who evaluated some features of atmosphere positively believed that shopping malls replaced the previously used open spaces. People who found shopping malls friendly (for the whole sample:  $\chi^2=11.505$ ,  $df=2$ ,  $p=0.003$ ) and natural (for the whole sample:  $\chi^2=6.503$ ,  $df=2$ ,  $p=0.039$ ) mentioned that shopping malls replaced the previously used open spaces.

In Akköprü Migros, the same kind of relationship is also found for one attribute which is being attractive ( $\chi^2=4.978$ ,  $df=2$ ,  $p=0.083$ ) (See App. E for the results). This is the only significant factor for Akköprü Migros. However, respondents who found Karum calming ( $\chi^2=5.250$ ,  $df=2$ ,  $p=0.072$ ), friendly ( $\chi^2=10.102$ ,  $df=2$ ,  $p=0.006$ ), natural ( $\chi^2=5.135$ ,  $df=2$ ,  $p=0.077$ ) claimed that shopping malls replaced the previously used open spaces (See App. E for the results).

Hence, when the respondents evaluated whether shopping malls replaced open spaces or not, it was seen that the atmosphere had an effect on the respondents' opinion about the replacement of open spaces by the shopping malls. Respondents who mentioned that shopping malls are attractive, calming, friendly, and natural believed that shopping malls replaced the previous open spaces.

Findings of the statistical analysis indicate that shopping mall development affected the use of some previously used spaces. Despite the similar purposes of use, the users expect different qualities in Akköprü Migros and Karum. Although, their expectations are mostly satisfied, there is no strong indication that these expectations are influenced by the location of the malls. However, for both Karum and Migros-urban and suburban examples-some design features seem to be influential upon the use of previously used urban spaces or replacement of them by the malls.

Evaluating the two malls-Akköprü Migros and Karum-in terms of user preferences and indoor and outdoor relationship indicated that people do not refer to pedestrian environments in different ways. They appeared rather similar in that respect. However, their locations provide different potentials for the integration with the pedestrian malls. Migros as a suburban shopping mall requires a new design proposal for this integration, whereas, Karum is at the heart of this relationship as the half of the respondents in Karum stated that most widely used open space is Tunalı, it may be because of the Karum's working as part of an urban pattern and its being human scaled as a shopping mall. Its entrances from various directions of different districts also make it a gathering and relaxing place. There is always a pedestrian flow which makes it more dynamic and integrated with the outdoor environment. It can be argued that the continuity of the urban life is supported by Karum.

## 5. CONCLUSION

In this study, pedestrian malls and shopping malls are evaluated as pedestrian places which can work together to create a healthy public life and spatial configuration.

While investigating the role of pedestrian places in shopping malls and urban open spaces, a field research was carried out to examine an integrated environment which is more advantageous in terms of citizens' expectations and city image.

Urban open spaces have a crucial impact on the city because they carry out valuable functions for shaping the city. Moreover, they should support public and outdoor life; pedestrian zone should be investigated in this context. One of the most important components of urban open spaces is the pedestrian malls in terms of defining the characteristics of urban environment. Pedestrian malls as public places should strengthen social experience, in other words, they should not only be related to space but also to social formation.

Quality of a space can be increased by creating sense of place which can be a guide for designers and architects. Being memorable and recognizable gives an identity to space. It can be said that identity of space is acquired through the meaning, and meaning is gained by the usage, in other words, meaning of the public place has a direct relation to its success. Moreover, unity as a design principle is also crucial in the redevelopment process of the cities. If an urban space is developed, it should be evaluated in the context of the entire city, which means that the identity of the outdoor public places should be examined in the overall city context.

In most of the cases, the city image is created with the help of these pedestrian spaces. Pedestrian malls make pedestrian access easier while improving the characteristics of city. Thus, they determine the quality of public life. Design elements and furniture have a direct impact on the effectiveness of socio-physical environment in pedestrian malls. Although their design is important, their value depends on the usage, because pedestrian malls are social environments which are created by human values. Thus, pedestrian malls reflect life styles, and preferences of people which also increase the imageability of the city. Moreover, spatial configuration of the mall has a direct influence on the socialization process. In other words, design elements and principles should always be taken into account, because social dimension of pedestrian malls are directly affected by them. Hence, the main concern should be to find out how pedestrian malls as a part of outdoor design affects on the choices of people.

To sum up, pedestrian malls are not only physical environments but also social settings. Their fundamental nature comes from the urban public spaces where social activities occur. Their success depends on the appropriate use of design elements and their specific locations to make them a mediator to support public life.

Shopping malls should be related to both social and physical aspects of environment as pedestrian places, because in the contemporary world shopping as a commercial activity modifies its meaning, it involves not only consumption but also socialization. Therefore, shopping becomes a social practice. Most important aim of shopping malls is to answer this social need of people; otherwise they can not become

meaningful social spaces. The mall should work as a bridge to create a system of pedestrian environment.

One of the most important components of urban environment is diversity which also gives its identity. Nevertheless, it is difficult to mention about the identity of a shopping mall. Experiences which shopping malls provide for people are more universal. In fact, the essence of mall is rooted in the variable choices of people. Although it is artificial, people want to live the urban ambience in a more controlled, purified, and safe environment. Malls provide a kind of isolated and comfortable utopian world, especially in suburbs and they have begun to function as a city center. This process creates competition between the city center and the shopping mall. For the purpose of this study, the most crucial question is how much shopping malls serve our public life.

Nowadays, design trends encourage shopping centers turn out to be more urban with their main design concepts. Even if shopping malls have positive aspects, they also lead to negative consequences such as reduced street activity, decline of streetscape, deprivation of city image, and poor aesthetic quality of the facades of buildings. Thus, the link between indoor and outdoor pedestrian places become more important and should be created with spatial and visual clues. Smooth transitions between these pedestrian places enhance physical as well as social quality.

The results of this research indicate that the positive aspects of indoor pedestrian places can be matched with the positive aspects of urban pedestrian environment. Once people enter the shopping mall, they spend hours walking around because of its attractive and obstacle-free pedestrian environment. This example, especially seen in

suburban shopping malls, should be applied to the pedestrian behavior on urban open spaces as well.

People find different meanings in open and closed spaces. This potential can be used by urban designers and city planners in the development or revitalization process of the cities. It creates a ground for a more integrated pedestrian environment. Each strategy, either a shopping mall or a pedestrian mall, presents different benefits and problems. By eliminating the negative sides and using the positive effects of the relation between the interior and exterior, architects and urban designers can have a chance to provide a link between the indoor and outdoor pedestrian environment.

Integrated pedestrian environment is important for defining the characteristics of a city. Identity of public places can be created by making them memorable and recognizable. This quality gives a sense of place to the entire city. Thus, a city can be unique and memorable via its connected interior and exterior spaces. Integrated networks of pedestrian places make city more effective and dynamic. As a result, liveliness of social life in the city depends on the network of spatial configuration, interaction and communication among people.

The most important issue is to examine the relation between outdoor urban places and indoor pedestrian places and their functions in the pedestrian life to understand what the integrated environment is. Although shopping has never lost its value in the process of city growth and development both in closed and open areas, shopping malls are the new formations for our country. It is hard to understand how shopping mall relates to existing city due to its novelty. Moreover, results of this research

indicate that people use both shopping malls and previously open spaces which mean having ten years experience is not enough to decide how much integration has been obtained in terms of pedestrian environment. Nevertheless, it should be kept in mind that; design strategy of shopping malls should include both spatial configuration and socio-structure of the city in order to create an integrated process with the traditional city, in other words with the urban open spaces.

There are aspects that are not covered within the context of this thesis which might be suggested for further research. Differences between user groups according to their socio-economic and demographic characteristics can be analyzed in detail.

Comparison between different mall characteristics which have an influence on the pedestrian environment is another important issue to be addressed in further studies.

In order to test the findings of this research, similar research can also be done after the users become more familiar with the existing shopping malls.

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APPENDIX A

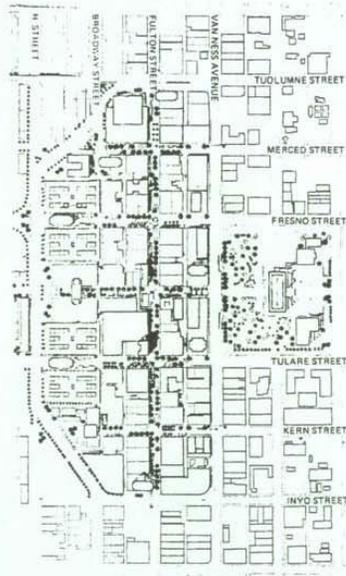


Figure 1a. Plan of Fulton Pedestrian Mall, (Rubenstein, 133).



Figure 1b. Overall view of mall (Rubenstein, 134).

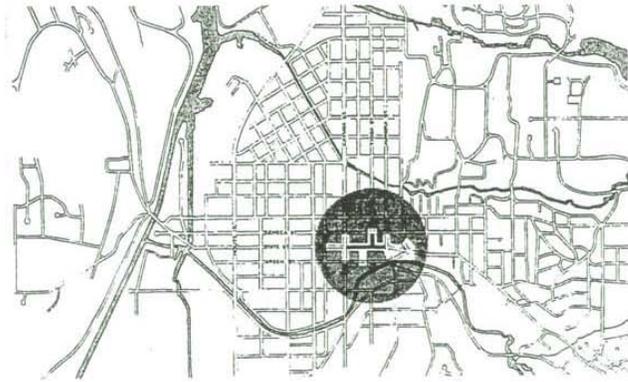


Figure 2a. Mall in relation to downtown context (Rubenstein, 141).

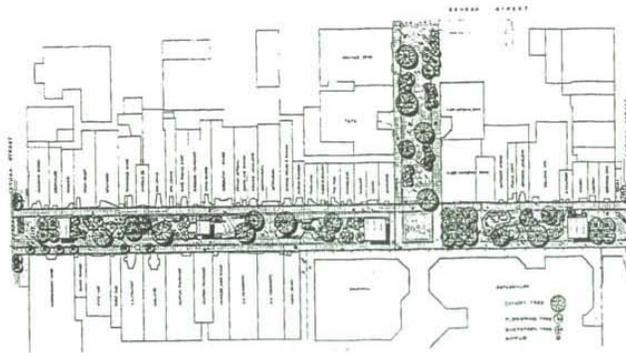


Figure 2b. Plan of Ithaca Pedestrian Mall (Rubenstein, 142).



Figure 2c. View of mall (Rubenstein, 146).

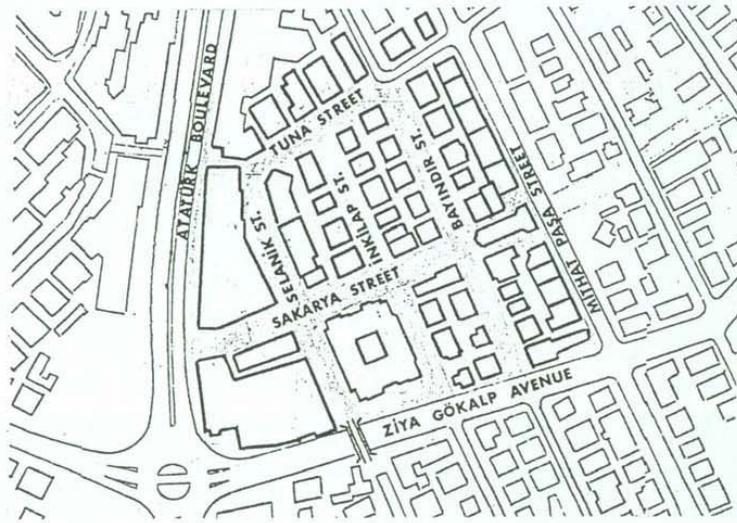


Figure 3a. Sakarya Pedestrian Mall in relation to downtown context (Torlak, 162).

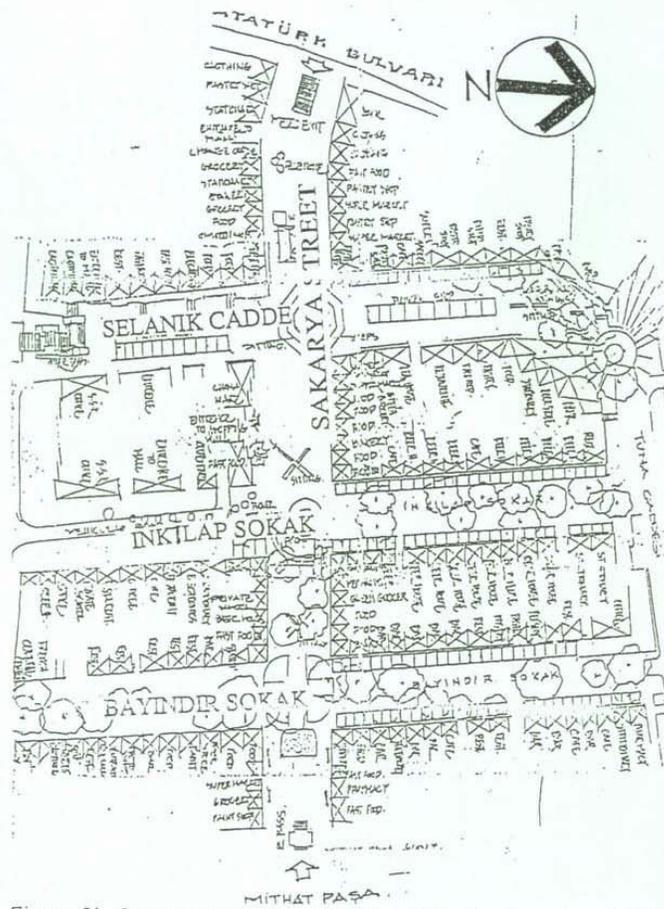


Figure 3b. Street furniture and functional distribution of mall (Mahmud, 105).



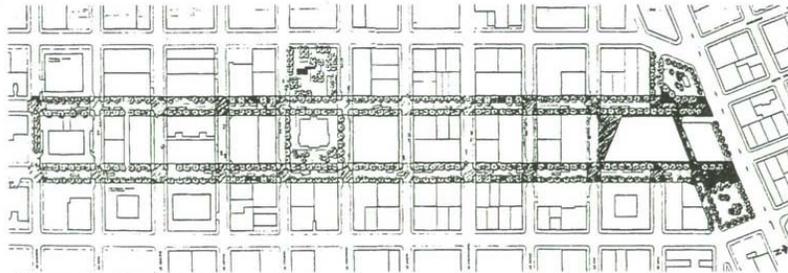


Figure 5a. Plan of Portland Pedestrian Mall (Rubenstein, 209).

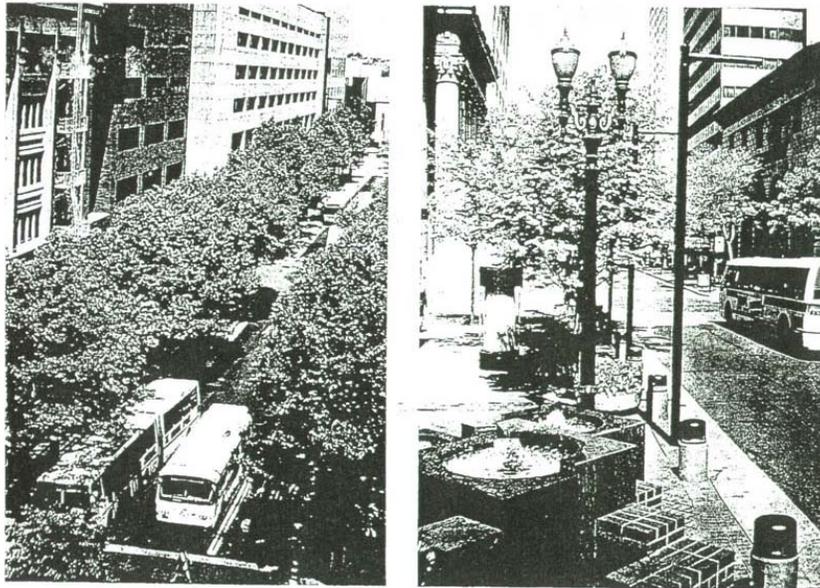


Figure 5b. View of mall (Rubenstein, 210).

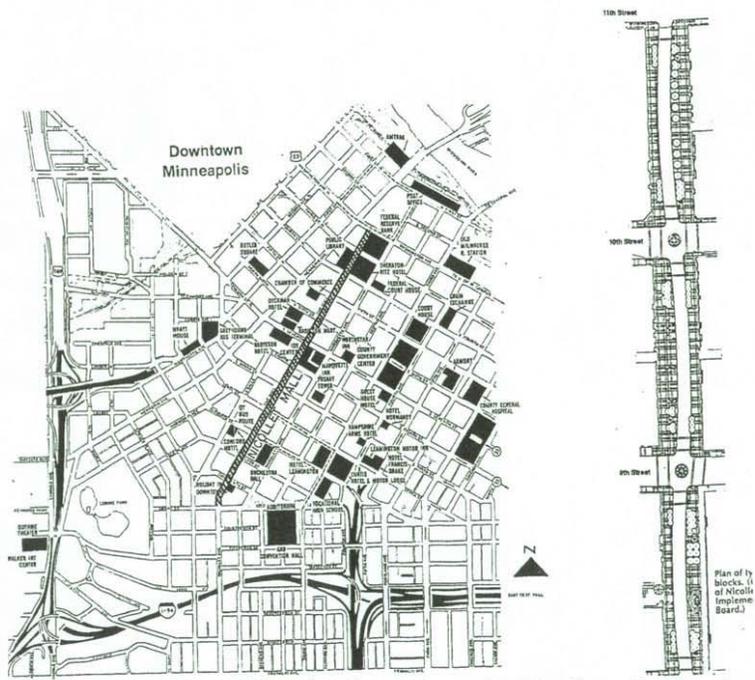


Figure 6a. Nicolet Pedestrian Mall location plan, (Rubenstein, 198). Figure 6b. Plan of mall, (Rubenstein, 199).

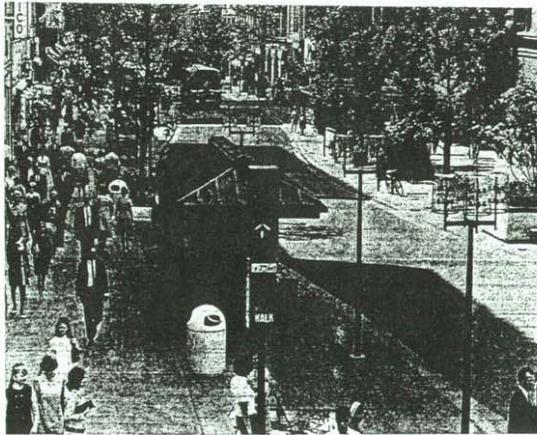


Figure 6c. View of mall, (Rubenstein, 200).



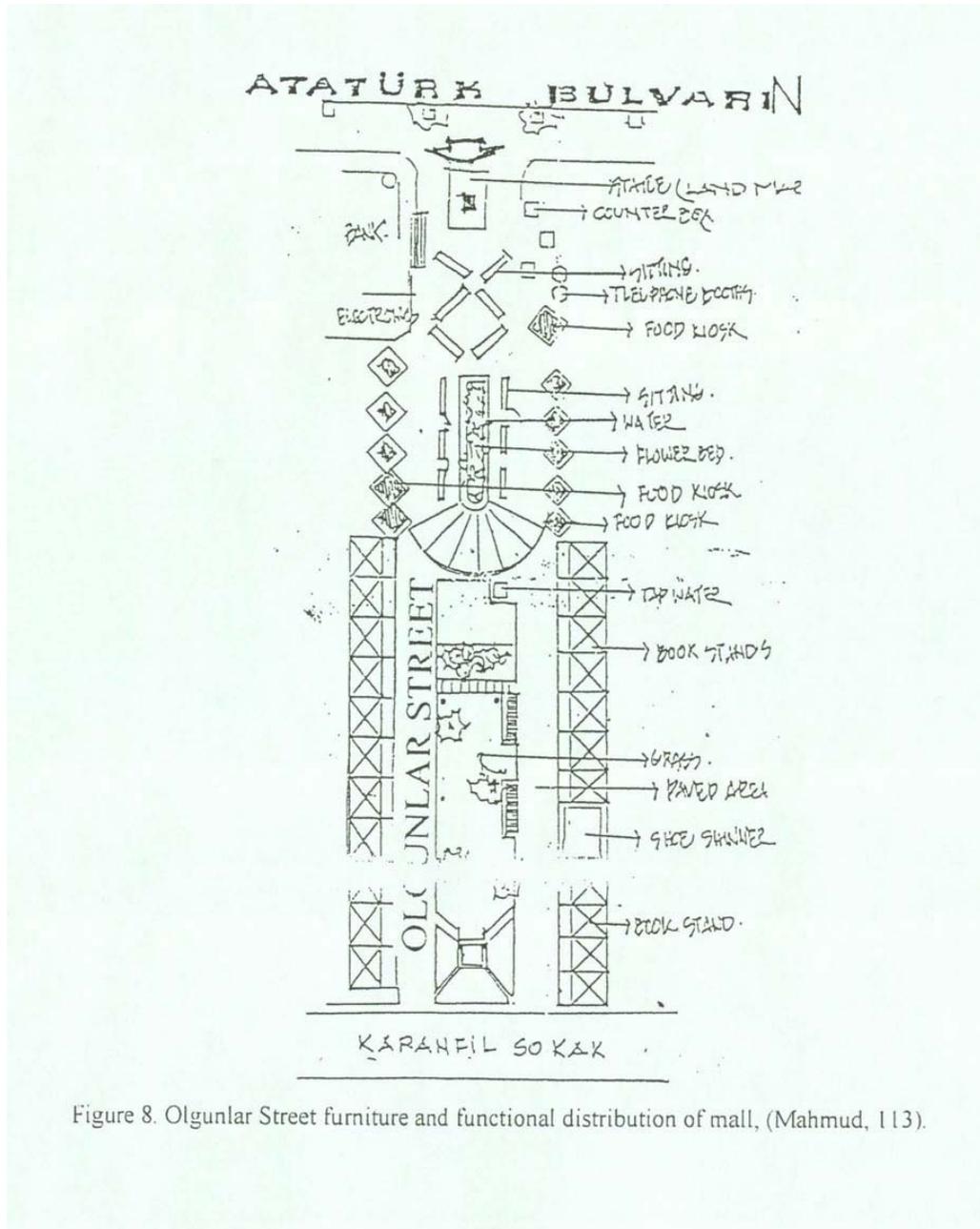


Figure 8. Olgunlar Street furniture and functional distribution of mall, (Mahmud, 113).



Figure 9a. Pavement, (Cerver, 45).



Figure 9b. Pavement, (Cerver, 80).

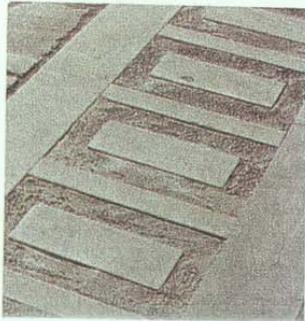


Figure 9c. Pavement, (Cerver, 45).

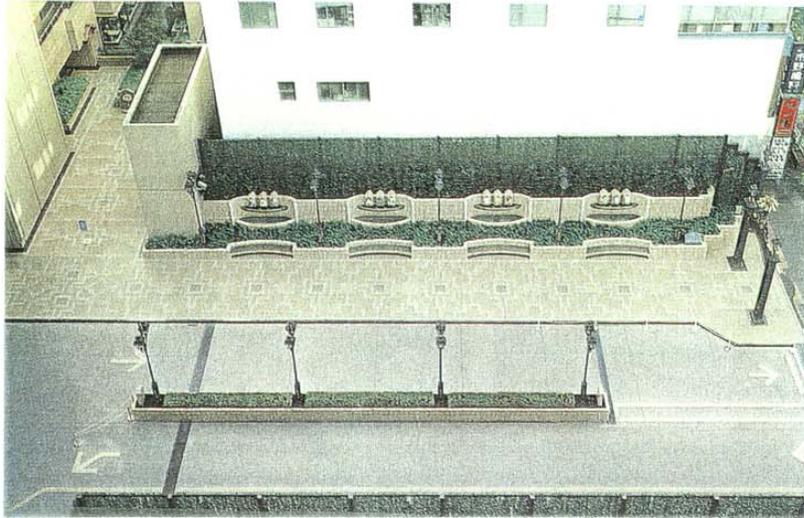


Figure 9d. Pavement, (Henshubu, 180).



Figure 9e. Pavement, (Henshubu, 165).



Figure 10a. Lighting. (Cerver, 45).



Figure 10b. Lighting. (Henshubu, 165).

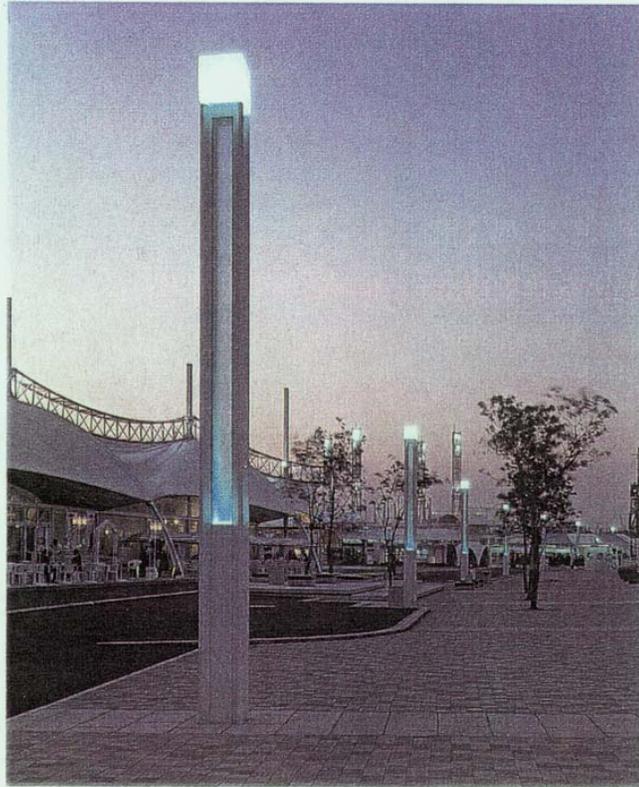


Figure 10c. Lighting, (Henshubu, 180).



Figure 11a. Sign, (Henshubu, 220).



Figure 11b. Sign, (Henshubu, 220).



Figure 11c. Sign, (Mukoda, 107).



Figure 12a. Sculpture, (Mukoda, 16).



Figure 12b. Sculpture, (Mukoda, 16).



Figure 12c. Sculpture, (Mukoda, 16).

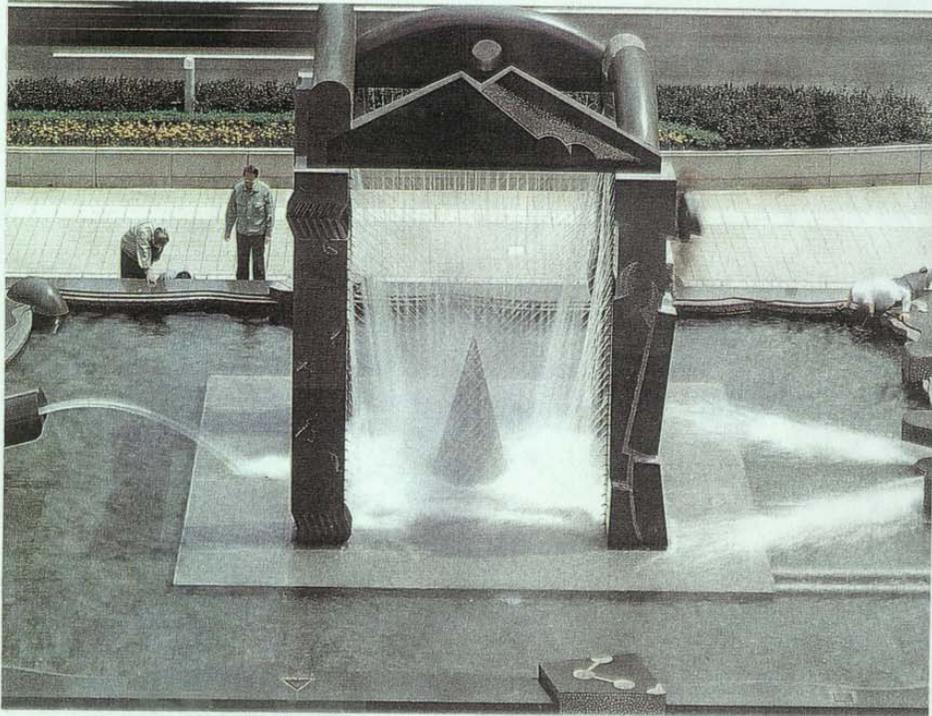


Figure 13a. Fountain, (Cerver, 32).

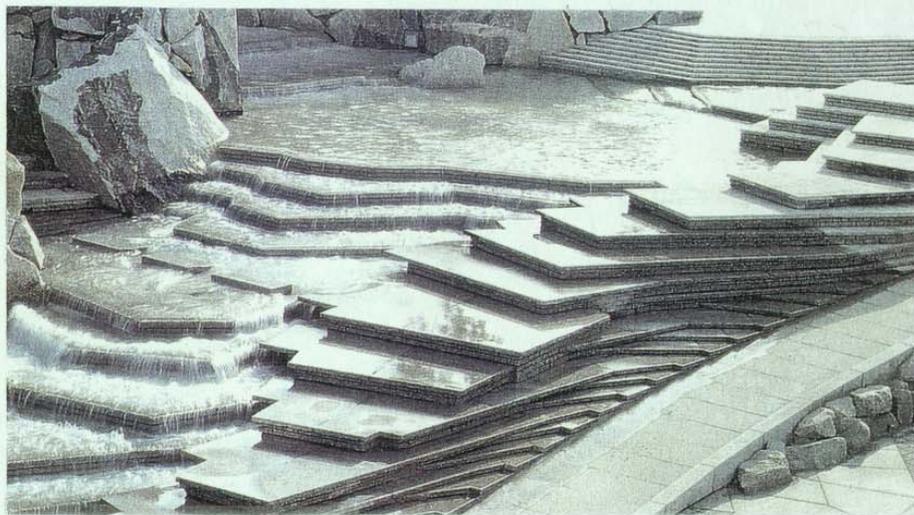


Figure 13b. Fountain, (Cerver, 81).



Figure 14a. Drinking fountain, (Mukoda, 70).

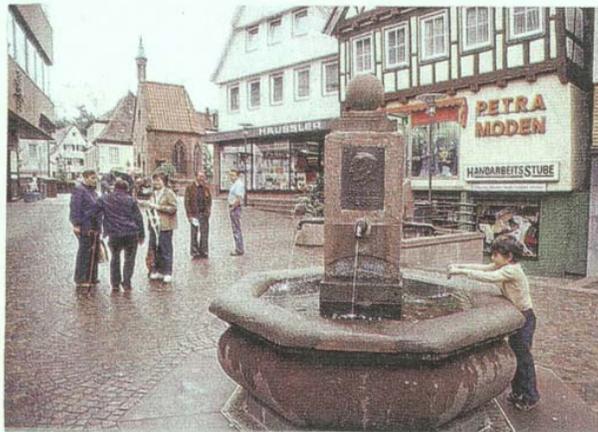


Figure 14b. Drinking fountain, (Mukoda, 120).



Figure15. Bollard, (Henshubu, 146).



Figure16a. Seating area, (Cerver, 72).



Figure16b. Bank, (Mukoda, 55).

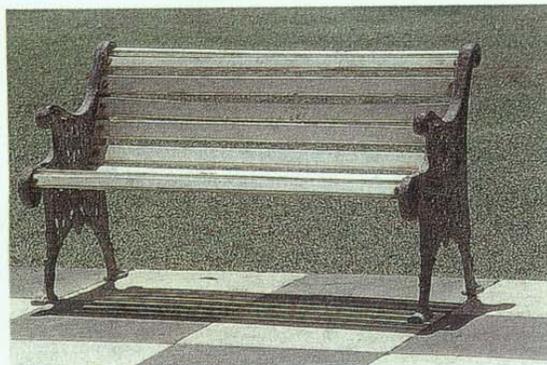


Figure16c. Bank, (Mukoda, 55).



Figure 16d. Seating area, (Cerver, 94).

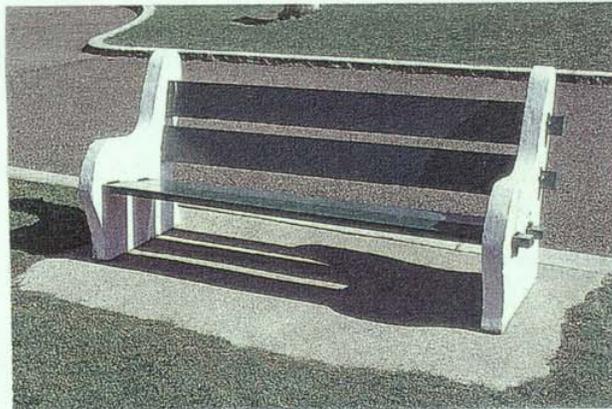


Figure 16e. Bank, (Mukoda, 55).

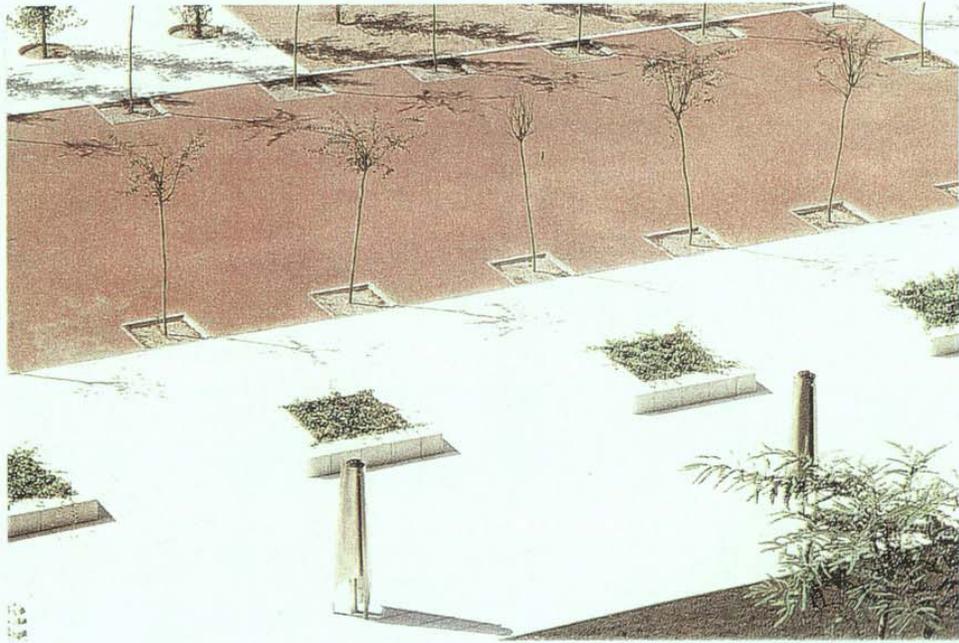


Figure 17a. Tree planter, (Cerver, v. 2, 39).



Figure 17b. Tree planter, (Cerver, 38).



Figure 18a. Pot, (Henshubu, 165).



Figure 18b. Pot, (Henshubu, 125).



Figure 18c. Pot, (Mukoda, 91)

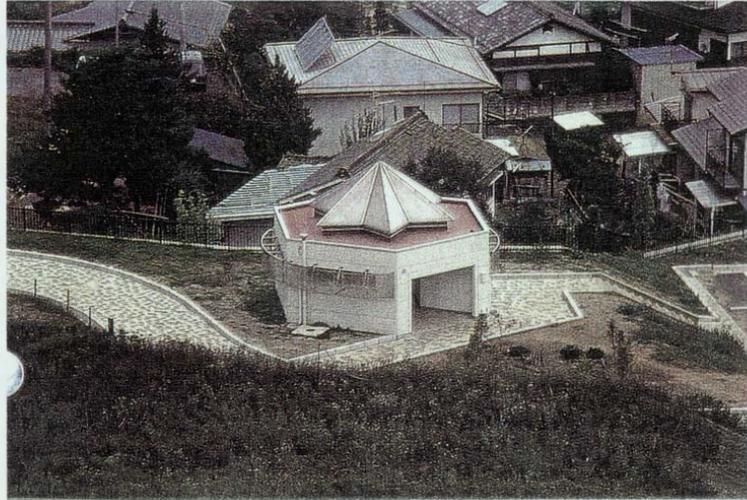


Figure 19. Kiosk, (Henshubu, 119).



Figure 20a. Shelter, (Henshubu, 147).



Figure 20b. Shelter, (Henshubu, 144).

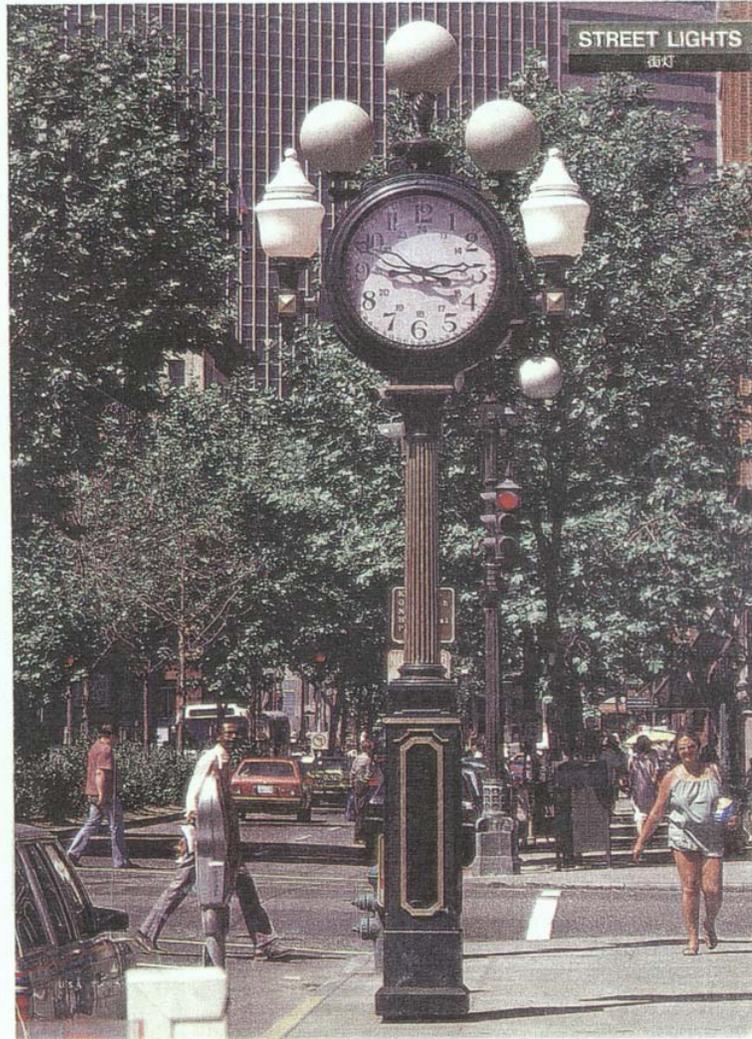


Figure 21. Clock, (Mukoda, 9).



Figure 22a. Telephone kiosk, (Mukoda, 31).



Figure 22b. Telephone kiosk, (Mukoda, 31).



Figure 22c. Telephone kiosk, (Henshubu, 185).



Figure 23a. Trash container, (Mukoda, 70).



Figure 23b. Trash container, (Mukoda, 72).





Figure 24a. Planting, (Henshubu, 88).



Figure 24b. Planting, (Henshubu, 82).



Figure 24c. Street planting, (Mukoda, 98).



Figure 24d. Street planting, (Mukoda, 98).

APPENDIX B



Figure 1a. Map of Chester, (Bednar, 1989,189).



Figure 1b. View of Eastgate Rows, (Bednar, 1989, 190).



Figure 1c. View of Chester, (Bednar, 1989, 191)



Figure 1d. View of Chester, (Bednar, 1989, 189).

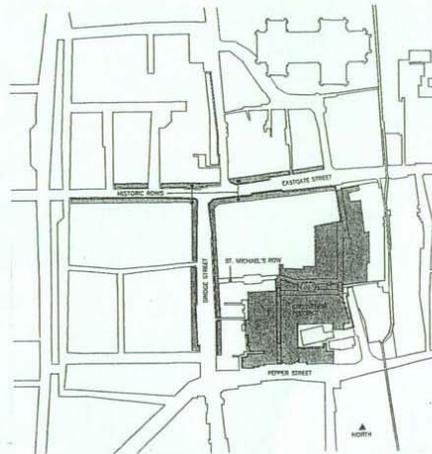


Figure 1e. Site plan of Chester, (Bednar, 1989, 192).

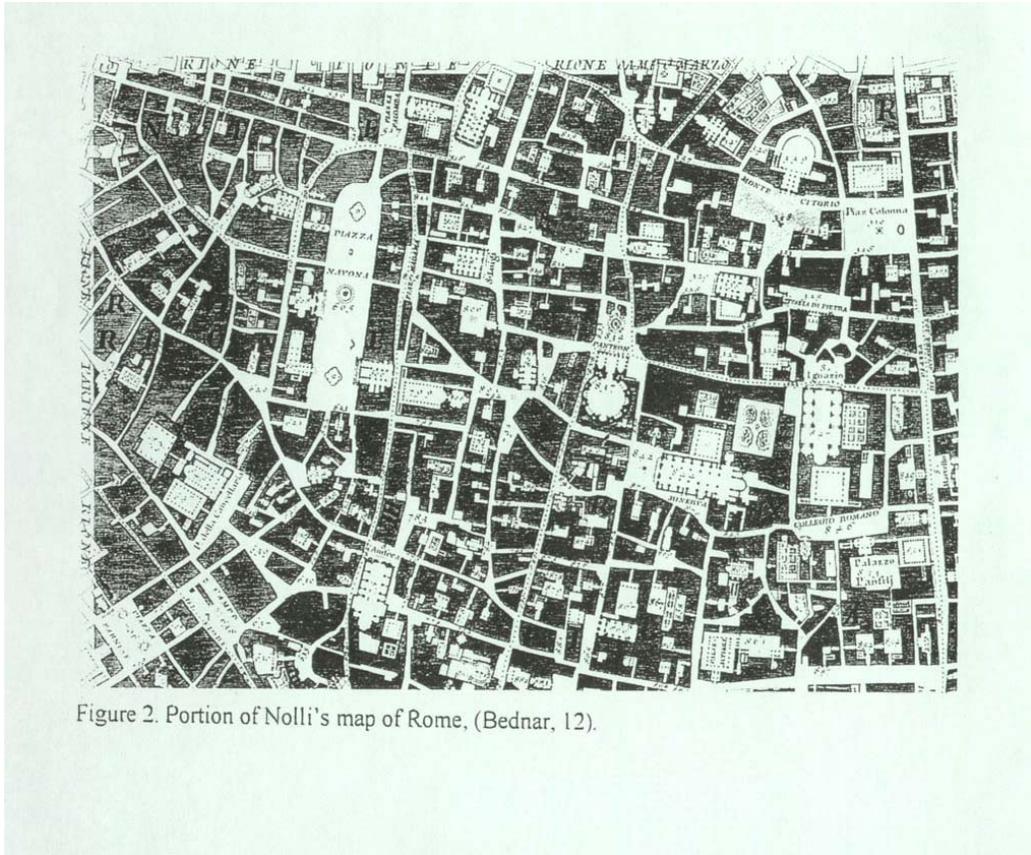


Figure 2. Portion of Nolli's map of Rome. (Bednar, 12).

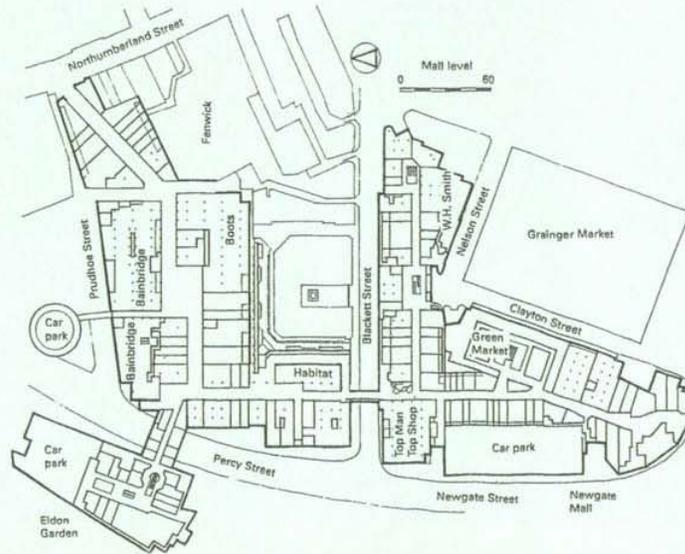


Figure 3a. Plan of Elton Square (Beddington, 157).



Figure 3b. View of Elton Square, (Beddington, 158).



Figure 3c. View of Elton Square, (Beddington, 158).

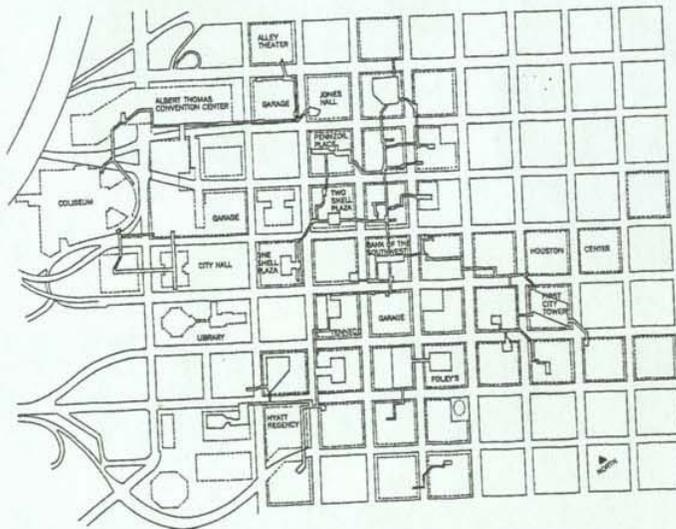


Figure 4a. Map of tunnel system-Houston, (Bednar, 1989, 181).



Figure 4b. Skyway system-Minneapolis, (Bednar, 1989, 148).



Figure 4c. Atrium of skyway-Los Angeles, (Bednar, 1989, 161).

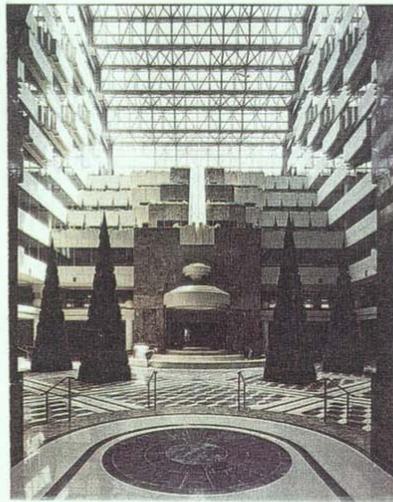


Figure 4d. Atrium of skyway-New York, (Bednar, 1989, 161).



Figure 4e. Atrium of skyway-New York (Bednar, 1989, 161).

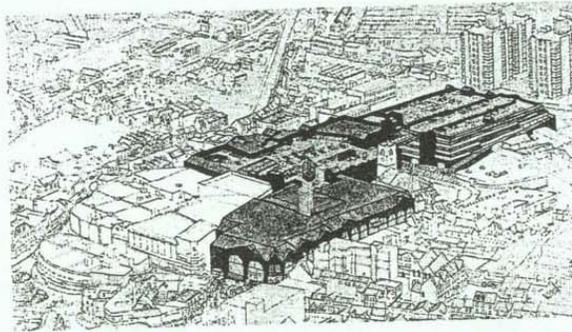


Figure 5a. Ariel view of Potteries Shopping Center, (Beddington, 183).

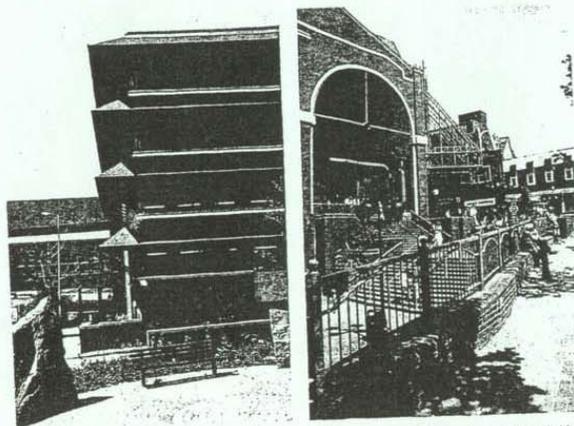


Figure 5b. Pedestrian bridge forming part of centre, (Beddington, 181).

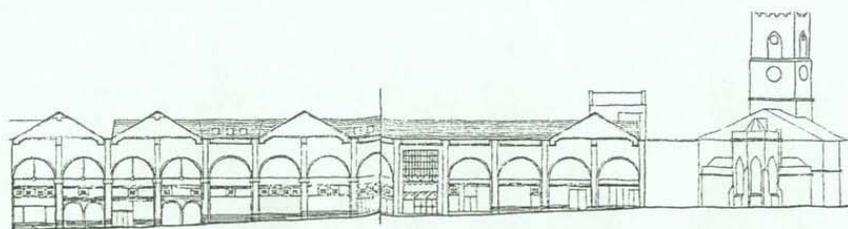


Figure 5c. Town road elevation, (Beddington, 180-181).

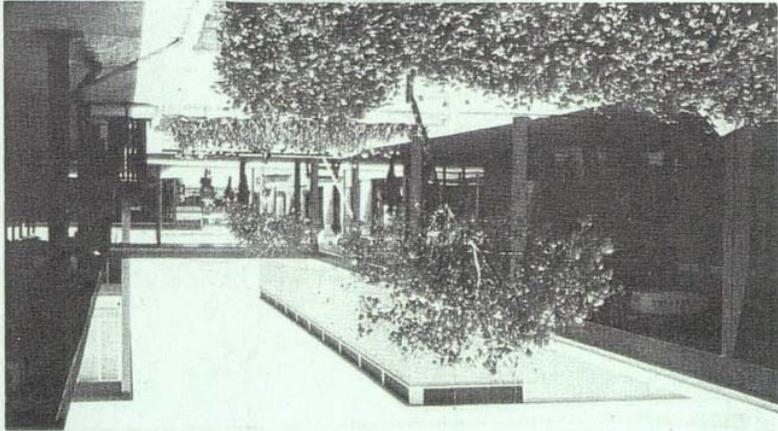


Figure 6a. General view of walkways-Canada, (Beddington, 22).



Figure 6b. St. Ann's Shopping Centre-UK, (Beddington, 23).

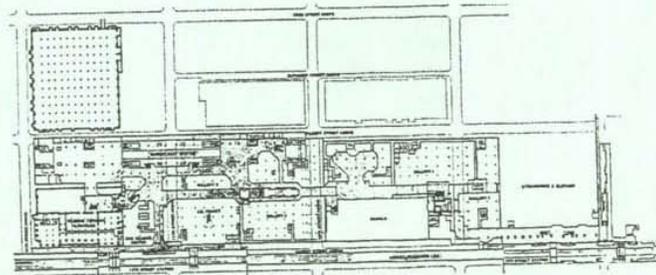


Figure 7a. Plan of mall-The Gallery. (Bednar, 1986, 56).

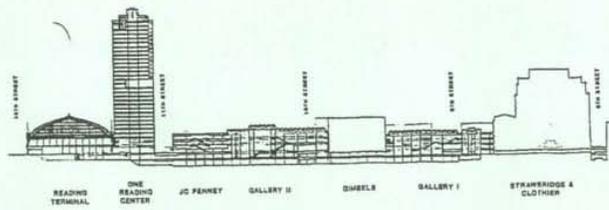


Figure 7b. Section of mall-The Gallery. (Bednar, 1986, 56).

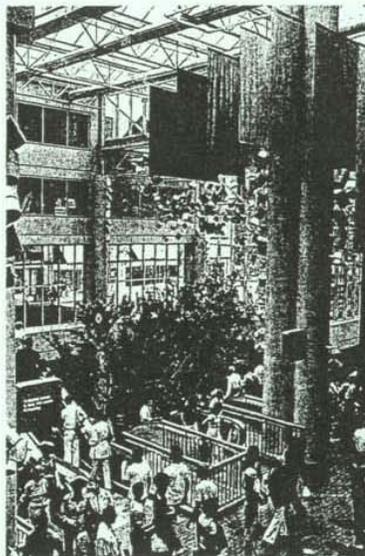


Figure 7c. View from Gallery, (Bednar, 1986, 58).

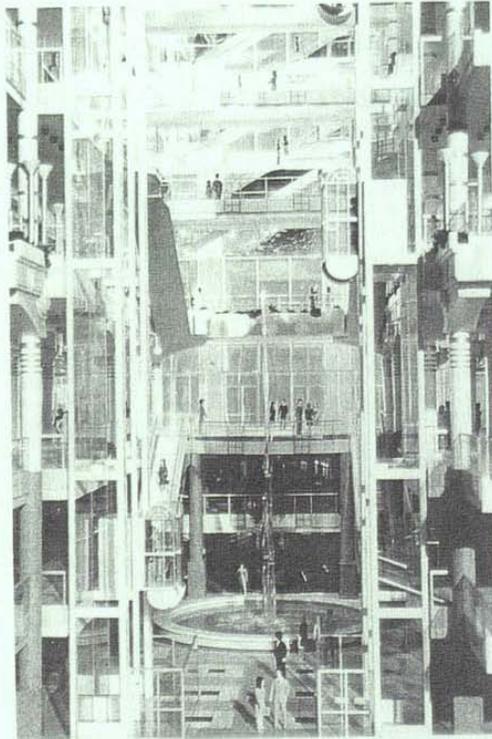


Figure 9. A&S Plaza-Manhattan, (Bednar, 1986, 217).

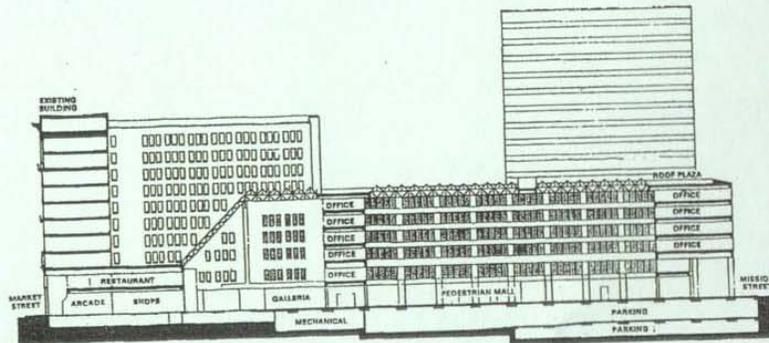


Figure 8. Site section of Market Plaza, (Bednar, 1986, 53).



Figure 10. View from Galleria Vittorio Emanuele, (World Famous Buildings, 1).



APPENDIX C

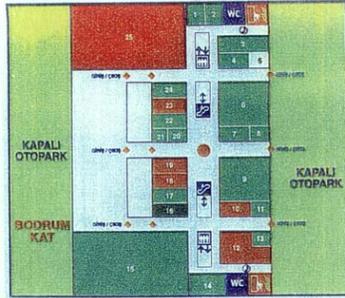


Figure 1a. Basement plan of Akköprü Migros.



Figure 1b. Ground plan of Akköprü Migros.

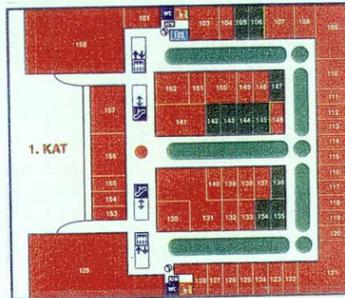


Figure 1c. First floor plan of Akköprü Migros.

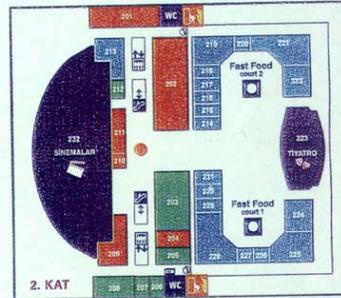


Figure 1d. Second floor plan of Akköprü Migros.

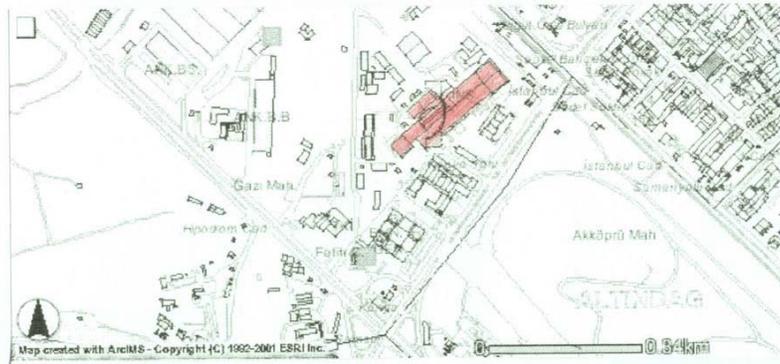


Figure 1e. Site plan of Akköprü Migros, (<http://burc.ankara-bel.gov.tr>)



Figure 2a. Exterior view of Akköprü Migros.



Figure 2b. Exterior view of Akköprü Migros.



Figure 2c. Interior view of Akköprü Migros.



Figure 2d. View of shops in Akköprü Migros.



Figure 2e. View of artificial planting in Akköprü Migros.



Figure 2f. Interior view of Akköprü Migros.

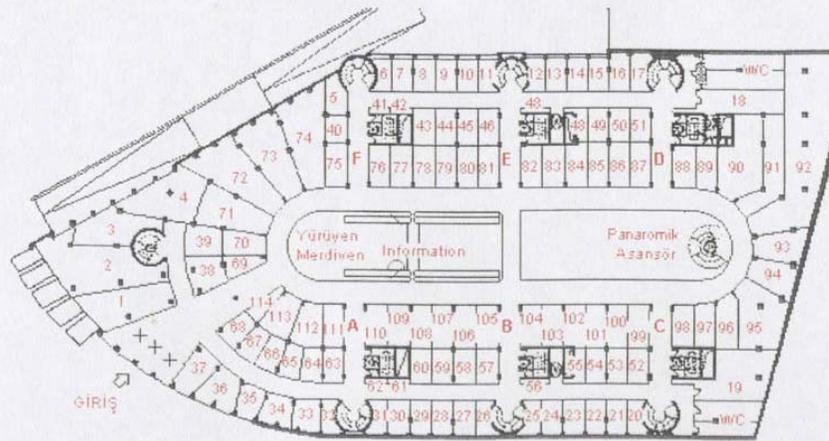


Figure 3a. Typical floor plan shopping levels of Karum

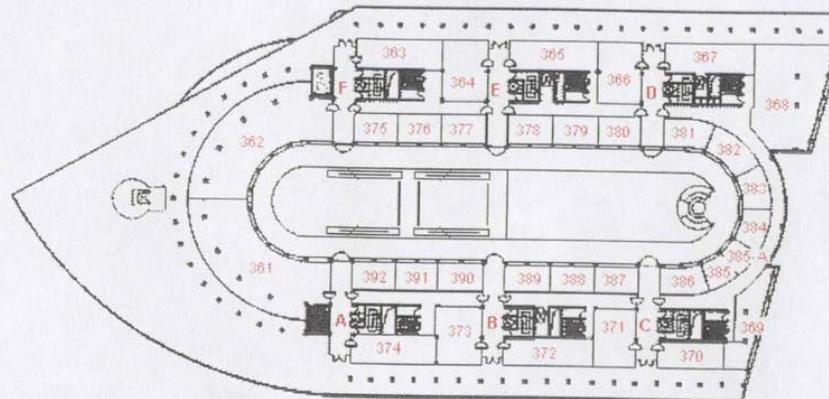


Figure 3b. Typical floor plan of office levels of Karum



Figure 4a. Exterior view of Karum, (Emden, XII, p. 74).



Figure 4b. Entrance of Karum, (Emden, XII, p. 72).



Figure 4c. Interior view of Karum, (Emden, XII, p. 78).

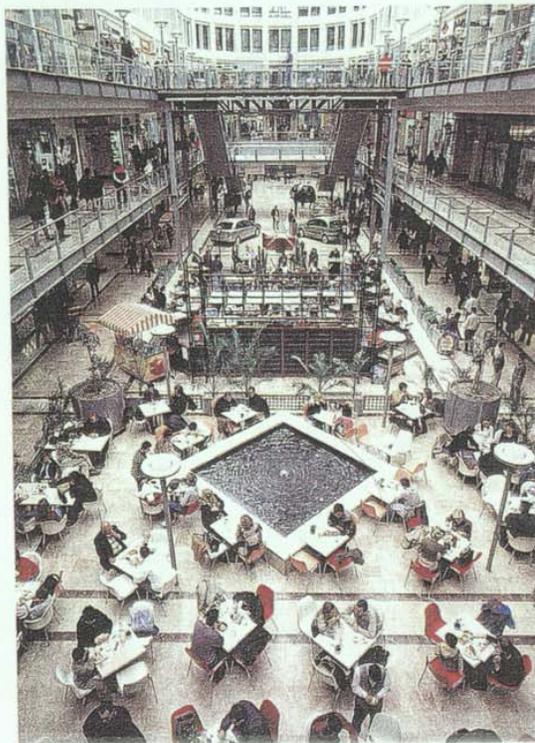


Figure 4d. Gathering area of Karum, (Emden, XII, p. 79).



## APPENDIX C

### Soru Formu

Saat:

Tarih:

Cinsiyet:

Kadın

Erkek

Yaş:

Sıklık:

Haftada 3kereden fazla

Haftada 1 kere

Ayda 2/3 kere

Ayda 1 kere

Ayda 1 kereden az

Ulaşım:

Araba

Metro

Otobüs

Yürüyerek

Başka

Semt:

**1. a. Bugün Akköprü Migros'a neden geldiniz?**

Alışveriş

Gezmek

Yemek

İnsanları seyretmek

Boş zaman geçirmek

Özel bir amaçla

**b. Akköprü Migros'u genellikle aynı sebep için mi kullanıyorsunuz?**

**2. Hangi yönlerinden hoşlanıyorsunuz?**

İklim korunaklı

Güvenli

Ortamı/Havası

Modern olması

Dükkanların kalitesi

Dükkanların birarada olması

Planlanmış olması

Yayalar için rahat olması  
Okunaklı olması  
Kontrollü bir alan olması  
Arınmış bir sosyal çevre olması  
Kamusal huzurun olması  
Boş zaman aktivitesi olarak değerlendirilebilecek bir yer olması  
Bakımlı olması  
Park alanının olması  
Başka

**3. Hangi yönlerinden hoşlanmıyorsunuz ?**

Kalabalık  
Kamusal bir çevre değil  
Şehir merkezinden uzak  
Yeşillik az  
Hava olaylarının eğlencesini yakalanamayışı  
Ulaşım problemi  
Dış çevrden kopuk  
Global olması (Evrensel olması)  
İçe dönük bir yapısı olması  
İnsanı kontrol eden bir yer olması  
Alışveriş yorgunluğu yaratması  
Gerçekdışı bir dünya gibi olması  
Doğal elemanların olmaması  
Başka

**4. a. Bir alışveriş merkezinde hangi tasarım elemanları sizin için önemli?**

- |  |   |
|--|---|
| <input type="checkbox"/> Banklar             | <input type="checkbox"/> Saat           |
| <input type="checkbox"/> Aydınlatmalar       | <input type="checkbox"/> Çöp tenekeleri |
| <input type="checkbox"/> Dükkan önleri       | <input type="checkbox"/> Su             |
| <input type="checkbox"/> Döşemeler           | <input type="checkbox"/> Park alanları  |
| <input type="checkbox"/> Heykeller           | <input type="checkbox"/> Giriş          |
| <input type="checkbox"/> Bitkiler            | <input type="checkbox"/> Asansörler     |
| <input type="checkbox"/> Saksılar            | <input type="checkbox"/> Merdivenler    |
| <input type="checkbox"/> Stant               | <input type="checkbox"/> Diğer          |
| <input type="checkbox"/> İşaretler/tabelalar |   |

**b. Migros'ta bu tasarım elemanları yeterince sağlanmış mı?**

5. Sizce hangi sıfatlar Akköprü Migros'un havasını tanımlıyor?

|                           |            |                |
|---------------------------|------------|----------------|
| Hoş                       | Kararsızım | Hoş olmayan    |
| Heyecan verici            | Kararsızım | Sıkıcı         |
| Sakin                     | Kararsızım | Rahatsız edici |
| Güvenli                   | Kararsızım | Tehlikeli      |
| Samimi                    | Kararsızım | Yapmacık       |
| Düzenli                   | Kararsızım | Karmaşık       |
| Konforlu                  | Kararsızım | Konforsuz      |
| Bakımlı                   | Kararsızım | Bakımsız       |
| Modern                    | Kararsızım | Modası geçmiş  |
| Geniş                     | Kararsızım | Dar            |
| İlgi çekici               | Kararsızım | Sıradan        |
| Hareketli                 | Kararsızım | Cansız         |
| Tutarlı/kolayca anlaşılan | Kararsızım | Tutarsız       |
| Aydınlık                  | Kararsızım | Karanlık       |
| Ferah                     | Kararsızım | Sıkışık        |
| Sıcak                     | Kararsızım | Soğuk          |
| Doğal                     | Kararsızım | Suni/Yapay     |
| Renkli                    | Kararsızım | Renksiz        |
| Çekici                    | Kararsızım | İtici          |

6. Alışveriş merkezleri oluşmadan önce hangi yerleri kullanıyordunuz?

7. Hangi amaçla kullanıyordunuz?

8. Hala bu mekanları kullanıyor musunuz?

|                                     |                                |  |
|-------------------------------------|--------------------------------|--|
| <input type="checkbox"/> Çoğunlukla | <input type="checkbox"/> Bazen | <input type="checkbox"/> Kullanmıyorum |
|-------------------------------------|--------------------------------|--|

9. Alışveriş merkezleri o mekanların yerini tam olarak tutuyor mu?

## Questionnaire

Time:

Date:

Gender:

 Female Male

Age:

Frequency:

 More than 3 times a week Once a week 2-3 times/month Once a month Less than once a month

Transportation:

 Car Metro Bus Walking Other

District:

**1. a.** Why do you come to Akköprü Migros today?

 Shopping Strolling Eating Watching people Spending leisure time Special purpose

**b.** Do you generally use Akköprü Migros for the same reason?

**2.** Which aspects do you like?

Weather protection

Safety

Ambience

Modernity

Quality of shops

Variety of shops

Planned form

Pedestrian amenities

Legibility

Controlled environment  
Purified social environment  
Public peace  
Leisure activity  
Maintenance  
Parking lot  
Other

**3. Which aspects you do not like?**

Crowded  
Not a public environment  
Far from the city center  
Lack of greenery  
Escaping the joys of climate  
Transportation problem  
Separated from the external environment  
Being global  
Being introverted  
Control over human  
Shopping fatigue  
Fantasy world  
Not having natural elements  
Other

**4. a. Which design elements are important in a shopping mall?**

- |   |  |
|---|--|
| <input type="checkbox"/> Benches        | <input type="checkbox"/> Clocks            |
| <input type="checkbox"/> Lighting       | <input type="checkbox"/> Containers        |
| <input type="checkbox"/> Storefronts    | <input type="checkbox"/> Fountain          |
| <input type="checkbox"/> Pavement       | <input type="checkbox"/> Parking lot       |
| <input type="checkbox"/> Sculptures     | <input type="checkbox"/> Canopy (Entrance) |
| <input type="checkbox"/> Planting       | <input type="checkbox"/> Elevators         |
| <input type="checkbox"/> Pots           | <input type="checkbox"/> Stairs            |
| <input type="checkbox"/> Kiosks         | <input type="checkbox"/> Others            |
| <input type="checkbox"/> Signage system |  |

**b. Are these elements sufficient in Akköprü Migros?**

5. Which attributes do you think describe the atmosphere of Akköprü Migros?

|                 |             |               |
|-----------------|-------------|---------------|
| Pleasant        | Not certain | Unpleasant    |
| Exciting        | Not certain | Boring        |
| Calming         | Not certain | Distressing   |
| Safe            | Not certain | Unsafe        |
| Friendly        | Not certain | Hostile       |
| Orderly         | Not certain | Chaotic       |
| Comfortable     | Not certain | Uncomfortable |
| Well-maintained | Not certain | Unkempt       |
| Modern          | Not certain | Old-fashioned |
| Wide            | Not certain | Narrow        |
| Interesting     | Not certain | Uninteresting |
| Active          | Not certain | Inactive      |
| Coherent        | Not certain | Incoherent    |
| Bright          | Not certain | Dark          |
| Spacious        | Not certain | Dull          |
| Hot             | Not certain | Cold          |
| Natural         | Not certain | Unnatural     |
| Colorful        | Not certain | Colorless     |
| Attractive      | Not certain | Unattractive  |

6. Which places did you use before the emergence of shopping malls?

7. Why did you use these places?

8. Do you still use these places?

|                                  |                                    |                                |
|----------------------------------|------------------------------------|--------------------------------|
| <input type="checkbox"/> Usually | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
|----------------------------------|------------------------------------|--------------------------------|

9. Are shopping malls totally used in place of these places?

## APPENDIX E

### RESULTS OF CHI-SQUARE TESTS

**Akköprü Migros: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - shopping**

Crosstab

Count

|                    |     | Shopping (previous spaces) |     | Total |
|--------------------|-----|----------------------------|-----|-------|
|                    |     | no                         | yes |       |
| Shopping (Akköprü) | no  | 6                          | 3   | 9     |
|                    | yes |                            | 21  | 21    |
| Total              |     | 6                          | 24  | 30    |

Chi-Square Tests

|                                    | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square                 | 17.500 <sup>b</sup> | 1  | .000                  |
| Continuity Correction <sup>a</sup> | 13.581              | 1  | .000                  |
| Likelihood Ratio                   | 18.567              | 1  | .000                  |
| Fisher's Exact Test                |                     |    |                       |
| N of Valid Cases                   | 30                  |    |                       |

Chi-Square Tests

|                                    | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------------|----------------------|----------------------|
| Pearson Chi-Square                 |                      |                      |
| Continuity Correction <sup>a</sup> |                      |                      |
| Likelihood Ratio                   |                      |                      |
| Fisher's Exact Test                | .000                 | .000                 |
| N of Valid Cases                   |                      |                      |

**Akköprü Migros: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - strolling**

Crosstab

Count

|                     |     | Strolling (previous spaces) |     | Total |
|---------------------|-----|-----------------------------|-----|-------|
|                     |     | no                          | yes |       |
| Strolling (Akköprü) | no  | 21                          | 2   | 23    |
|                     | yes | 1                           | 6   | 7     |
| Total               |     | 22                          | 8   | 30    |

Chi-Square Tests

|                                    | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square                 | 16.279 <sup>b</sup> | 1  | .000                  |
| Continuity Correction <sup>a</sup> | 12.579              | 1  | .000                  |
| Likelihood Ratio                   | 15.463              | 1  | .000                  |
| Fisher's Exact Test                |                     |    |                       |
| N of Valid Cases                   | 30                  |    |                       |

Chi-Square Tests

|                                    | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------------|----------------------|----------------------|
| Pearson Chi-Square                 |                      |                      |
| Continuity Correction <sup>a</sup> |                      |                      |
| Likelihood Ratio                   |                      |                      |
| Fisher's Exact Test                | .000                 | .000                 |
| N of Valid Cases                   |                      |                      |

Akköprü Migros: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - eating

Crosstab

Count

|        |     | Eating (previous spaces) |     | Total |
|--------|-----|--------------------------|-----|-------|
|        |     | no                       | yes |       |
| Eating | no  | 26                       |     | 26    |
|        | yes | 1                        | 3   | 4     |
| Total  |     | 27                       | 3   | 30    |

Chi-Square Tests

|                                    | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square                 | 21.667 <sup>b</sup> | 1  | .000                  |
| Continuity Correction <sup>a</sup> | 14.135              | 1  | .000                  |
| Likelihood Ratio                   | 15.006              | 1  | .000                  |
| Fisher's Exact Test                |                     |    |                       |
| N of Valid Cases                   | 30                  |    |                       |

Chi-Square Tests

|                                    | Exact Sig.<br>(2-sided) | Exact Sig.<br>(1-sided) |
|------------------------------------|-------------------------|-------------------------|
| Pearson Chi-Square                 |                         |                         |
| Continuity Correction <sup>a</sup> |                         |                         |
| Likelihood Ratio                   |                         |                         |
| Fisher's Exact Test                | .001                    | .001                    |
| N of Valid Cases                   |                         |                         |

Akköprü Migros: Purpose of visiting shopping malls vs.  
purpose of visiting previous open spaces - watching

Crosstab

Count

|                    |     | Watching (previous spaces) |     | Total |
|--------------------|-----|----------------------------|-----|-------|
|                    |     | no                         | yes |       |
| Watching (Akköprü) | no  | 29                         |     | 29    |
|                    | yes |                            | 1   | 1     |
| Total              |     | 29                         | 1   | 30    |

Chi-Square Tests

|                                    | Value               | df | Asymp. Sig.<br>(2-sided) |
|------------------------------------|---------------------|----|--------------------------|
| Pearson Chi-Square                 | 30.000 <sup>b</sup> | 1  | .000                     |
| Continuity Correction <sup>a</sup> | 6.992               | 1  | .008                     |
| Likelihood Ratio                   | 8.769               | 1  | .003                     |
| Fisher's Exact Test                |                     |    |                          |
| N of Valid Cases                   | 30                  |    |                          |

Chi-Square Tests

|                                    | Exact Sig.<br>(2-sided) | Exact Sig.<br>(1-sided) |
|------------------------------------|-------------------------|-------------------------|
| Pearson Chi-Square                 |                         |                         |
| Continuity Correction <sup>a</sup> |                         |                         |
| Likelihood Ratio                   |                         |                         |
| Fisher's Exact Test                | .033                    | .033                    |
| N of Valid Cases                   |                         |                         |

**Akköprü Migros: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - leisure**

**Crosstab**

Count

|                   |     | Leisure (previous spaces) |     | Total |
|-------------------|-----|---------------------------|-----|-------|
|                   |     | no                        | yes |       |
| Leisure (Akköprü) | no  | 26                        | 2   | 28    |
|                   | yes |                           | 2   | 2     |
| Total             |     | 26                        | 4   | 30    |

**Chi-Square Tests**

|                                    | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square                 | 13.929 <sup>b</sup> | 1  | .000                  |
| Continuity Correction <sup>a</sup> | 7.052               | 1  | .008                  |
| Likelihood Ratio                   | 9.151               | 1  | .002                  |
| Fisher's Exact Test                |                     |    |                       |
| N of Valid Cases                   | 30                  |    |                       |

**Chi-Square Tests**

|                                    | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------------|----------------------|----------------------|
| Pearson Chi-Square                 |                      |                      |
| Continuity Correction <sup>a</sup> |                      |                      |
| Likelihood Ratio                   |                      |                      |
| Fisher's Exact Test                | .014                 | .014                 |
| N of Valid Cases                   |                      |                      |

**Karum: Purpose of visiting shopping malls vs.  
purpose of visiting previous open spaces - shopping**

**Crosstab**

Count

|                  |     | Shopping (previous spaces) |     | Total |
|------------------|-----|----------------------------|-----|-------|
|                  |     | no                         | yes |       |
| Shopping (Karum) | no  | 4                          | 2   | 6     |
|                  | yes |                            | 24  | 24    |
| Total            |     | 4                          | 26  | 30    |

**Chi-Square Tests**

|                                    | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square                 | 18.462 <sup>b</sup> | 1  | .000                  |
| Continuity Correction <sup>a</sup> | 13.143              | 1  | .000                  |
| Likelihood Ratio                   | 15.922              | 1  | .000                  |
| Fisher's Exact Test                |                     |    |                       |
| N of Valid Cases                   | 30                  |    |                       |

**Chi-Square Tests**

|                                    | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------------|----------------------|----------------------|
| Pearson Chi-Square                 |                      |                      |
| Continuity Correction <sup>a</sup> |                      |                      |
| Likelihood Ratio                   |                      |                      |
| Fisher's Exact Test                | .001                 | .001                 |
| N of Valid Cases                   |                      |                      |

**Karum: Purpose of visiting shopping malls vs.  
purpose of visiting previous open spaces-strolling**

**Crosstab**

Count

|                   |     | Strolling (previous spaces) |     | Total |
|-------------------|-----|-----------------------------|-----|-------|
|                   |     | no                          | yes |       |
| Strolling (Karum) | no  | 18                          | 5   | 23    |
|                   | yes |                             | 7   | 7     |
| Total             |     | 18                          | 12  | 30    |

Chi-Square Tests

|                                    | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square                 | 13.696 <sup>b</sup> | 1  | .000                  |
| Continuity Correction <sup>a</sup> | 10.629              | 1  | .001                  |
| Likelihood Ratio                   | 16.296              | 1  | .000                  |
| Fisher's Exact Test                |                     |    |                       |
| N of Valid Cases                   | 30                  |    |                       |

Chi-Square Tests

|                                    | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------------|----------------------|----------------------|
| Pearson Chi-Square                 |                      |                      |
| Continuity Correction <sup>a</sup> |                      |                      |
| Likelihood Ratio                   |                      |                      |
| Fisher's Exact Test                | .000                 | .000                 |
| N of Valid Cases                   |                      |                      |

Karum: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - watching

Crosstab

Count

|                  |     | Watching (previous spaces) |     | Total |
|------------------|-----|----------------------------|-----|-------|
|                  |     | no                         | yes |       |
| Watching (Karum) | no  | 26                         | 2   | 28    |
|                  | yes |                            | 2   | 2     |
| Total            |     | 26                         | 4   | 30    |

Chi-Square Tests

|                                    | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square                 | 13.929 <sup>b</sup> | 1  | .000                  |
| Continuity Correction <sup>a</sup> | 7.052               | 1  | .008                  |
| Likelihood Ratio                   | 9.151               | 1  | .002                  |
| Fisher's Exact Test                |                     |    |                       |
| N of Valid Cases                   | 30                  |    |                       |

Chi-Square Tests

|                                    | Exact Sig.<br>(2-sided) | Exact Sig.<br>(1-sided) |
|------------------------------------|-------------------------|-------------------------|
| Pearson Chi-Square                 |                         |                         |
| Continuity Correction <sup>a</sup> |                         |                         |
| Likelihood Ratio                   |                         |                         |
| Fisher's Exact Test                | .014                    | .014                    |
| N of Valid Cases                   |                         |                         |

**Karum: Purpose of visiting shopping malls vs.  
purpose of visiting previous open spaces - leisure**

Crosstab

Count

|                 |     | Leisure (previous spaces) |     | Total |
|-----------------|-----|---------------------------|-----|-------|
|                 |     | no                        | yes |       |
| Leisure (Karum) | no  | 22                        | 1   | 23    |
|                 | yes | 2                         | 5   | 7     |
| Total           |     | 24                        | 6   | 30    |

Chi-Square Tests

|                                    | Value               | df | Asymp. Sig.<br>(2-sided) |
|------------------------------------|---------------------|----|--------------------------|
| Pearson Chi-Square                 | 15.093 <sup>b</sup> | 1  | .000                     |
| Continuity Correction <sup>a</sup> | 11.192              | 1  | .001                     |
| Likelihood Ratio                   | 13.422              | 1  | .000                     |
| Fisher's Exact Test                |                     |    |                          |
| N of Valid Cases                   | 30                  |    |                          |

Chi-Square Tests

|                                    | Exact Sig.<br>(2-sided) | Exact Sig.<br>(1-sided) |
|------------------------------------|-------------------------|-------------------------|
| Pearson Chi-Square                 |                         |                         |
| Continuity Correction <sup>a</sup> |                         |                         |
| Likelihood Ratio                   |                         |                         |
| Fisher's Exact Test                | .001                    | .001                    |
| N of Valid Cases                   |                         |                         |

**Whole sample: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - shopping**

**Crosstab**

Count

|          |     | Shopping (previous) |     | Total |
|----------|-----|---------------------|-----|-------|
|          |     | no                  | yes |       |
| Shopping | no  | 8                   | 2   | 10    |
|          | yes | 1                   | 49  | 50    |
| Total    |     | 9                   | 51  | 60    |

**Chi-Square Tests**

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 39.765 | 1  | .000                  |
| Continuity Correction        | 33.882 | 1  | .000                  |
| Likelihood Ratio             | 30.913 | 1  | .000                  |
| Fisher's Exact Test          |        |    |                       |
| Linear-by-Linear Association | 39.102 | 1  | .000                  |
| N of Valid Cases             | 60     |    |                       |

**Chi-Square Tests**

|                              | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|----------------------|----------------------|
| Pearson Chi-Square           |                      |                      |
| Continuity Correction        |                      |                      |
| Likelihood Ratio             |                      |                      |
| Fisher's Exact Test          | .000                 | .000                 |
| Linear-by-Linear Association |                      |                      |
| N of Valid Cases             |                      |                      |

**Whole sample: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - strolling**

**Crosstab**

Count

|           |     | Strolling (previous) |     | Total |
|-----------|-----|----------------------|-----|-------|
|           |     | no                   | yes |       |
| Strolling | no  | 39                   | 8   | 47    |
|           | yes | 1                    | 12  | 13    |
| Total     |     | 40                   | 20  | 60    |

Chi-Square Tests

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 25.974 | 1  | .000                  |
| Continuity Correction        | 22.696 | 1  | .000                  |
| Likelihood Ratio             | 26.446 | 1  | .000                  |
| Fisher's Exact Test          |        |    |                       |
| Linear-by-Linear Association | 25.541 | 1  | .000                  |
| N of Valid Cases             | 60     |    |                       |

Chi-Square Tests

|                              | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|----------------------|----------------------|
| Pearson Chi-Square           |                      |                      |
| Continuity Correction        |                      |                      |
| Likelihood Ratio             |                      |                      |
| Fisher's Exact Test          | .000                 | .000                 |
| Linear-by-Linear Association |                      |                      |
| N of Valid Cases             |                      |                      |

Whole sample: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - eating

Crosstab

Count

|        |     | Eating (previous) |     | Total |
|--------|-----|-------------------|-----|-------|
|        |     | no                | yes |       |
| Eating | no  | 56                |     | 56    |
|        | yes | 1                 | 3   | 4     |
| Total  |     | 57                | 3   | 60    |

Chi-Square Tests

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 44.211 | 1  | .000                  |
| Continuity Correction        | 29.831 | 1  | .000                  |
| Likelihood Ratio             | 19.323 | 1  | .000                  |
| Fisher's Exact Test          |        |    |                       |
| Linear-by-Linear Association | 43.474 | 1  | .000                  |
| N of Valid Cases             | 60     |    |                       |

Chi-Square Tests

|                                 | Exact Sig.<br>(2-sided) | Exact Sig.<br>(1-sided) |
|---------------------------------|-------------------------|-------------------------|
| Pearson Chi-Square              | .000                    | .000                    |
| Continuity Correction           |                         |                         |
| Likelihood Ratio                |                         |                         |
| Fisher's Exact Test             |                         |                         |
| Linear-by-Linear<br>Association |                         |                         |
| N of Valid Cases                |                         |                         |

Whole sample: Purpose of visiting shopping malls vs.  
purpose of visiting previous open spaces - watching

Crosstab

Count

|          |     | Watching (previous) |     | Total |
|----------|-----|---------------------|-----|-------|
|          |     | no                  | yes |       |
| Watching | no  | 55                  | 2   | 57    |
|          | yes |                     | 3   | 3     |
| Total    |     | 55                  | 5   | 60    |

Chi-Square Tests

|                                 | Value  | df | Asymp. Sig.<br>(2-sided) |
|---------------------------------|--------|----|--------------------------|
| Pearson Chi-Square              | 34.737 | 1  | .000                     |
| Continuity Correction           | 23.254 | 1  | .000                     |
| Likelihood Ratio                | 17.092 | 1  | .000                     |
| Fisher's Exact Test             |        |    |                          |
| Linear-by-Linear<br>Association | 34.158 | 1  | .000                     |
| N of Valid Cases                | 60     |    |                          |

Chi-Square Tests

|                                 | Exact Sig.<br>(2-sided) | Exact Sig.<br>(1-sided) |
|---------------------------------|-------------------------|-------------------------|
| Pearson Chi-Square              | .000                    | .000                    |
| Continuity Correction           |                         |                         |
| Likelihood Ratio                |                         |                         |
| Fisher's Exact Test             |                         |                         |
| Linear-by-Linear<br>Association |                         |                         |
| N of Valid Cases                |                         |                         |

**Whole sample: Purpose of visiting shopping malls vs. purpose of visiting previous open spaces - leisure**

**Crosstab**

Count

|         |     | Leisure (previous) |     | Total |
|---------|-----|--------------------|-----|-------|
|         |     | no                 | yes |       |
| Leisure | no  | 48                 | 2   | 50    |
|         | yes | 2                  | 8   | 10    |
| Total   |     | 50                 | 10  | 60    |

**Chi-Square Tests**

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 34.656 | 1  | .000                  |
| Continuity Correction        | 29.400 | 1  | .000                  |
| Likelihood Ratio             | 27.265 | 1  | .000                  |
| Fisher's Exact Test          |        |    |                       |
| Linear-by-Linear Association | 34.078 | 1  | .000                  |
| N of Valid Cases             | 60     |    |                       |

**Chi-Square Tests**

|                              | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|----------------------|----------------------|
| Pearson Chi-Square           |                      |                      |
| Continuity Correction        |                      |                      |
| Likelihood Ratio             |                      |                      |
| Fisher's Exact Test          | .000                 | .000                 |
| Linear-by-Linear Association |                      |                      |
| N of Valid Cases             |                      |                      |

**Akköprü Migros: Sufficiency of pavement vs. frequency of using previously used open spaces**

**Crosstab**

Count

|          |     | Frequency |           |         | Total |
|----------|-----|-----------|-----------|---------|-------|
|          |     | never     | sometimes | usually |       |
| Pavement | no  |           | 14        | 7       | 21    |
|          | yes | 2         | 5         | 2       | 9     |
| Total    |     | 2         | 19        | 9       | 30    |

**Chi-Square Tests**

|                              | Value              | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square           | 5.049 <sup>a</sup> | 2  | .080                  |
| Likelihood Ratio             | 5.216              | 2  | .074                  |
| Linear-by-Linear Association | 2.167              | 1  | .141                  |
| N of Valid Cases             | 30                 |    |                       |

**Akköprü Migros: Sufficiency of signage systems vs. frequency of using previously used open spaces**

**Crosstab**

Count

|                |     | Frequency |           |         | Total |
|----------------|-----|-----------|-----------|---------|-------|
|                |     | never     | sometimes | usually |       |
| Signage system | no  |           | 16        | 8       | 24    |
|                | yes | 2         | 3         | 1       | 6     |
| Total          |     | 2         | 19        | 9       | 30    |

Chi-Square Tests

|                              | Value              | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square           | 8.655 <sup>a</sup> | 2  | .013                  |
| Likelihood Ratio             | 7.171              | 2  | .028                  |
| Linear-by-Linear Association | 3.715              | 1  | .054                  |
| N of Valid Cases             | 30                 |    |                       |

**Akköprü Migros: Sufficiency of stairs vs. frequency of using previously used open spaces**

Crosstab

Count

|        |     | Frequency |           |         | Total |
|--------|-----|-----------|-----------|---------|-------|
|        |     | never     | sometimes | usually |       |
| Stairs | no  |           | 17        | 7       | 24    |
|        | yes | 2         | 2         | 2       | 6     |
| Total  |     | 2         | 19        | 9       | 30    |

Chi-Square Tests

|                              | Value              | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square           | 9.094 <sup>a</sup> | 2  | .011                  |
| Likelihood Ratio             | 7.703              | 2  | .021                  |
| Linear-by-Linear Association | 1.264              | 1  | .261                  |
| N of Valid Cases             | 30                 |    |                       |

**Karum: Sufficiency of storefronts vs. frequency of using previously used open spaces**

**Crosstab**

Count

|             |     | Frequency |           |         | Total |
|-------------|-----|-----------|-----------|---------|-------|
|             |     | never     | sometimes | usually |       |
| Storefronts | no  |           | 12        | 12      | 24    |
|             | yes | 2         | 3         | 1       | 6     |
| Total       |     | 2         | 15        | 13      | 30    |

**Chi-Square Tests**

|                              | Value              | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square           | 9.231 <sup>a</sup> | 2  | .010                  |
| Likelihood Ratio             | 7.961              | 2  | .019                  |
| Linear-by-Linear Association | 5.641              | 1  | .018                  |
| N of Valid Cases             | 30                 |    |                       |

**Karum: Sufficiency of sculpture vs. frequency of using previously used open spaces**

**Crosstab**

Count

|           |     | Frequency |           |         | Total |
|-----------|-----|-----------|-----------|---------|-------|
|           |     | never     | sometimes | usually |       |
| Sculpture | no  | 1         | 15        | 12      | 28    |
|           | yes | 1         |           | 1       | 2     |
| Total     |     | 2         | 15        | 13      | 30    |

**Chi-Square Tests**

|                              | Value              | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square           | 7.129 <sup>a</sup> | 2  | .028                  |
| Likelihood Ratio             | 4.872              | 2  | .087                  |
| Linear-by-Linear Association | .762               | 1  | .383                  |
| N of Valid Cases             | 30                 |    |                       |

## WHOLE SAMPLE

### Sufficiency of storefronts vs. frequency of using previously used open spaces

#### Crosstab

Count

|             |     | Frequency |           |         | Total |
|-------------|-----|-----------|-----------|---------|-------|
|             |     | never     | sometimes | usually |       |
| Storefronts | no  | 1         | 25        | 18      | 44    |
|             | yes | 3         | 9         | 4       | 16    |
| Total       |     | 4         | 34        | 22      | 60    |

#### Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 5.589 | 2  | .061                  |
| Likelihood Ratio             | 4.930 | 2  | .085                  |
| Linear-by-Linear Association | 3.525 | 1  | .060                  |
| N of Valid Cases             | 60    |    |                       |

### Sufficiency of signage system vs. frequency of using previously used open spaces

#### Crosstab

Count

|                |     | Frequency |           |         | Total |
|----------------|-----|-----------|-----------|---------|-------|
|                |     | never     | sometimes | usually |       |
| Signage system | no  | 1         | 29        | 19      | 49    |
|                | yes | 3         | 5         | 3       | 11    |
| Total          |     | 4         | 34        | 22      | 60    |

#### Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 9.202 | 2  | .010                  |
| Likelihood Ratio             | 6.750 | 2  | .034                  |
| Linear-by-Linear Association | 3.472 | 1  | .062                  |
| N of Valid Cases             | 60    |    |                       |

**Karum: Sufficiency of entrance vs. frequency of using previously used open spaces**

**Crosstab**

Count

|          |     | Frequency |           |         | Total |
|----------|-----|-----------|-----------|---------|-------|
|          |     | never     | sometimes | usually |       |
| Entrance | no  |           | 12        | 11      | 23    |
|          | yes | 2         | 3         | 2       | 7     |
| Total    |     | 2         | 15        | 13      | 30    |

**Chi-Square Tests**

|                              | Value              | df | Asymp. Sig. (2-sided) |
|------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square           | 7.124 <sup>a</sup> | 2  | .028                  |
| Likelihood Ratio             | 6.422              | 2  | .040                  |
| Linear-by-Linear Association | 3.246              | 1  | .072                  |
| N of Valid Cases             | 30                 |    |                       |

Akköprü Migros: Atmosphere vs. frequency of visit to previously used open spaces - exciting

Crosstab

Count

|          |           | Frequency |           |         | Total |
|----------|-----------|-----------|-----------|---------|-------|
|          |           | never     | sometimes | usually |       |
| Exciting | undecided | 1         | 5         | 2       | 8     |
|          | positive  | 1         | 12        | 2       | 15    |
|          | negative  |           | 2         | 5       | 7     |
| Total    |           | 2         | 19        | 9       | 30    |

Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 8.330 | 4  | .080                  |
| Likelihood Ratio             | 8.250 | 4  | .083                  |
| Linear-by-Linear Association | 3.707 | 1  | .054                  |
| N of Valid Cases             | 30    |    |                       |

Akköprü Migros: Atmosphere vs. frequency of visit to previously used open spaces - comfortable

Crosstab

Count

|             |           | Frequency |           |         | Total |
|-------------|-----------|-----------|-----------|---------|-------|
|             |           | never     | sometimes | usually |       |
| Comfortable | undecided |           |           | 2       | 2     |
|             | positive  | 2         | 18        | 5       | 25    |
|             | negative  |           | 1         | 2       | 3     |
| Total       |           | 2         | 19        | 9       | 30    |

Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 7.834 | 4  | .098                  |
| Likelihood Ratio             | 8.018 | 4  | .091                  |
| Linear-by-Linear Association | .034  | 1  | .854                  |
| N of Valid Cases             | 30    |    |                       |

**Akköprü Migros: Atmosphere vs. frequency of visit to previously used open spaces - modern**

**Crosstab**

Count

|        |           | Frequency |           |         | Total |
|--------|-----------|-----------|-----------|---------|-------|
|        |           | never     | sometimes | usually |       |
| Modern | undecided |           |           | 2       | 2     |
|        | positive  | 2         | 19        | 7       | 28    |
| Total  |           | 2         | 19        | 9       | 30    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 5.000 | 2  | .082                  |
| Likelihood Ratio             | 5.161 | 2  | .076                  |
| Linear-by-Linear Association | 3.900 | 1  | .048                  |
| N of Valid Cases             | 30    |    |                       |

**Akköprü Migros: Atmosphere vs. frequency of visit to previously used open spaces - interesting**

**Crosstab**

Count

|             |           | Frequency |           |         | Total |
|-------------|-----------|-----------|-----------|---------|-------|
|             |           | never     | sometimes | usually |       |
| Interesting | undecided | 1         | 2         | 2       | 5     |
|             | positive  | 1         | 15        | 2       | 18    |
|             | negative  |           | 2         | 5       | 7     |
| Total       |           | 2         | 19        | 9       | 30    |

**Chi-Square Tests**

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 11.048 | 4  | .026                  |
| Likelihood Ratio             | 10.896 | 4  | .028                  |
| Linear-by-Linear Association | 3.257  | 1  | .071                  |
| N of Valid Cases             | 30     |    |                       |

**Akköprü Migros: Atmosphere vs. frequency of visit to previously used open spaces - active**

Crosstab

Count

|        |           | Frequency |           |         | Total |
|--------|-----------|-----------|-----------|---------|-------|
|        |           | never     | sometimes | usually |       |
| Active | undecided | 1         | 1         |         | 2     |
|        | positive  | 1         | 11        | 7       | 19    |
|        | negative  |           | 7         | 2       | 9     |
| Total  |           | 2         | 19        | 9       | 30    |

Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 7.809 | 4  | .099                  |
| Likelihood Ratio             | 5.661 | 4  | .226                  |
| Linear-by-Linear Association | .617  | 1  | .432                  |
| N of Valid Cases             | 30    |    |                       |

Akköprü Migros: Atmosphere vs. frequency of visit to previously used open spaces - natural

Crosstab

Count

|         |           | Frequency |           |         | Total |
|---------|-----------|-----------|-----------|---------|-------|
|         |           | never     | sometimes | usually |       |
| Natural | undecided | 1         |           |         | 1     |
|         | positive  | 1         | 3         | 1       | 5     |
|         | negative  |           | 16        | 8       | 24    |
| Total   |           | 2         | 19        | 9       | 30    |

Chi-Square Tests

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 17.240 | 4  | .002                  |
| Likelihood Ratio             | 9.805  | 4  | .044                  |
| Linear-by-Linear Association | 5.548  | 1  | .018                  |
| N of Valid Cases             | 30     |    |                       |

**Akköprü Migros: Atmosphere vs. frequency of visit to previously used open spaces - colorful**

**Crosstab**

Count

|          |           | Frequency |           |         | Total |
|----------|-----------|-----------|-----------|---------|-------|
|          |           | never     | sometimes | usually |       |
| Colorful | undecided |           | 1         |         | 1     |
|          | positive  | 1         | 14        | 2       | 17    |
|          | negative  | 1         | 4         | 7       | 12    |
| Total    |           | 2         | 19        | 9       | 30    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 8.416 | 4  | .077                  |
| Likelihood Ratio             | 8.893 | 4  | .064                  |
| Linear-by-Linear Association | 4.070 | 1  | .044                  |
| N of Valid Cases             | 30    |    |                       |

**Akköprü Migros: Atmosphere vs. frequency of visit to previously used open spaces - attractive**

**Crosstab**

Count

|            |           | Frequency |           |         | Total |
|------------|-----------|-----------|-----------|---------|-------|
|            |           | never     | sometimes | usually |       |
| Attractive | undecided | 1         | 1         | 1       | 3     |
|            | positive  | 1         | 16        | 4       | 21    |
|            | negative  |           | 2         | 4       | 6     |
| Total      |           | 2         | 19        | 9       | 30    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 9.081 | 4  | .059                  |
| Likelihood Ratio             | 7.574 | 4  | .108                  |
| Linear-by-Linear Association | 3.875 | 1  | .049                  |
| N of Valid Cases             | 30    |    |                       |

**Karum: Atmosphere vs. frequency of visit to  
previously used open spaces - well-maintained**

**Crosstab**

Count

|                      |           | Frequency |           |         | Total |
|----------------------|-----------|-----------|-----------|---------|-------|
|                      |           | never     | sometimes | usually |       |
| Well -<br>maintained | undecided | 1         |           | 1       | 2     |
|                      | positive  | 1         | 14        | 12      | 27    |
|                      | negative  |           | 1         |         | 1     |
| Total                |           | 2         | 15        | 13      | 30    |

**Chi-Square Tests**

|                                 | Value | df | Asymp. Sig.<br>(2-sided) |
|---------------------------------|-------|----|--------------------------|
| Pearson Chi-Square              | 8.036 | 4  | .090                     |
| Likelihood Ratio                | 6.153 | 4  | .188                     |
| Linear-by-Linear<br>Association | .120  | 1  | .729                     |
| N of Valid Cases                | 30    |    |                          |

**Karum: Atmosphere vs. frequency of visit to  
previously used open spaces - hot**

**Crosstab**

Count

|       |           | Frequency |           |         | Total |
|-------|-----------|-----------|-----------|---------|-------|
|       |           | never     | sometimes | usually |       |
| Hot   | undecided | 1         |           | 1       | 2     |
|       | positive  | 1         | 14        | 12      | 27    |
|       | negative  |           | 1         |         | 1     |
| Total |           | 2         | 15        | 13      | 30    |

**Chi-Square Tests**

|                                 | Value | df | Asymp. Sig.<br>(2-sided) |
|---------------------------------|-------|----|--------------------------|
| Pearson Chi-Square              | 8.036 | 4  | .090                     |
| Likelihood Ratio                | 6.153 | 4  | .188                     |
| Linear-by-Linear<br>Association | .120  | 1  | .729                     |
| N of Valid Cases                | 30    |    |                          |

**Karum: Atmosphere vs. frequency of visit to previously used open spaces - attractive**

**Crosstab**

Count

|            |           | Frequency |           |         | Total |
|------------|-----------|-----------|-----------|---------|-------|
|            |           | never     | sometimes | usually |       |
| Attractive | undecided |           | 3         | 6       | 9     |
|            | positive  | 1         | 11        | 7       | 19    |
|            | negative  | 1         | 1         |         | 2     |
| Total      |           | 2         | 15        | 13      | 30    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 9.209 | 4  | .056                  |
| Likelihood Ratio             | 7.247 | 4  | .123                  |
| Linear-by-Linear Association | 5.549 | 1  | .018                  |
| N of Valid Cases             | 30    |    |                       |

Whole sample: Atmosphere vs. frequency of visit to previously used open spaces - friendly

Crosstab

Count

|          |           | Frequency |           |         | Total |
|----------|-----------|-----------|-----------|---------|-------|
|          |           | never     | sometimes | usually |       |
| Friendly | undecided |           | 1         | 5       | 6     |
|          | positive  | 4         | 23        | 10      | 37    |
|          | negative  |           | 10        | 7       | 17    |
| Total    |           | 4         | 34        | 22      | 60    |

Chi-Square Tests

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 8.987  | 4  | .061                  |
| Likelihood Ratio             | 10.158 | 4  | .038                  |
| Linear-by-Linear Association | .231   | 1  | .631                  |
| N of Valid Cases             | 60     |    |                       |

Whole sample: Atmosphere vs. frequency of visit to previously used open spaces - comfortable

Crosstab

Count

|             |           | Frequency |           |         | Total |
|-------------|-----------|-----------|-----------|---------|-------|
|             |           | never     | sometimes | usually |       |
| Comfortable | undecided |           | 1         | 4       | 5     |
|             | positive  | 4         | 31        | 14      | 49    |
|             | negative  |           | 2         | 4       | 6     |
| Total       |           | 4         | 34        | 22      | 60    |

Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 7.946 | 4  | .094                  |
| Likelihood Ratio             | 8.283 | 4  | .082                  |
| Linear-by-Linear Association | .023  | 1  | .878                  |
| N of Valid Cases             | 60    |    |                       |

**Whole sample: Atmosphere vs. frequency of visit to previously used open spaces - natural**

**Crosstab**

Count

|         |           | Frequency |           |         | Total |
|---------|-----------|-----------|-----------|---------|-------|
|         |           | never     | sometimes | usually |       |
| Natural | undecided | 1         | 1         | 2       | 4     |
|         | positive  | 3         | 9         | 6       | 18    |
|         | negative  |           | 24        | 14      | 38    |
| Total   |           | 4         | 34        | 22      | 60    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 8.630 | 4  | .071                  |
| Likelihood Ratio             | 9.688 | 4  | .046                  |
| Linear-by-Linear Association | .988  | 1  | .320                  |
| N of Valid Cases             | 60    |    |                       |

**Akköprü Migros: Atmosphere vs. replacement of previous open spaces - attractive**

**Crosstab**

Count

|            |           | Replacement |     | Total |
|------------|-----------|-------------|-----|-------|
|            |           | no          | yes |       |
| Attractive | undecided | 1           | 2   | 3     |
|            | positive  | 16          | 5   | 21    |
|            | negative  | 6           |     | 6     |
| Total      |           | 23          | 7   | 30    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 4.978 | 2  | .083                  |
| Likelihood Ratio             | 5.725 | 2  | .057                  |
| Linear-by-Linear Association | 4.528 | 1  | .033                  |
| N of Valid Cases             | 30    |    |                       |

**Karum: Atmosphere vs. replacement of previous open spaces - calming**

**Crosstab**

Count

|         |           | Replacement |     | Total |
|---------|-----------|-------------|-----|-------|
|         |           | no          | yes |       |
| Calming | undecided |             | 3   | 3     |
|         | positive  | 14          | 11  | 25    |
|         | negative  |             | 2   | 2     |
| Total   |           | 14          | 16  | 30    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 5.250 | 2  | .072                  |
| Likelihood Ratio             | 7.159 | 2  | .028                  |
| Linear-by-Linear Association | .170  | 1  | .680                  |
| N of Valid Cases             | 30    |    |                       |

**Karum: Atmosphere vs. replacement of previous open spaces - friendly**

**Crosstab**

Count

|          |           | Replacement |     | Total |
|----------|-----------|-------------|-----|-------|
|          |           | no          | yes |       |
| Friendly | undecided | 2           | 1   | 3     |
|          | positive  | 6           | 15  | 21    |
|          | negative  | 6           |     | 6     |
| Total    |           | 14          | 16  | 30    |

**Chi-Square Tests**

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 10.102 | 2  | .006                  |
| Likelihood Ratio             | 12.509 | 2  | .002                  |
| Linear-by-Linear Association | 3.018  | 1  | .082                  |
| N of Valid Cases             | 30     |    |                       |

**Karum: Atmosphere vs. replacement of previous open spaces - natural**

**Crosstab**

Count

|         |           | Replacement |     | Total |
|---------|-----------|-------------|-----|-------|
|         |           | no          | yes |       |
| Natural | undecided | 2           | 1   | 3     |
|         | positive  | 3           | 10  | 13    |
|         | negative  | 9           | 5   | 14    |
| Total   |           | 14          | 16  | 30    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 5.135 | 2  | .077                  |
| Likelihood Ratio             | 5.342 | 2  | .069                  |
| Linear-by-Linear Association | 1.044 | 1  | .307                  |
| N of Valid Cases             | 30    |    |                       |

**Whole sample: Atmosphere vs. replacement of previous open spaces - friendly**

**Crosstab**

Count

|          |           | Replacement |     | Total |
|----------|-----------|-------------|-----|-------|
|          |           | no          | yes |       |
| Friendly | undecided | 4           | 2   | 6     |
|          | positive  | 17          | 20  | 37    |
|          | negative  | 16          | 1   | 17    |
| Total    |           | 37          | 23  | 60    |

**Chi-Square Tests**

|                              | Value  | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square           | 11.505 | 2  | .003                  |
| Likelihood Ratio             | 13.587 | 2  | .001                  |
| Linear-by-Linear Association | 5.395  | 1  | .020                  |
| N of Valid Cases             | 60     |    |                       |

**Whole sample: Atmosphere vs. replacement of previous open spaces - natural**

**Crosstab**

Count

|         |           | Replacement |     | Total |
|---------|-----------|-------------|-----|-------|
|         |           | no          | yes |       |
| Natural | undecided | 2           | 2   | 4     |
|         | positive  | 7           | 11  | 18    |
|         | negative  | 28          | 10  | 38    |
| Total   |           | 37          | 23  | 60    |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|-------|----|-----------------------|
| Pearson Chi-Square           | 6.503 | 2  | .039                  |
| Likelihood Ratio             | 6.477 | 2  | .039                  |
| Linear-by-Linear Association | 4.636 | 1  | .031                  |
| N of Valid Cases             | 60    |    |                       |