TRANSFORMATION OF A PUBLIC SPACE IN ISTANBUL: THE EMİNÖNÜ SQUARE

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ABSTRACT

TRANSFORMATION OF A PUBLIC SPACE IN ISTANBUL: THE EMİNÖNÜ SQUARE

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Urban public spaces have always been subjected to physical, economical, social, political and cultural transformations of the city. These changing dynamics could cause decay in the spatial qualities and could also lead to a loss of values and identities of urban spaces, especially in public spaces.

This thesis explores the qualities of a particular urban space in Istanbul: the Eminönü Square. Providing a guideline for the future urban design projects, the structure and the identity of the historical public space is aimed in this thesis. Firstly, in order to evaluate the qualities of urban public space a method of analysis has been developed in the study. For this purpose, the urban design theories and their methodologies of analysis have been discussed with respect to three main headings: urban form, urban activity and urban image. Furthermore, as parallel to this purpose, the criteria of the quality of urban space are developed by the help of the morphological, visual and perceptual analyses. In the second stage, the formation-transformation processes of the Eminönü Square, spatial dynamics and urban operations have been discussed within the framework of the method of analysis in a historical aspect.

The results of the analyses show that the spatial dynamics and the urban operations affected the quality of the Square negatively in all formal, visual, social and perceptual aspects. In other words, the Eminönü Square lost its well-defined formal structure and transformed to a space which is deprived of activity structure and legible identity.

Keywords: Transformation, Urban Form, Urban Image, Urban Activity, Eminönü Square, Quality of Urban Space, Morphological Analysis.

ÖZ

ISTANBUL'DA BİR KAMUSAL MEKANIN DÖNÜŞÜMÜ: EMİNÖNÜ MEYDANI

Çin, Tümay
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Kamusal mekanlar her zaman kentlerin fiziksel, ekonomik, sosyal, politik ve kültürel dönüşümlerine konu olmaktadır. Bu değişen dinamikler kentsel mekanın, özelliklede kamusal alanların niteliğinin bozulmasına ve sahip olduğu değerlerin ve kimliklerinin yitirilmesine yol açabilmektedir.

Bu tez İstanbul'un özellikli bir mekanı olan Eminönü Meydanı'nın mekansal kalitesini araştırmaktadır. Tezde ileride yapılacak olan kentsel tasarım projelerine ışık tutmak için, tarihi kamusal mekanın kaybolan değerlerinin, yapı ve kimliklerinin ortaya çıkarılması ve değerlendirme ilkeleri kılavuzu geliştirilmesi amaçlanmaktadır. Çalışmada önce kamusal mekanın kalitesini değerlendirebilmek için bir analiz yöntemi geliştirilmektedir. Bu amaçla, kentsel tasarım kuramları ve analiz metotları kentsel form, kentsel aktivite ve kentsel imge olmak üzere üç ana başlık altında tartışılmıştır. Bu hedefe paralel olarak morfolojik, görsel-mekansal ve algısal analizler yardımıyla kentsel mekanın kalite kriterleri geliştirilmiştir. İkinci aşamada ise Eminönü Meydanı'nın oluşum-dönüşüm süreçleri, mekansal dinamikler ve müdahaleler geliştirilen çözümleme yöntemi çerçevesinde tarihsel olarak ele alınmaktadır.

Tüm bu analizlerin sonucu kentsel müdahalelerin Eminönü Meydanı'nın kalitesini fiziksel, görsel, sosyal ve algısal açıdan olumsuz bir şekilde etkilediğini göstermektedir. Diğer bir deyişle, Eminönü Meydanı tanımlı fiziksel yapısını kaybederek, sosyal aktiviteden yoksun, akılda kalıcı bir kimliği olmayan bir mekana dönüşmüştür.

Anahtar Kelimeler: Dönüşüm, Kentsel Form, Kentsel İmge, Kentsel Aktivite, Eminönü Meydanı, Kentsel Mekanın Kalitesi, Morfolojik Analiz.

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CHAPTER 1

INTRODUCTION

1.1. PROBLEM DEFINITION

Urban spaces have always been subjected to physical, economical, social, political, architectural and cultural transformations of the city. In this sense, urban spaces reflect temporal qualities in parallel with changing planning and architectural practices. The modernization and urbanization processes have been necessitated the transformation of spatial-physical, socio-cultural and economical relations in the urban space such as the opening of wide roads, construction of new buildings and formation of new activity patterns. These changing dynamics also affect the spatial qualities of urban spaces.

Related with changing dynamics, the urban public spaces have also been transformed. With the degradation in spatial qualities, urban public spaces may lose their values, structures and identities and fail to support any sense of place. Consequently, this presents a new problematique for architectural and planning practices: to maintain spatial quality and provide sense of place within urban spaces.

In this context, the Eminönü Square, which has been transformed by the changing dynamics of the city, is chosen as a research area. The reasons behind selecting Eminönü as the research area can be summarized in four points. Firstly, it has always been a gate *par-excellence* to the historical city of Istanbul. Secondly, it has been the primary node of urban transportation in between the intra urban roads, maritime transportations and railway transportations in the city of Istanbul. Thirdly, it has been the entrance of central business district of Istanbul and has been a node of activities. Finally, it has been an important public space for the city of Istanbul.

Eminönü has always been subjected to operations. The construction of Yeni Cami was a large scale urban operation in the 17th century. The demolition of the exterior courtyard of Yeni Cami (the New Mosque) signifies a conversion of the courtyard of the mosque to a public square in the 19th century. This spatial transformation attracted a new form of public life. The Eminönü Square as a public space has started to be transformed especially by the beginning of 19th century with the modernization of Istanbul. Radical changes were made with the Prost Plan in 1940s. The aspiration to create a public plaza like in European cities started to gain strength with this plan and reached to the present time. Many projects have been realized in different periods, with different historical, political, socio economic and legislative aspects. The main objectives of these projects were to create Eminönü Square as a public space of good quality. Unfortunately, today, the Square is turned into a hub of roads and lost its character of a public plaza in many aspects. It has become a transition area instead of being a meeting point for people because it lost its historical values, well-defined structure and activity pattern, human scale and sense of place.

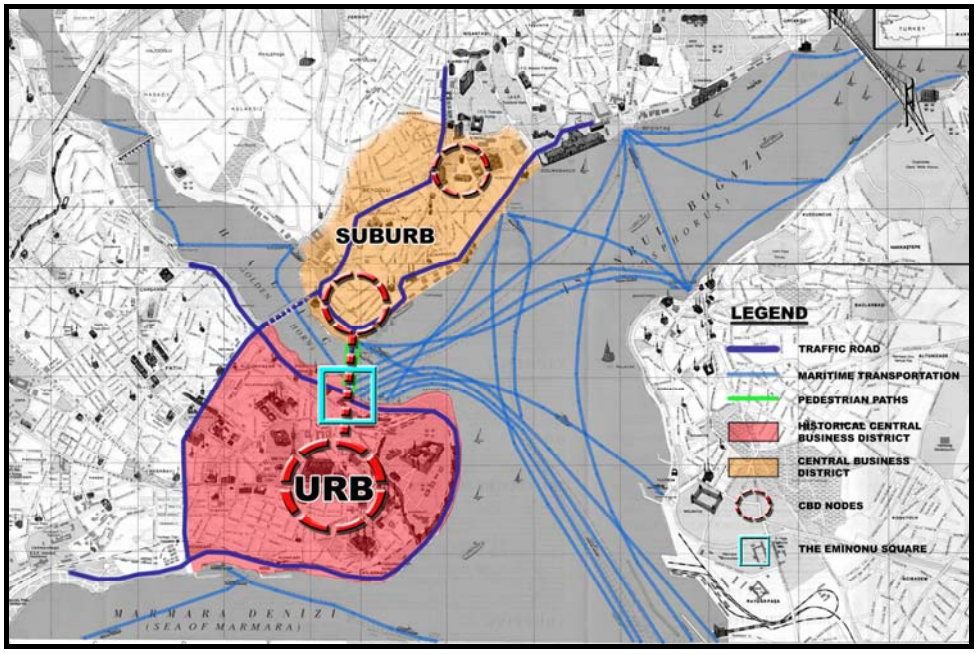

Figure 1.1: The location of the Eminönü Square within the city of Istanbul.

1.2. THE AIM OF THE STUDY

The aim of the study is to provide a guideline for the future urban design projects by putting forward the values, the structure and the identity of historical public space, the Eminönü Square. This urban design research will try to identify the relation between past, present and future projects. The main question of this research is “How did the operations affect the quality of public space in Eminönü Square?”, “How far did they create good quality of public space on Eminönü Square?”. In this context, this research explores “the qualities of urban space”. It deals with the criteria of the spatial qualities of the “successful urban place”.

In order to answer the main question of the thesis, this research seeks to achieve two major objectives. One of these objectives is to develop a method of analysis to evaluate the qualities of urban space. For this purpose, the urban design theories and their methodologies of analysis will be discussed. The second one is to make a historical survey in order to grasp the formation and transformation processes of the Eminönü Square. In this context, the past urban operations of the Eminönü Square with their different aspects: objectives, projects, results and reasons of their failure or success will be studied.

1.3. RESEARCH METHODOLOGY

The complex relationships between well-structured physical-spatial, psychological and socio-cultural attributes compose successful urban spaces. For Montgomery (2003: 4), all successful urban places can be studied in three sets of elements:

• *Form:* the relationship between buildings and spaces

• *Meaning:* sense of place, historical and cultural

• *Activity:* economic, cultural, social

In this context, this thesis will try to achieve the urban design criteria for evaluating the spatial qualities of the Eminönü Square under the three main components of quality of space: *urban form*, *image* and *activity*.

Based on these headings within the guidance of related concepts and methodologies, the analysis will be structured.

'Piecemeal' urban operations of the 19th century and the urbanization process of Istanbul through the 20th century gradually affected the spatial quality of the Eminönü Square. In this respect, the operations on the Eminönü Square and its surroundings from the beginning of 19th century to the 21st century are studied in this research.

The public space with its spatial form will be studied in the first part of the analyses. Morphological analysis will be used for the formal analysis of the Eminönü Square. In this respect, the *figure-ground* and *linkage analyses* as two-dimensional types of analysis and spatial-visual analysis as a *three-dimensional analysis of built and open spaces* will be made. The *urban blocks*, *building patterns, pattern of urban plots (parcel divisions)* and *public monuments* will be taken as the components of urban solids for the figure-ground analysis. Besides, the *types* and *geometry of open spaces* will be taken as the determinants of urban voids for the figure-ground analysis.

In the three-dimensional urban form analysis, *"the built and spatial forms", "treatment of defining surfaces" and "ground treatment and furnishing"* will be used with reference to the classification of Raymond Curran's three visual components of urban space.

The Eminönü Square with its activity relations will be studied in the second part of the analyses. In this context, activity *pattern, everyday or social practices pattern, rhythm of urban activities and landownership pattern will be examined*.

The form of the space and the activities in the space collectively constitute the image of urban space. It depends on user's experience. It is related with the perception of users. Yet, the perceptual experience of people in the past

can hardly be studied today. However, an analysis of *the image of urban space* might be made by comparing the Pervititich map of 1940s, which provides detailed information about both the physical structure and the activity pattern of the area, and the present condition of the Eminönü Square with reference to Kevin Lynch. In this context, the five perceptual elements of urban space; *districts, edges, paths, nodes* and *landmarks* will be figured out for the Eminönü Square and its surroundings.

In order to examine the changes of the space quality in the Eminönü Square five base maps will be used; the water addiction map of 1815, the map of 1882 by Ayverdi, the map of Pervititich of 1940s, the map of 1960, the map of 1996. It is thought that the chosen maps show the formal changes on the Square before and after the operations. In addition, photographs dated to the end of 1800s, beginning of 1900s, 1940s, 1950s, 1960s, 1980s and today will be used for the analysis.

1.4. STRUCTURE OF THE THESIS

The research consists of six chapters. The second chapter consists of a literature review to identify and evaluate the concepts, theories, and models for building qualified public spaces. The theoretical framework is studied for a method of analysis and evaluation of the transformation of a public space. The first part explores the 'public space' as part of public realm. The second part studies the question of 'successful urban place' or 'quality of place'. Lastly, it explores these concepts and principles of urban design.

Chapter 3 seeks a historical review before the Republican era to understand the formation and transformation of Eminönü Square. This period reflects the effects of 'piecemeal' urban operations of the 19th century on the fabric of Eminönü Square. It helps to understand the social and economical relations between Eminönü and other parts of the city. The second part of the chapter explores the construction of Yeni Cami, which brought new activities and relations to Eminönü in the 17th century. The third part studies the effects of Galata Bridges, the new transportation systems, the big fires, the Ottoman

modernization projects, the new administrative and urban politic systems in the 19th century until the Republican era.

Chapter 4 studies the operations on the Square from the Republican era to today that have gradually affected the spatial quality of the Eminönü Square with the urbanization process of Istanbul through the 20th century. As the urban operations that affected the morphology of the Square coincide with the planning process, the sections of the chapter are divided according to the planning process from 1920s to the present time. In the first part of this chapter, the Eminönü Square and its surrounding area will be examined from 1920s to 1950s; the period covers Prost's planning. The second part explores the rapid urbanization period between the 1950s and 1960s, the operations of Adnan Menderes. The third part explores the "regional planning" period from the 1960 to 1966. The conservation plan of Gündüz Özdeş for Historical Peninsula had effects on Eminönü. The fourth part studies the period from 1966s to 1990s. It contains the metropolitan planning process, the operations by Bedrettin Dalan and the historical peninsula conservation planning process. Finally, the last conservation plan of the Historical Peninsula and the urban design project on the Square will be examined within a physical and socio-economical perspective.

Chapter 5 is the analysis chapter for evaluating the operations on the Eminönü Square according to the methods of analysis, discussed in Chapter 2.

Finally, Chapter 6 concludes the thesis. It provides an overview of the research by summarising the initial focus of the research, the research question and methodology emphasizing the findings of the research.

CHAPTER 2

QUALITIES OF URBAN PUBLIC SPACE

2.1. INTRODUCTION

As public spaces are important parts of cities, the quality of public space is one of the main themes of the literature of urban design. In this part, a theoretical framework will be made to identify and evaluate the concepts, theories, and models for building public spaces. An analysis of these findings will help to set criteria for defining qualities of urban space. Thus, it will provide us with a methodological framework to evaluate the qualities of the Eminönü Square as a public space.

The first part explores the 'public space' as part of the public realm. The second part explores the question of 'successful urban place' or 'quality of place' to understand why the discussions about the quality of space started. Many concepts are developed to define 'successful places' or 'qualified places'. For example; activity, diversity, image, enclosure, vitality, form, density etc. are the concepts, which are used to define the quality or success of place in the urban design literature. Lastly, it explores three concepts according to the result of these literature reviews into three main headings, which are the urban form, urban image and urban activity.

2.2. PUBLIC SPACE AS PART OF PUBLIC REALM

Public realm is the most important component of urban life. It refers not only to a variety of social relations but also to the space where public social life takes place in all its forms. Therefore, urban public places are spaces for

public meetings in which intellectual discourse and social interaction take place (Montgomery, 1997: 88).

Lofland (1989: 19 cited in Montgomery, 1997: 86) explains public realm as:

> "…made up of the public places or spaces…that tend to be inhabited…by persons who are strangers to one another and who 'know' one another only in terms of occupational or non-personal identity categories."

Public space as an arena for strengthening civic society has gained importance in the last two centuries (Madanipour, 1996: 144). Urban space is a public realm that people share and where they carry out functional and ritual activities and a ground for politics, religion, commerce, sport, etc (Madanipour, 1996).

Madanipour (1996: 145) defines public space as:

> "Public urban space is the space that is not controlled by private individuals or organizations, and hence is open to the public. This space is characterized by the possibility of allowing different groups of people, regardless of their class, ethnicity, gender and age, to intermingle."

Jan Gehl argues in his book "Life Between Buildings" that the public realm in urban space maintains three roles; as places to interact with others, as market places to transact in and as channels of movement (Gehl, 1987 cited in Montgomery, 1997: 87). Arendt (1958) defines public space as "the space of appearance". The appearances by others are crucial for human beings to keep psychological balance (Sennett, 1992).

Urban public space, which is open to general observation, has important functions. First; it is a kind of forum, second; it is a place of group action where people come together and symbolize their power and ideas, third; it is a kind of social school or learning social interactions and lastly it is a common ground where strangers meet (Brill, 1989: 8).

Public space, which is the most important element of city's livability, has three important components. These are *activity*, *form* and *meaning* (Montgomery, 1998: 97). Variety of activities and events in public space constitute the meaning, identity and image of that public space. Events also maintain the *experience* of the public space by people (Montgomery, 1998). Madanipour (2003: 235) mentions about the public spaces as places that regulate interpersonal relationships with others and provide a link with previous generations by the experience of the same place. This provides the *permanence* of public space. The shared experience, such as rituals, performances and public opinion etc. bring out a sense of personal continuity of public spaces as places of remembrance and of personal associations.

Today, the term "public realm" is frequently discussed by many different disciplines like; urban geography, sociology, urban planning and urban design. It is generally accepted that urban space is a public realm where intellectual discourse, social interaction and political struggle take place. However, today social, cultural and technological transformations begin to affect the public realm of cities.

2.3. QUESTION OF 'SUCCESSFUL URBAN PLACE' OR 'QUALITY OF PLACE'

The relation between life inside the buildings and activity on streets and squares are seen from the ancient times throughout the history of the cities. In traditional European cities, squares were the spaces where public could gather in crowds and socially interact. These open public spaces were used not only for exchange of goods, but also for variety of unplanned and recreational activities (Laurie, 1976: 61).

The 19th century, industrialization era, which affected the rhythm of life in its social, economical, cultural and political dimension, resulted in the acceleration in urban dynamics. Public realm also has undergone a significant change within this process. People have lost their controlling role over the making of the environment in which they live, and instead of being

participators, they have become observers of the changing city (Choay, 1960: 9).

To eliminate both qualitative and quantitative problems of the city of 19th century, different approaches and models were developed. Amongst these, the functionalist approach has been the most influential. CIAM (International Congress of Modern Architecture), attempted to develop a scientific method for a systematic analysis of the cities and to regulate the urban environment, focused on *existenzminimum* – the problems of minimum living standards (Le Corbusier, 1973: 15). For achieving equal rights for every member of the modern society, standardization was introduced into the field of urbanism and architecture as expressed in universal manifestos.

According to Athens Charter in 1933, the manifesto of "the Functional City", the needs of modern society determined three basic functions of life: *dwelling, working and recreation* (Le Corbusier, 1973: 7). Le Corbusier (1987: 10), one of the pioneers of the modern movement, states:

> "Modern town planning comes to birth with a new architecture. By this immense step in evolution, so brutal and so overwhelming, we burn our bridges and break with the past."

In this sense, the traditional and historical characteristics of the city were rejected for setting out universal rules of planning (Trancik, 1986: 85). The functionalist policies of planning caused the loss of the traditional qualities of urban space (Trancik, 1986: 85).

The functionalist urban planning suggested that the historical urban fabrics needed to be revolutionized with regard to the needs of the modern society and the necessities of hygiene: sunlight, vegetation and open space (Le Corbusier, 1973: 55).

With the functionalist approach zoning –separation of functions- came into existence. The centre of the cities were re-designed for provide the need of cities according to new functional needs or new urban conditions like traffic,

open space, density etc. of the era (Le Corbusier, 1973: 77-78). However, it is difficult to obtain these new urban conditions in the traditional city centre.

Consequently, traditional characteristics of urban space, like human scale, unity and enclosure, have been lost. Trancik (1986: 4) states about these lost spaces as:

> "The modern urban space began to be criticized to turn into *antispace* –to become an agglomeration of undesirable urban areas having no positive contribution to the context or users: they are regarded as spaces without both spatial and public quality."

After 1950s, Team 10, a group of architects, reacted against the modern movement and tried to formulate a new approach to urban design. They aimed to establish relations between the physical form and socio-psychological needs (Frampton, 1980: 271). The aim of the studies has been to define the components of the spatial qualities of the "successful urban place".

Much of the literature that defines successful urban places does not emphasize aesthetics, or the design of its architectural properties (Montgomery, 1998). Instead, according to Montgomery (1998: 93);

> "*…they understand that* good urban places have a structure and an underlying dynamic of activity."

To better understand the qualities of good urban design, an understanding of place and place making is essential (Montgomery, 1998: 93).

The complex relationships between well-structured physical-spatial, psychological and socio-cultural attributes composed the successful urban space. This quality is determined by the form, image and activity within urban environment, which is called urbanity (Montgomery, 1998: 95)

Consequently, following from Canter's (1977 cited in Montgomery, 2003: 4) *Metaphor for Place*, one can posit that all successful urban places are comprised of three sets of elements:

• *Form:* the relationship between buildings and spaces

• *Meaning:* sense of place, historical and cultural

• *Activity:* economic, cultural, social

2.4. CREATING A SENSE OF PLACE

Trancik (1986: 113) defines the place as:

> "A place is a space which has a distinct character and a stable system in which people can develop their social, cultural and political values and behaviors"

In this context, the space does not give an emotional content alone. For Trancik (1986: 112), "…*the space* only becomes a place when it is given a contextual meaning derived from cultural or regional background." In order to create a sense of place, some aspects, is more than physical, need to be taken into account in spatial design (Trancik, 1986: 113).

According to Montgomery (1998: 94), within the literature, urban designers are generally seen to fall into two categories about what creates a sense of place. One group places more emphasis on "physicality," including aesthetics, architecture, functionality, public spaces, historic monuments and landmarks. This is the "rational objective classical view of urban design". The second group takes the "romantic subjective view of urban design," stressing the "psychology of place," wherein people use "mental maps," relying on their senses to determine whether or not an area is comfortable, safe, or vital (Montgomery, 1998: 94).

For Montgomery (1998: 94), Jane Jacobs, with her study, *Death and Life of Great American Cities (1961),* was "the first to explore urban quality from the premise that activity both produces and mirrors quality in the built environment". Jacobs (cited in Montgomery, 1998: 94) is also mentioned for identifying successful urban places as spaces that "stimulate the sensory experiences and perceptions of those who use them, and offer the range of use and variety of activities desired by the community".

Urban quality, as described by Montgomery (1998: 2) is determined by “the social, psychological, and cultural dimensions of place”. Besides, many physical elements affect the sense of place. What is important here is to combine the gap between these two views to create a sense of place or to create successful urban place.

2.5. QUALITIES OF URBAN PUBLIC SPACE: FORM, IMAGE, ACTIVITY

In this part of the thesis three important components of urban public space; will be studied according to the classification of Montgomery (1998: 95), urban form, urban image and urban activity and their relations with each other. The theoretical framework developed for understanding these components of urban space will be used as a method of analysis to evaluate qualities of the Eminönü Square.

2.5.1. URBAN FORM

The term “urban form” has been studied from many different points of view like –architectural view, urban design and urban geography.

The architectural interest mainly deals with the physical structure of the city, its aesthetic and functional dimensions (Madanipour, 1996: 32). For Smailes (1955 cited in Madanipour, 1996: 32), urban form has been coupled with the term *‘townscape’*. It has four important components like; street plan or layout, settlement patterns, architectural style of buildings and their design and land use. Therefore, the geometry of each of these components can be defined as urban form.

According to urban geography view, with reference to Gordon’s (1984: 3 cited in Madanipour, 1996: 53) work *The Shaping of Urban Morphology*, urban morphology is the study of urban form. For Gordon (1984: 3 cited in Madanipour, 1996: 53), morphology deals with “plots, building, use, streets, plans, and townscapes”. It means that the urban morphology is related with the study of form, shape, structure and functions of the built fabric of the cities.

Besides the physical properties, the social aspects should also be related with the urban form. As Madanipour (1996: 53) states:

> "The relationship between people and the built environment constitute two interrelated dimensions of urban form".

Rogers (1971: 210 cited in Madanipour, 1996: 32) defines urban form as:

> "Being concerned with the disposition of human socio-economic activities in urban areas, with the goals of discovering, explaining and ultimately predicting regularities which exist in people's adaptation to city space."

Bourne (1982 cited in Madanipour, 1996: 33) defines urban form with its both spatial and non-spatial dimensions. He defines urban form as "a spatial pattern or arrangement of individual elements within a city system". The elements that he defines are; built environment, buildings and land uses, as well as disposition of social groups, economic activities and public institutions within the city (Bourne, 1982 cited in Madanipour, 1996: 33).

These definitions point out different aspects of the multifaceted phenomenon of urban form. This is resulted from the fact that urban space is both a physical and social phenomenon.

Different methods of analysis are developed to analyse physical conditions of urban space. Morphological methodologies, R. Trancik's theoretical analysis –figure-ground and linkage theory- as *two-dimensional types of analysis* and R. Curran's visual and spatial analysis as a *three-dimensional analysis* for urban form are examined in this part of the study. These two and three dimensional analyses are also used as methods of formal analyses to evaluate the qualities of the Eminönü Square.

Typo-morphological methodologies are used for spatial analyses that aim to understand the principles of formation of urban space. They build a design theory to achieve ways of constructing the city.

According to Roger Trancik (1986: 97-124), to explain the general pattern of space and to explore its urban characteristics, three urban design theories could be used: (1) figure-ground theory; (2) linkage theory, and (3) place theory. These theories differ significantly from each other, but taken together, they can provide with comprehensive understanding of integrated spatial design of a built environment. Combining the three, it can give a comprehensive evaluation on various facets of a particular structure within a built environment - the mass-void relationship, organization pattern, and its correspondence to human needs (Trancik, 1986).

Raymond Curran (1983) also associates the urban form with the visual perception to explain the relation between the urban form and urban quality. In his work, *Architecture and the Urban Experience*, he states: “the forms of buildings tell us how people use and experience the urban space in their daily lives” (Curran, 1983: 2).

2.5.1.1. Typo-morphological studies

Moudon (1994: 289) defines the typo-morphological studies as:

> “*Typo-morphological studies*…reveal the physical and spatial structure of cities. They are typological and morphological because they describe urban form (morphology) based on detailed classifications of buildings and open spaces by type (typology). Typo morphology is the study of urban form derived from studies of typical spaces and structures.”

Typo-morphological studies appeared as a criticism to the urban renewal projects for developing a method of examining urban form.

Typological studies have been seen as a design tool since the eighteenth century (Assi, n.d). The enlightenment generated two ideas that represent two sides of the problem: the functional approach and the formal approach. (Assi, n.d)

Interest in urban fabric as an object and a tool in design methodology began to emerge toward the end of the nineteenth century (Assi, n.d). It blossomed

in the 1930s and was renewed in the 1950s and led to international debate in the mid-1960 that extends through the seventies (Assi, n.d). Three schools in Europe began to elaborate theories for the understanding of the built environment and the relation between its elements (Assi, n.d). They are; the urban Morphology research group of the University of Birmingham inspired by M.R.G. Conzen, the Italian school established by Saverio Muratori, and the school of Versailles in France" (Assi, n.d).

Conzen's (1969 cited in Assi, n.d) approach for typological analysis is using small towns of medieval origin in England in which he developed new concepts. His analysis isolated three basic components of the urban fabric - street, plot, and building (Conzen, 1969 cited in Assi, n.d).

Muratori's theory was organized in the crisis of Modern movement to formulate design and building on different basic principles. The method is based on to relate the history and memory (Assi, n.d). For the Italian school the goal of topological/morphological research is to establish a correct formulation of the design process, and in fact, Muratori talks of 'Storia Operativa' – operational history - (Assi, no date).

Another significant study from Italian school belongs to Aldo Rossi. His study is in a historical perspective on the urban process and typological study of individual transformations of urban artifacts (Rossi, 1982: 32). Rossi (1982: 32) defines the form as:

> "…the architecture of the city –that is, its form, which seems to summarize the total character of urban artifacts including their origins."

Rossi criticizes the functionalist approach of the modern movement. He (1982: 46) argues:

> "…functionalism and organicism, the two principal currents which have pervaded modern architecture, reveal their common roots and the reason for their weakness and fundamental ambiguity. Through them form is divested of its complex derivation: type is reduced to a simple scheme of organization, a diagram of

> circulation routes, and architecture is seen as possessing no autonomous value."

Rossi's methodology has a dialectical relationship between the study of typology and urban morphology defining the urban context. In addition to that, he develops a theory of urban artifacts around the themes of *function, permanence, classification and typology* (Rossi, 1982: 61).

Rossi (1982: 86) defines certain elements as the *primary elements* that satisfy the continuity of the urban structure with their permanent characteristics and distinguishable identities. As the primary elements participate in the evolution of the city over time, they become the major artifacts constituting the city (Rossi, 1982: 86). Not only monuments but also the plan of a city can be considered as a primary element with its persistent role in shaping urban environment (Rossi, 1982: 86). Even though the city and its artifacts transform, there is continuity and permanence that shapes and guides the future of the urban form, keeping the values of their autonomous and relational essences within the process (Rossi, 1982: 86).

Types are defined as the instruments that transmit values through the time, as the objects of history. Rossi (1982: 40) mentions in *The Architecture of the City* about the concept of type as:

> "…something that is permanent and complex, a logical principle that is prior to form and that constitutes it."

Rossi uses his historical approach in two different ways. He (1982: 128) uses these as: "first, city is considered as the collection of material artifacts, a man-made object, which is built over time, and secondly history as the study of the actual formation and structure of urban artifacts, which is a synthesis of values."

Robert Krier's study amongst other studies had exceptional influence on the dominance of a historicist and traditional attitudes. He praises the ancient urban forms referring to their positive spatial quality. His methodology is composed of geometrical relations and aesthetic values. According to him,

functional, social, political and even aesthetic considerations may change through time; the only permanent thing is *type* (Krier, 1979: 64).

Krier (1979: 170) defines the street and the square as the basic urban types. The urban space is shaped and related with using these types (Krier, 1979: 170). He (1979: 170) states about why using the ancient urban forms as:

> "…it is more useful to imitate something 'old' but proven, rather than to turn out something new which risks causing people suffering. The logical and attractive building types and spatial structures left to us by anonymous architects have been improved upon by countless succeeding generations."

The French school of Versailles is differentiated from the other schools with its two general characteristics (Assi, n.d). One is related to the dialectic of urban form and social action, and the second related to the dialectic of modern-non modern (Petruccioli, 1998: 12 cited in Assi, n.d). The social component is of primary importance. As Moudon (1994: 301) claims:

> "…their approach to typo morphology is oriented to formal, physical an issue which is placed within the social sciences perspective."

The three schools of typo morphology consider the built landscape within the historical context of the city (Assi, n.d).

Time factor is one of the essential dimensions of urban space. In this sense, typo-morphological studies should consider the temporal aspects of the city. Permanence is both formed and forming in the urban fabric in order to analyze the historical process of urban space formation based on the relation between space and time. It is important to consider the dialectical relationship of urban form and its past and present components for shaping the future environment.

2.5.1.2. Figure-Ground Theory

Trancik (1986: 97) defines figure-ground theory in his work *Finding Lost Space*: *Theories of Urban Design* as "a graphic tool for illustrating mass-void

relationships; it is a two-dimensional abstraction in plan view that clarifies the structure and orders the urban spaces". The two basic components of figure-ground drawings are the buildings or solid mass (figure) and the surrounding open spaces (ground) (Trancik, 1986: 100). These types of studies are used to identify the textures and patterns of the urban fabric as well as the problems associated with the order of the spaces (Trancik, 1986: 100).

According to Trancik (1986: 100), figure-ground drawings have the disadvantage of leading to a static or two-dimensional notion of the space. In practice, the figure ground relationship is not possible or even desirable because of its two-dimensional character (Trancik, 1986: 100). However, it should be used as a conceptual guidance principle in city design to clarify the structure of urban areas and to establish coherence between spaces of different sizes (Trancik, 1986: 100). Figure-ground theory is the starting point to understand the urban form. This approach to spatial design is considered as a valuable tool used to study and manipulate the pattern of solid and void spaces in the urban environment (Trancik, 1986).

According to Trancik's (1986: 102) classification, in traditional city there are three types of urban solids: *public monuments and institutions*, *predominant field of urban blocks* and *edge*-defining buildings. There are five main types of urban void: *entry foyers*, *inner block voids*, *the network of streets* and *squares, parks and gardens* and *linear open space systems* (Trancik, 1986: 102).

The change in the understanding of urban spatial design can be seen with the comparison of the figure-ground relations of traditional and modern cities. One is a figure dominant; the other is a ground dominant pattern. Well-defined boundaries and the dense character of the built space are defined as the conditions of spatial quality (Trancik, 1986). Traditional city pattern when compared with the modern one is successful because it has a dense built space and well-defined open spaces (squares, streets etc.). On the other hand, the urban spaces shaped by a functionalist understanding where the

buildings form figural, freestanding objects and open spaces become uncontained and undefined voids, which are not successful (Trancik, 1986).

Generally, cities are formed of the composition of both structure of spaces and structure of solids. Structure of space, which corresponds to the traditional cities, is organized around a clearly defined network of interconnectedness streets and squares (Figure 2.1) (Trancik, 1986: 67). The squares or streets are the figural entities. Square is the first recognizable form of urban space in traditional cities (Trancik, 1986: 67).

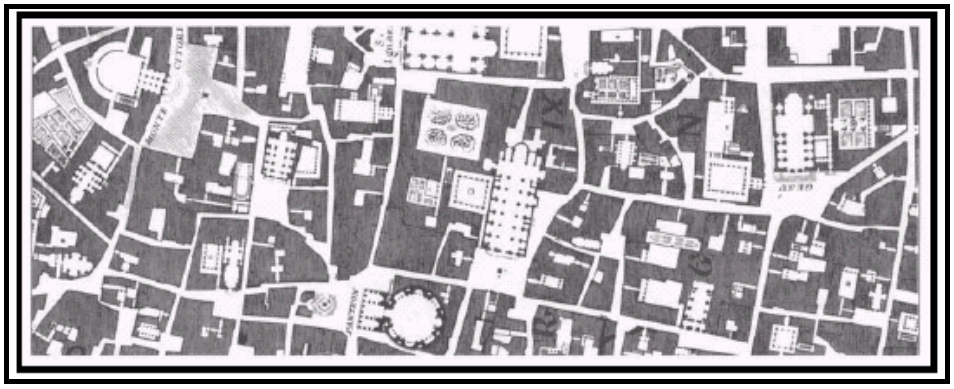

Figure 2.1: Figure-Ground Drawing: Giambattista Nolli, Map of Rome, illustrates the relationship of traditional open space and building mass (Trancik, 1986, p: 99).

In modern planning, traditional figure-ground relationships and human scale are lost. Therefore, urban space has become *left over space* between buildings (Trancik, 1986: 3). The city centre has lost its well-defined, human scale characteristics with the vast open spaces, traffic roads etc.

According to Trancik (1986), the easiest way to create positive space is by working with horizontal buildings, which provide an appropriate ground coverage area. Contrasting to these horizontal elements, there are also vertical elements in the modern urban environments, such as skyscrapers and block towers. They mostly lack the appropriate ground coverage making it difficult to achieve an interrelated urban space (Trancik, 1986).

The loss of traditional figure-ground relationships in modern city is pointed out in another point of view by Christian Norberg-Schulz (1979: 189) as:

> "Spatially the new settlements do not any more possess enclosure and density and usually consist of buildings freely placed within a park-like space. Streets and squares in the traditional sense are no longer found and the general result is a scattered assembly of units. This implies that a distinct figure-ground relationship no more exists; the continuity of the landscape is interrupted and the buildings do not form clusters or groups."

Raymond Curran (1983: 2) states "the form of the buildings and public spaces play an important role in urban quality and urban experience". He focuses on the relationship between the visual forms and the public domain in the city. He analyzes the form of built environment and open spaces in both scales of macroform and microform. In his microform analysis, He (1983: 80) identifies "built and spatial forms", examines "the treatment of defining surfaces", and "ground treatment and furnishing" as the three visual components of public domain. They enable us experience the urban environment (Curran, 1983).

First component has expressive qualities like being a symbol or sign for their functions as well as providing the basic context for the urban experience (Curran, 1983). Built and spatial forms form open spaces with their characteristics like density, height, distance, perspective effect, scale, proportion, organization of defining surfaces, orientation, symbol, sign and reference (Curran, 1983).

The second component provides visual and functional linkage between interior and exterior (public and private) domains (Curran, 1983: 126). Boundaries of open spaces are the *transition-interaction-transaction* surfaces between different domains, so they provide the diversity and heterogeneity of urban space. These surfaces contain such elements like entrances, arcades, openings, that provide transaction and permeability (Curran, 1983).

The third component is described in terms of material, pattern and level differentiations. Furnishing also supports urban activities as they have an important role in defining orientation, division, definition and association of urban space (Curran, 1983).

2.5.1.3. Linkage Theory

This theory is described as the study of the organization of the lines connecting parts of the city and the design of the *'spatial datum'* by these lines relating building to space (Trancik, 1986: 97). "Spatial datum" is described by Trancik (1986: 97) as: "the site lines, directional flow of movement, an organizational axis or a building edge". Some of the physical elements that form connections between parts of the city are the streets, pedestrian ways or linear open spaces. This approach to spatial design emphasizes the circulation diagram rather than the spatial diagram of the figure-ground theory (Trancik, 1986: 97). Movement systems and efficiency of the infrastructure takes priority over patterns of defined outdoor spaces.

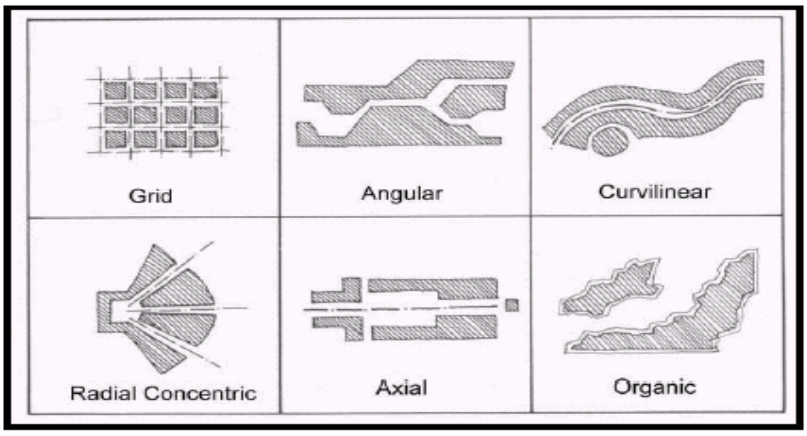

Figure 2.2: Types of Urban Patterns: This image illustrates the patterns created by the different relationships between mass and void. (Trancik, 1986, p: 101)

Trancik (1986: 105) explains the system of relationships in an urban space on the basis of Fumihiko Maki's classification of spatial relation types, and asserts that types of linkage schemes in an urban space are *compositional form*, *mega form*, and *group form*. These forms represent the basic shapes

that emerge from the combination of all the connective lines in an urban environment.

The first type is the “Compositional Form” and is made by individually shaped buildings in an abstract pattern when viewed in plan view. “Linkage” elements in this class of form are static and formal in nature (Trancik, 1986: 105).

The second form described is the “Megaform”. The structure of megaform encloses the internal space and the edge is formally defined. This structure is not responsive to exterior space. It creates its own environment (Trancik, 1986: 106).

“Group Form” is the third type of form created by the connective lines in urban areas. This form is present typically in the organization of many historic towns (Trancik, 1986:106). In Group Form, the “linkage” evolves naturally as part of the organic structure that generates it. It is characterized by a consistency of materials, a response to topography, respect to human scale, and by sequences of spaces defined by buildings, walls, gateways, and tower rising steeply to a point, as on a church (Trancik, 1986: 107).

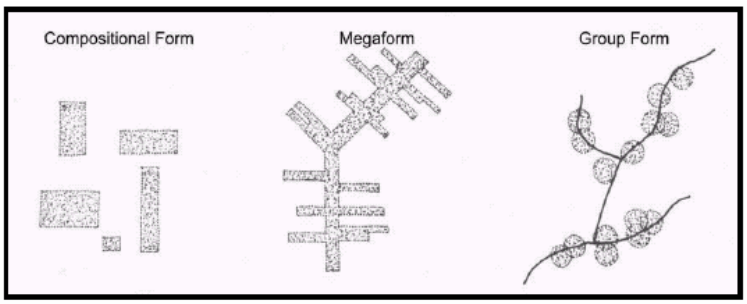

Figure 2.3: Types of “Linkage”: These are forms derived from the connection previously established or imposed. (Trancik, 1986, Finding Lost Space, p: 107)

2.5.2. URBAN IMAGE

Every place has an identity. Image, on the other hand, is a combination of this identity and the perceptions of those who use it or pass through it

(Montgomery, 1998). To individuals, the image of a place represents “their feelings and impressions, [based in part on their] values, beliefs, and ideas” (Montgomery, 1998); it also represents a wider set of group or cultural values, beliefs, and ideas or meanings associated with the place. Rapoport (1977 cited in Nasar, 1998:1) mentions about this identity as:

> “Cities and parts of the cities have a sensory quality or character that we can easily notice.”

Image and meaning derive from the activities one finds in a place and perceptions of the built form—its aesthetics, functionality, and public space—all of which create a “sense of place” (Montgomery, 1998). Many writers define this quality as the “character” or “atmosphere” of urban places (Jiven et al., 2003: 68; as cited in Cullen, 1961; Conzen, 1969; cited in Montgomery, 1998).

The term “urban image” is interpreted as one of the important components of sense of place in urban space.

Images can be defined as “point of contact between people and their environment” (Downs, 1967; cited in Rapoport, 1977: 41). Urban image is defined as the way people perceive and experience the urban space and structure it mentally. Harrison and Sarre (1971:351-374; cited in Rapaport, 1977: 40) define “urban image” as “an individual’s mental representation of the parts of external reality known to him via any kind of experience”.

Images play a significant role in environmental cognition. They are the mental representation of urban parts known through direct and indirect experience in the city (Rapaport, 1977: 115). How people evaluate urban space is an important issue. Nasar (1998: 2) defines the evaluative image as: “the appearance of memorable and visible parts of urban space by public actors who experience it”.

Not only the spatial form of the environment but also socio-cultural variables, people’s values, beliefs, ideas, memories, human activities and history of an environment are important in the construction of urban images (Lynch, 1960:

46). Human feelings and associations constitute perception of and reaction to the physical environment (Nasar, 1998: 8). Therefore, feelings affect environmental experience and structure evaluative image of that urban space.

Urban space is not only a physical construction. It is the composition of dialectical relationships between formal and social structures of the city. Formal analysis of urban space is not adequate to evaluate the quality of urban space. In this context, human interactions with the urban space, the urban experience, should be analysed. Human beings experience urban environment both individually and collectively. They experience the urban environment individually referring their five senses and the collection of individual experiences defines the public realm.

2.5.2.1. Urban Place Theory

The place theory goes one-step beyond figure-ground and linkage theories in that it adds the components of human needs and cultural, historical and natural contexts (Trancik, 1986: 98). In place theory social and cultural values, visual perceptions of users, and an individual control over the immediate public environment are important principles (Trancik, 1986: 98). Each of these approaches has its own values, which are interrelated.

In order to understand this theory, place must be defined as “a space that has a distinct character” (Trancik, 1986). “Place Theory” or the study of place is an attempt to understand the context of the physical place. The essence of this theory resides in considering the social and cultural values of the place, visual perceptions of the users and individual’s control over the immediate public environment (Trancik, 1986). This approach to urban design recognizes the unique character of each place given by its surroundings. The contextual meaning of a place is an outcome of the cultural or regional content of the area and consists of concrete things such as colors, shapes and textures, as well as intangible things like cultural associations, and the flavor given by the human use over time (Trancik 1986).

Thus, it can be said that subjective reading of urban environment focuses on three dimensional analysis with its two points of view; the designer and the users (Kallus, 2001). According to Kallus (2001), this analysis can be discussed in two groups. First group is the theories of perception, which focus on the cognitive, psychological and behavioural studies of spatial environment. Second group is the theories of meaning, which focus on the concept of place and components of urban place, i.e. identity, character and structure.

The methodology of the perception analyses is used in order to understand how cities are perceived and associated by people. The analyses usually depend on empirical data based on concrete daily human experience analyses.

2.5.2.2. Theories of Perception

Urban experience is the object of many analytical and theoretical studies. People experience the environment with their five senses and their cultural experience. Visual perception is particularly important for the perception of space.

The Gestalt-laws of form-perception firmly established that the mind is accustomed to pattern. (Guy, 2002: 6) For Koffka (1935 cited in Guy, 2002: 6) four of the non-hierarchical Gestalt principles, relating to the perception of the built environment, are listed as:

> *"Law of Simplicity:* The visual system integrates separate visual stimuli into a (meaningful) whole. For spatially contiguous forms, perception organizes visual stimuli in as large and as simple forms as possible. This is called *Simplicity of form*, where 'simple' may mean regular, symmetrical, minimal re-entrant corners, etc.
>
> *Law of Proximity:* Forms are close together tending to be perceived as a coherent group. Grouping elements together is more efficient than seeing them as separate elements; hence, this is an extension of *Simplicity.*

> *Law of Equality:* Equalities and similarities, especially in patterns, are immediately recognized.
>
> *Law of Continuity:* A figure is continued as it starts – new information will not be added (e.g. a line continues as a line, a zigzag a zigzag, a plane a plane, etc.). Information is concentrated at changes in direction (e.g. angles) and therefore the effect of *closure* occurs even if only the angles of a form are given."

The variety or complexity is important features for the urban design. The visual system will be satisfied when the perception contains complexity (Guy, 2002: 7). Guy (2002: 7) explains this relation as: "Variety is composed in form by opposing simplicity. Complexity is achieved by creating contrasts in form, dimension, materials, and scale etc." However, too much variety can cause not to perceive the space as a whole. Therefore, it is important to provide a balance between the complexity and simplicity (Guy, 2002: 7).

Lynch's theory of urban form is abstracted into its five components and their relation to each other. *Paths, edges, districts, nodes* and *landmarks* are the elements of people's mental image of urban space. He (1960: 47-48) defines these five components:

> *"Paths:* The dominant elements of city images, which are channels along with the observer moves around.
>
> *Edges:* The boundaries between two phases, which are linear breaks in continuity.
>
> *Districts:* The medium-to-large sections of the city, which are recognizable as having some common, identifying character.
>
> *Nodes:* The strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which she/he is travelling.
>
> *Landmarks:* The point-references, which are external, a simply defined physical object building, sign, store or mountain."

These components define and structure themselves with reference to their complex relationships.

Lynch (1981: 8) defines the visual qualities of urban space according to perceptual and non-perceptual factors. Perceptual factors are about the well-built environmental image-*legibility*.

Lynch (1981: 8) defines *legibility-imageability* as:

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

According to Lynch (1981: 131, 134) *Legibility* is composed of *identity, structure* and *meaning.*

> *"Identity:* The extent to which a person can recognize or recall a place as being distinct from other places-as having a vivid, or unique, or at least a particular character of its own.
>
> *Structure:* is about the relationships of parts of an urban place and how its parts fit together. It affects the sense of orientation knowing how other places are connected to this place.
>
> *Meaning:* A relation with the observer whether practical or emotional."

For an *imageable* environment, it is important to satisfy all three components. *Imageability* depends on the *legibility*, which means, urban place having recognizable symbols like: identifiable districts, edges, landmarks, streets and nodes. Therefore, the form of the environment that can be easily read, or legible, plays an important role in the shaping of urban image as well as for a likable environment (Montgomery, 1998: 100).

Lynch defines the criteria –characteristics of *imageable* urban environment. These are the non-perceptual factors like *accessibility, adequacy, diversity*, *adaptability* and *comfort* (Lynch, 1981: 68).

It is not possible to derive a universal, stable set of rules for a good urban image. Perceptual qualities are changed according to human's background and the historical, cultural and social characteristics of a place. That means, experiencing a place is a unique, complex issue and cannot be defined simply within either scientific or artistic considerations. It is obvious that perceptual theories cannot be enough for a complete urban design theory, but be a helpful tool for understanding the individuals' relation with spatial qualities of urban spaces.

2.5.3. URBAN ACTIVITY

The city life is made of complex set of activities and their interaction. The economical, social, cultural activities are the basic constituents of the city life that have dialectical relationship with the physical-spatial, social-cultural and economic structure of urban space.

As urban space is a socio-spatial phenomenon, activity is one of the basic components of urban public spaces. Combinations of activities are the key to successful urban places (Montgomery, 1998: 96).

Montgomery (1998: 96) mentions about the importance of activity in the city as:

> "Without activity, there can be no urbanity".

Activity generates vitality and diversity in urban space. For Montgomery (1998: 97) vitality refers to:

> "The numbers of people in and around an urban space, pedestrian flows at different times of the day and night, the mixture of facilities, the number of cultural events and celebrations over the year."

Urban vitality depends on diversity, mixture of activities, events, movement and meetings in public spaces (Montgomery, 1998: 100). Meeting places, which embody memories, customs and traditions of a society, play a significant role in the constitution of meaning and image in urban public places (Montgomery, 1998: 100).

Montgomery (1995: 15) introduces the concept of 'cultural animation' –"an important concept in France during the 1970s"- and explains:

> "The idea is to actively programme events and spectacles to encourage people to visit, use and linger in urban places. Using cultural animation, special programmes activate the public realm and urban vitality can be achieved."

Jane Jacobs (1961: 150), in *"Death and Life of Great American Cities"*, introduces four essential determinants as the condition of activity. These are *mixture of primary use, permeability, mixture of building types, ages, sizes, conditions and intensity.*

Mixed use: Vital urban areas serve at least two and preferably much primary functions, like; living, working, shopping, eating and so on. These should concern different kinds of people who come and go at different times for different purposes using facilities at different times and in different ways. For Jacobs, there are two types of mixed-use diversity (Jacobs, 1961: 161-164).

> *Primary uses* 'bring people to specific places because they are anchorages' like, offices, residence, some shops, and many places of education, recreation and entertainment.
>
> *Secondary uses* refer to the enterprises, which grow in response to primary uses, and serve people whom the primary uses attract.

She (1961) also focuses on the importance of fine grain economy in urban space. High proportion of small business of varying kinds generates lively and active urban places with commercial diversity. This enables maximum *flexibility* of use or *adaptability* in urban places (Montgomery, 1998: 106).

Permeability and accessibility: For Jacobs (1961: 178), city blocks must be short in order to generate more streets to walk down and more opportunities to turn corners. Shorter blocks constitute more street life and permeability with back alleyways and courtyards, which are opened up to active use (Montgomery, 1998: 106).

Accessible urban environment satisfies the possibility and choice of interaction, as well as development of economic and social efficiency. Since small sized city blocks let intersections of streets, the chance of getting into interaction and contact between people increases. For a better accessibility, the continuous flow of social and economic activity through streets is satisfied (Jacobs, 1961: 179). In this respects, city blocks of small size can be effective elements to satisfy diversity in connection with accessibility.

Mixture of building types, ages and sizes: Buildings that house different ages and conditions what Jacobs calls a 'close-grain' are important for the urban activity in public places. For Jacobs, there should be quite a high proportion of old and new buildings because of their importance to the economy of the urban place. If cities consisted of only new buildings, the enterprises that can exist there would automatically be limited (Jacobs, 1961: 187). Only the enterprises, which can support the high costs of these new constructions, exist there. Therefore, the mixture of age of buildings in an urban space means also the mixture of diverse commercial activities.

Intensity: The last condition that generates activity is the sufficiently dense concentration of people using an urban place for a range or reasons that she calls as intensity (Jacobs, 1961: 200).

In *"The Life Between Buildings"*, J. Gehl (1996:11) concentrates on the relationship between activities in urban space and the built environment. He sets out three types of outdoor activities, which are influenced by physical conditions. These are *necessary, optional* and *social activities* (Gehl, 1996: 11).

Necessary activities include compulsory activities such as; going to school or to work, shopping, waiting for bus; i.e., everyday activities. These activities take place in nearly all exterior environments (Gehl, 1996: 11).

Optional activities take place only when exterior physical conditions are convenient (Gehl, 1996: 11).

Social activities depend on the opportunity to get into social interaction (Gehl, 1996: 11). These activities are related with other activities in urban spaces (Gehl, 1996: 14). To see, hear and meet each other is a form of social activity. The opportunity to see, hear and meet others is one of the most important attractions in urban public spaces (Gehl, 1996: 15).

Gehl (1996: 13) examines the relationship between outdoor activities and the quality of outdoor spaces as follows:

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

J.Gehl searches urban conditions and properties of open spaces in terms of how they interact with activity patterns of people. He (1996: 82) proposes a set of planning principles, i.e. *assembling-dispersing, integrating-segregating, inviting-repelling* and *opening up-closing in*. For Gehl (1996: 83, 103), "if activities and people are assembled, it is possible for individual elements to stimulate one another" and in the same way, "integration of various activities and functions in and around public spaces allows people to get involved to function together". In fact, segregation of high-speed traffic from pedestrian

routes is required for the safe environment for people in urban space. Besides that, public spaces can be inviting and easily accessible or repelling, due to their boundary characteristics between public and private activities (Gehl, 1996: 115). A smooth transition from private to public spaces becomes an invitation to participation and encourages people getting into contact with other people. In this context, being open up to the “contact through experience between what is taking place in the public environment and what is taking place in the adjacent environment” (Gehl, 1996: 123) brings the common interaction and knowing much about the environment and activity.

It is important that at least a proportion of activity in an area should occur in the streets, squares and spaces in the city - "*the public realm*" (Montgomery, 2003: 10). It is the public realm and associated semi-public spaces that provide the terrain for social interaction and a significant part of an area's transaction base (the market square, the street vendor, the shop frontage, the sidewalk café) (Montgomery, 2003: 10). It is activities such as these and the all-important activities of promenading and people watching, which provide the dynamic quality of successful urban places and cultural quarters in particular (Montgomery, 2003: 10). In fact, the public realm in a city performs many functions, not only as meeting places but also in helping to define the built environment, providing spaces for local traditions and customs such as festivals and carnivals, and representing meaning and identity (Montgomery, 2003: 10).

According to Gehl (1996 cited in Montgomery, 2003: 10) the public realm in towns and cities performs a number of 'functions':

- As an integral part of the built form or townscape.
- As neutral territory where everyone has a right to gather;
- Where historical events occurred and collective memory resides;
- As places where public forms of social life can occur.

As mentioned before, public spaces are the connector between activities and buildings. They form the solid and void relations in cities. Therefore, they are

important part of the cities. With the feature of “open to all” or as “neutral territory" public spaces bring together different kind of people. They are the places where people meet others. People experience it both individually and collectively which provides shared experience such as rituals, events etc. they also places that include diversity of activities and people and provide social life.

Consequently, the human activities within public realm, one of the components of urban place, can provide a place with a vital life. Activities give a particular atmosphere to urban place thus might give an identity to that place. A vital urban life may become one of the determinants for identity of a place that increases the sense of place. Sharing common experiences within a variety of activities can create the sense of belonging to a place, thus public realm may become the main attraction for the city life. In this context, it can be mentioned that the vitality and diversity of activities defining the atmosphere of the urban place affects the concentration of people and activities, also much time spent on the area and may increase people’s self-identification within the life of urban place.

Urban places play a crucial role for sustaining the social bounds and unity between inhabitants as being the arena of public life. In order to constitute successful urban places, an active public realm is needed which is supported by a network of spaces where meeting, interaction, movement and exchange are possible (Montgomery, 1998: 100). The mutual relations of form, image and activity with each other constitute public experience in urban space. Therefore, it is necessary that built from, activity and image complete each other in order to achieve liveable, vivid, imageable, identifiable hence successful urban places that satisfy the needs of citizens, their social interaction and that can support an active public life. Therefore, the key point is the interrelation of physical and spatial forms easily imageable and identifiable as distinct places with a variety of activities.

CHAPTER 3

FORMATION AND TRANSFORMATION OF THE EMİNÖNÜ SQUARE BEFORE THE REPUBLICAN ERA

3.1. INTRODUCTION

Eminönü has been a gate *par-excellence* of the historical city of Istanbul, a primary node of urban transportation where the intra urban roads, maritime transportations, railway transportations intersect. It has been the entrance to the central business district of Istanbul and a node of activities throughout the history. In this part of the thesis, the changes in Eminönü and its surroundings will be analysed from the Byzantine period to the Republican era. This period shows both the formation stages of Eminönü Square in Istanbul as an important urban public space and shows the effects of "piecemeal" modernization of the 19th century on the transformation of the Square.

In the first part of this chapter, Istanbul, with special focus on Eminönü and its surrounding area, will be examined first, from the Byzantine era to 17th century. The objective of this historical review is to understand the general structure of the city and the urban fabric in Eminönü. The historical review aims to bring out the values, structures and identities between Eminönü and other part of city in history. The second part explores the construction of Yeni Cami (the New Mosque), which brought a new urban fabric and new activities and relations to Eminönü in the 17th century. The demolition of the old city walls and the gates of the exterior courtyard of Yeni Cami will be studied. The exterior courtyard of Yeni Cami, i.e. the *Harim*, constitutes a significant part of the Ottoman mosque architecture, reveals the interventions that took place

in the beginning of the 19th century. The third part explores the effects of Galata Bridges, the new transportation systems, the big fires, the Ottoman modernization projects, the new administrative and urban politic systems in the 19th century until the Republican era.

3.2. THE CITY AND EMİNÖNÜ: IN THE BYZANTINE AND THE OTTOMAN PERIODS

Eminönü is the name of the district in Istanbul that is situated on the waterfront, on the southwest of Haliç (the Golden Horn) where it runs into the Bosporus. The maritime customs, known as *gümrük emini*, were located at what is now known as Eminönü (Kuban, 1996b: 23).

Eminönü's historical past goes back to the first construction of Istanbul. The shores of the Golden Horn were suitable for human habitation and were occupied by settlements dating back as far as the Palaeolithic age (Kuban, 1996b: 10). Besides, the geographical position of the Golden Horn was convenient for defending the city. It was also an important point on the trade road. Thus, it became a suitable settlement area for various colonies throughout the history.

3.2.1. THE BYZANTINE PERIOD

It will be helpful to mention about the general structure of Istanbul in the Byzantine period for understanding the importance of strategic location of the Eminönü district in the city. In the Byzantine period, administrative, entertainment and commercial centre focused around the Hippodrome –i.e. the centre of Sultanahmet and Çarşıkapı (Kuban, 1996b: 11). The inhabitants of the city were concentrated around Saraçhane because of the commercial districts located around the Golden Horn. The Golden Horn and the harbour square located at Eminönü in particular was a centre that was organized according to different facilities. Eminönü was not only the centre of trade, transportation and storage in this period but also the administrative and military centre (Kuban, 1996b: 11).

According to Kuban (1996 b) the growth of the city took place in four stages in the Byzantine Period (Figure 3.1). The expansion of the city walls towards the western side is observed in every stage. While the principal monuments and main arteries shaped the inner part of the settlement, city walls determined the macro form of the city in these periods (Kuban, 1996b: 11). The Neorion Harbour, today's *Bahçekapı* district, and its church became one of the focal points of the city in Constantine period. The area has still been keeping this feature by acting as a transition point between the two important commercial parts of Istanbul. The walls of Theodosius determined the boundary and the general structure of Istanbul until 20th century. Monuments around the main artery-*Mese*- constituted the 'backbone' of the city (Kuban, 1996b: 15). The area between the main road and harbour has been the commercial centre of the city throughout its history.

In the Byzantine period, the gates and jetties were located in Eminönü district (Figure 3.2, 3.3). These gates and jetties are important urban elements, which determine the relation between the commercial activities, the urban fabric and city frontier. Today's Eminönü comprises the shore and the harbour district between the "Neorion" Gate (*Bahçekapı*-formerly *Haseki*) and the "Porta Drungari" Gate (*Odunkapısı*) in the Byzantine period (Kuban, 1993a: 158). Eminönü is named as "Oraia Pile" (*Yahudi Kapısı, Çıfıt Kapısı*) because of the Jewish community, which lived there from the Byzantine period until the construction of Yeni Cami (Kuban, 1993a: 158). In the time of Mehmet II, there was a neighbourhood, whose name was *Orya Kapısı* (Kuban, 1993a: 158). The name of the district remained the same as in the Byzantine period.

Towards the west, the "Perama" Gate (*Balıkpazarı Kapısı*-formerly *Tahmis*) was located on the Unkapanı side of Galata Bridge. "Perama" meaning boat (*kayık*) in Greek (Kuban, 1993a: 158). The crossing between Galata and Istanbul were done through the "Perama" quay in Balıkpazarı (Ülgen, 1974: 393). In the period after the conquest, it also worked as a quay in the crossing between Eminönü and Karaköy (Kuban, 1993a: 159). The name of

"Balıkpazarı" is given because of the fish market, which has been in the same place from the Byzantine period until today.

Figure 3.1: The growth of the city in the Byzantine period (Kuban, 1996a: 104). The expansion of the city walls determined the each growing stages of the City in the Byzantine period.

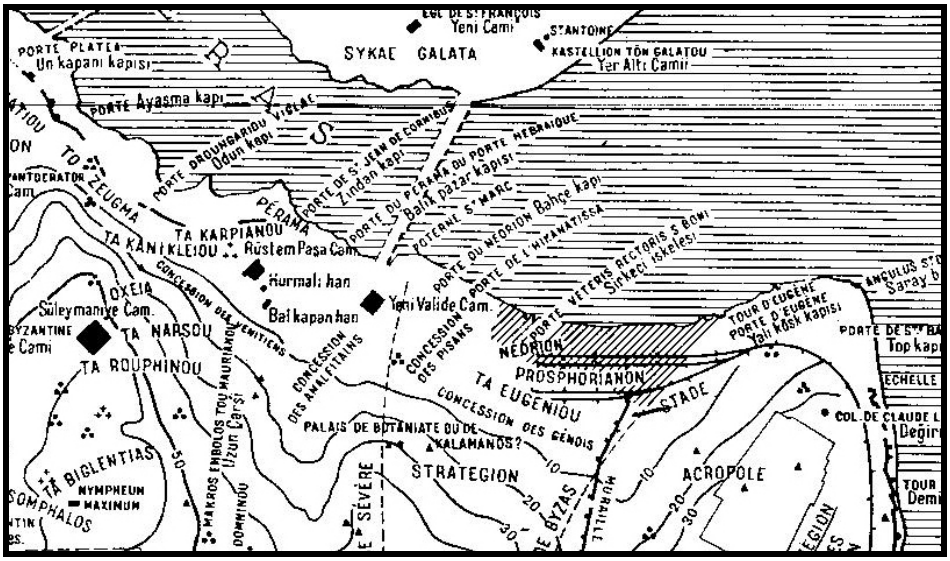

Figure 3.2: The gates and jetties in the Eminönü district in the Byzantine period (Francis, 1995). They are important urban elements, which determine the relation between the commercial activities, the urban fabric and city frontier.

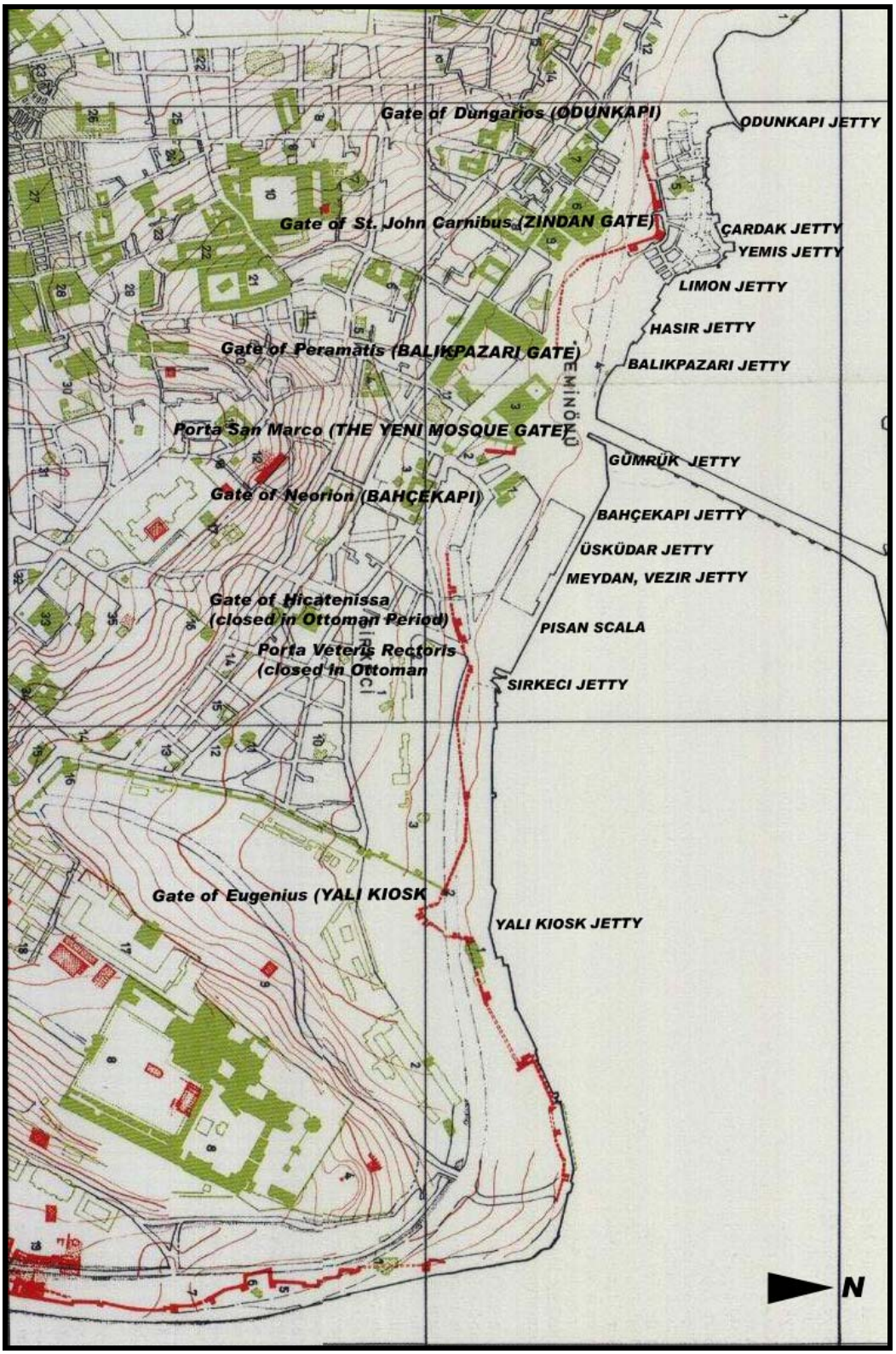

Figure 3.3: The gates and jetties in Eminönü, on the base map by Müller-Wiener (edited by author) (Atatürk Library, Map Archives, Istanbul, 2004).

In the Ottoman period, the quay of the Balıkpazarı was named as "*Yemiş İskelesi*" (Yemiş Jetty). "*Hasır İskelesi*" (Hasır Jetty) was on the east of the Yemiş İskelesi. The next gate was "*Zindan Kapı*" (Zindan Gate). There was a sacred fountain (*ayazma*) by *Zindan Kapı* (Kuban, 1993a: 159). In the period of Mehmet II, there was a neighbourhood, whose name was "Vasiliko Gate" (Kuban, 1993a: 159). The last boundary of Eminönü in the Byzantine period was "Porta Drungari" (Odun Kapısı-Odun Gate) (Kuban, 1993a: 159). The road that started from Odunkapı through the Sirkeci was named as "Via Drungariu" (Kuban, 1993a: 159). Timber was unloaded on this jetty. This tradition also continued in the Ottoman period. Started from the 10th century, various colonies settled in Eminönü district. Physical remains of these colonies could not reach up today (Kuban, 1993a: 159).

3.2.2. THE OTTOMAN PERIOD

The general structure of the city in the Byzantine period was built around the Roman roads. After the conquest, the Ottomans brought a new structure to the city. The religious complexes, '*Külliye*', started to determine the structure of the city (Figure 3.4, 3.5). Among these complexes, the Fatih Külliyesi and its mosque occupies a very special place being the first of a series of great complexes (Kuban, 1996b: 18). Yeni Cami is also one of the examples of these. New districts were developed around these complexes in the Ottoman period (Figure 3.6).

The commercial areas also developed during the rule of Mehmet II. However, according to Kuban (1996b: 19), "there was no change in the position of the main harbour; the business centre of Constantinople was to be found in the same location". The demographic development in the city necessitated the enlargement of *Kapalı Çarşı* (the Grand Bazaar). New khans and *bedestens* were built around the *Kapalı Çarşı* (Figure 3.7). The main business centre of the city was located in this market area. In the reign of Mehmet II, the shops stretched down from the market area to the shores of Golden Horn where the great wharves and warehouses were located (Kuban, 1996b: 19). *Arastas* composed the main business centre.

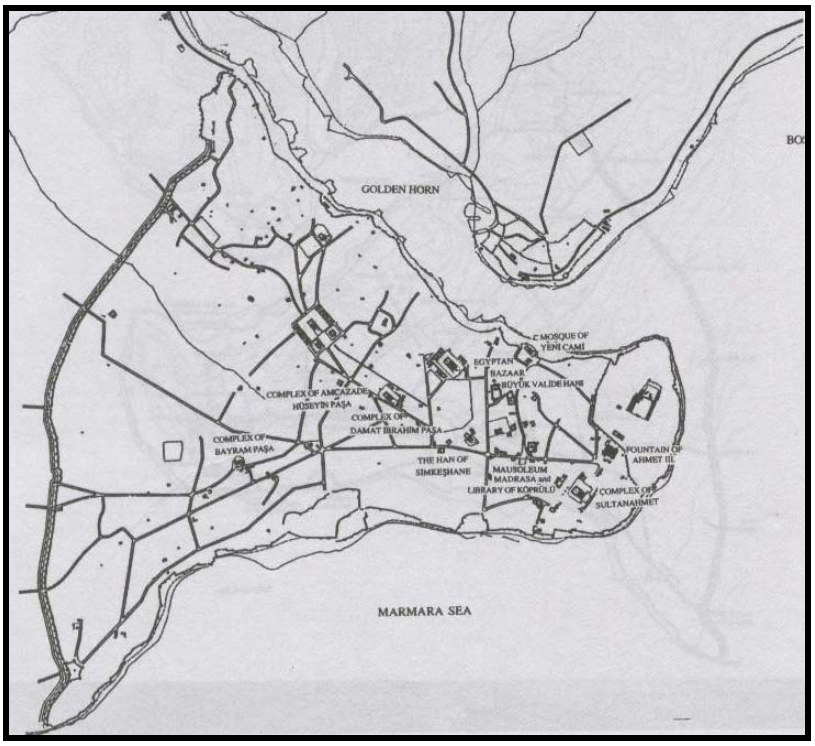

Figure 3.4: The religious complexes in Istanbul, 15th to 17th centuries (Kuban, 1996a: 292).

Figure 3.5: The religious complexes in Istanbul, 18th century (Kuban, 1996a: 347).

The trade was carried by the sea. The wharves on the shore of the Golden Horn were specialized according to the types of goods. Some of them had kept their place since the Byzantine period. For example, Mısır Çarşısı (the Egypt Bazaar) was the area where the ships that came from Egypt, unloaded their goods. As also seen in the Byzantine period, Unkapanı, Odunpazarı and Balıkpazarı were the areas where warehouses were concentrated (Kuban, 1996b: 24). The economic life in Istanbul was mainly based on import trade which was primarily in the hands of non-Muslims (Kuban, 1996b: 26). Throughout the history, the location of the business quarters was closely linked to the port. As the population of the city increased different commercial arteries and secondary business centres appeared. Most of the commercial khans were built during this period (Kuban, 1996b: 27). The construction of khans also affected the fabric of streets, which were specializing according to the type of goods. The Balkapanı Han, the Çukur Han, the Papazoğlu Han, the Yeni Han, the Kiraz Han, the Yeni Valide Han and the Haraççı Han can be counted as examples of the khans in Eminönü.

Kuban (1996b: 20) describes the growth of the city in the Ottoman Period, as:

> "...*It* was the same as general functional fabric of Constantinople and the lines of its topography. The business centres, dependent as they were on the proximity of a harbour, remained in the same locations while the increased importance assumed by the Edirnekapı axis by the construction of the Fatih complex resulted in the location of the Turkish settlements along the slopes of the Golden Horn parallel to this axis".

In the 16th century, many mosque complexes were added to the silhouette of the city on the slopes of Haliç. The city spread to the northern shore of the Haliç (Kuban, 1996b: 21). Commercial activities or the main business centre was still situated between the Golden Horn and Divanyolu. The wharves and warehouses were on the shores of Haliç between Sirkeci and Unkapanı (Kuban, 1996b: 23).

Eleven quarters constituted the Eminönü district, in the reign of Mehmet II. These were organized according to the gates and *mescids* (small mosques)

(Kuban, 1996b: 21). Timurtaş Mescid and Arpacılar Mescid can be given as examples in Eminönü. The Gümrükönü Mescid, outside the city walls, was built for sailors and passengers in this period. Later, in the place of this *mescid* the *Selanik Bonmarşesi* was built, which was demolished in 1935 (Kuban, 1993a: 161).

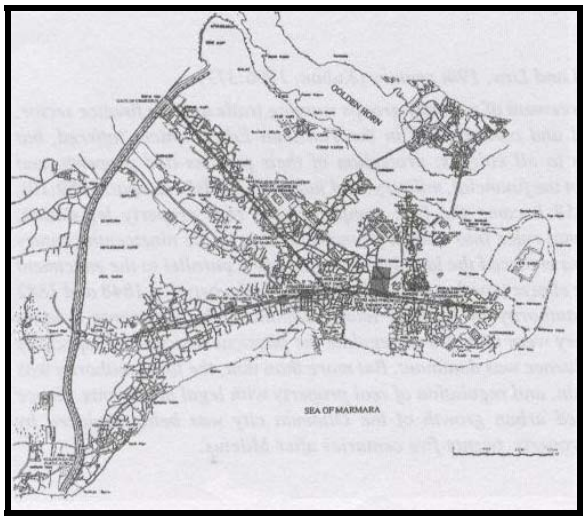

Figure 3.6: The new Ottoman urban structure that covered the linear Roman arterials, 18th century (Kuban, 1996a: 385).

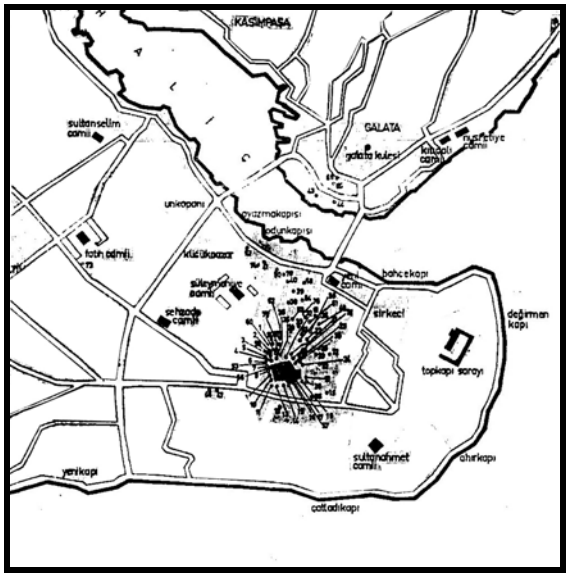

Figure 3.7: The development of the Kapalı Çarşı. Khans and *bedestens* were built around it and stretched down towards Haliç (Güran, 1978: 29).

3.3. YENI CAMI (the NEW MOSQUE) AND ITS SURROUNDINGS

The Yeni Valide Cami, widely known as the Yeni Cami, is located next to the harbour on the southern bank of the Golden Horn. In the beginning, the mosque was named as 'Adliye', 'Zulmiye' and 'Valide' Mosque (Erseyrek, 1962: 6). It was Safiye Sultan, mother of Mehmed III (1595-1603), who entrusted Davud Ağa, Architect-in Chief to the Sultan, with the building of a great mosque at the head of one of Istanbul's most important quays in Bahçekapı district in 1597 (Ülgen, 1974: 388). In this period, Bahçekapı and its surroundings were a commercial district and a dense Jewish neighbourhood (Ülgen, 1974: 388). Jewish communities were living along the shores of the Golden Horn from Sirkeci inwards. Kuban (1996b: 26) notes that "seventeen Jewish localities are recorded in the *vakfiye* of the Conqueror". With the construction of the Yeni Cami, the Jewish communities were forced to migrate to Balat and Hasköy (Kuban, 1996b: 26).

There were a church and a synagogue in the Mosque's construction area (Ülgen, 1974: 388). For the construction of Yeni Cami, they were demolished. The remains of the synagogue can be seen in the map of 1875 (Figure 3.8). After the death of the architect, the construction was continued by Dalgıç Ahmed Aga who assumed the responsibility for the realization of the project (Ülgen, 1974: 389). Considerable technical difficulties were encountered in the foundation work because the site was next to the sea. Mehmed III died in 1603, when the walls were beginning to take shape (Ülgen, 1974: 389). Safiye Sultan was forced to retire to the Old Palace and died shortly afterwards, in 1603 (Ülgen, 1974: 389). The building that had reached the level of the ground floor, the construction was interrupted. It was half a century later that Valide Hatice Turhan Sultan, mother of Mehmed IV, took over the construction of the mosque. The mosque stands in a long tradition of architectural patronage by Ottoman queen mothers ('valide's) (Ülgen, 1974: 389). Architect Mustafa Aga completed the mosque between 1661 and 1663 (Ülgen, 1974: 389). It was opened in 1663.

The Yeni Cami complex, or *'külliye'*, is composed of the mosque, a sultan's kiosk (hünkar mahfili), a room for the Kur'an readers (darülkurra), the tomb of Turhan Sultan (türbe), the Kur'an school (sibyan mektebi), public fountains (sebil), fountains (çesme), stores (dükkan) and a closed, 'L'-shaped spice market known as Mısır Çarsısı (interviewed with Eyice, 2004) (Figure 3.9). Apart from these annex buildings, there was a public bath (Haseki hamamı), which gave the district its name, Sultanhamamı, backside of the Iş Bankası today (interviewed with Eyice, 2004). The Haseki bath was demolished in 1904, while the restoration of the Haseki Gate of Mısır Çarşısı (Kuban, 1993). A room for the timekeeper of the mosque (muvakkithane) was added in the nineteenth century. Its place was changed for the traffic road in Republican period works (interviewed with Eyice, 2004).

The mosque is set parallel to the shoreline, on the northwest-southeast axis. The 'L'-shaped market, adjoined by a cemetery and a tomb to the east, defines a large courtyard on the west. Walls separated the mosque from the lower docklands on the seaside, until their demolition in the nineteenth century. They joined the market at either end to enclose an irregularly shaped courtyard. The mosque and its courtyard were elevated above sea level on a substructure of wooden piles (interviewed with Eyice, 2004). In the place of Ottoman Bank, there were a wall and a courtyard gate (Figure 3.8). In addition, in the place of İş Bankası, the darülkurra was located. The sibyan mektebi was constructed on Darülkurra's west gate. The gate and school were demolished before the buried of Murat V in 1904 (Kuban, 1993a: 162).

The *Harim* of the Mosque was entered from five gates and gave access to all the subsidiary structures with the exception of the market, which was primarily entered from the street (Figure 3.9). On the old city walls that defined the perimeter of the outer courtyard of the Mosque (*harim*), there were three gates, which existed before the construction of the Mosque. The gates were *Bahçekapı* (Porto Neorion) on the east side of the Mosque, *Çıfıtkapısı* (Porta Ebraika) on the north side of the Mosque, *Balıkpazarı* (Porta Peramatis) near the gate of Mısır Çarşısı (Ülgen, 1974:392).

Figure 3.8: The remains of Synagogue (in the red mark) in the map of 1875 (Kuban, 1993a: 160).

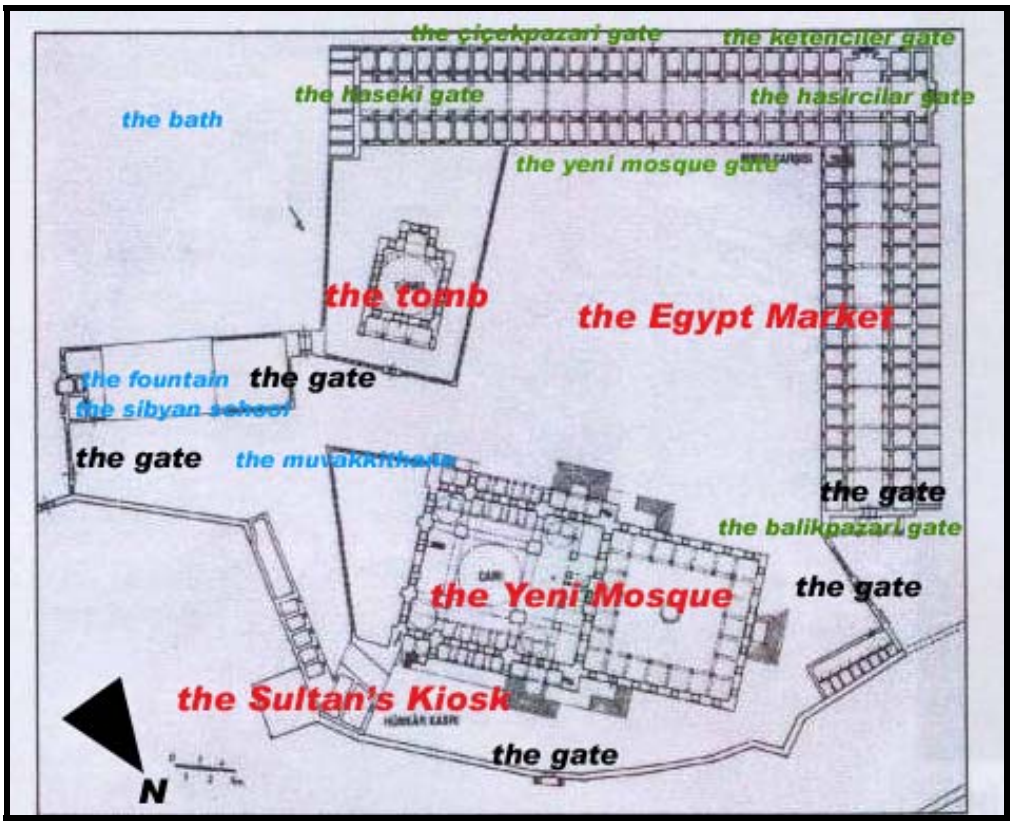

Figure 3.9: The plan of the Yeni Cami and the *Harim* (Ülgen, 1974).

N. Erkal (2001: 218-219) mentions about the gates in Eminönü district in his thesis work. These gates were parts of both the *harim* of the Mosque and the Byzantium walls. The changes on gates will be studied with reference to Erkal's study. Bahçekapı disappeared totally by the earthquake of 1867. There was a passage in the place of the gate. It was communication point between Eminönü Square and the inner city. Physical remains of the walls between Bahçekapı and Yeni Cami Gate can be seen at some parts of the district today. The Arpacılar Mescid is an important historical monument in this district. The tower, on which Yeni Cami Sultan Kiosk is placed, can be survived until today. The Yeni Cami Gate was demolished in 1870s. With the construction of the Galata Bridge in 1845 and the demolition of the outer courtyard walls, a larger square emerged at the waterfront with commercial buildings built along the mosque. The buildings on both sides of the Yeni Cami Gate to Balıkpazarı were demolished in the Republican period. A larger street came into existence in the place of Balıkpazarı Gate. However, Mısır Çarşısı and waterfront relation was the same until 1930s.

S. Ülgen mentions about Grelot's engraving which is one of the first drawings showing Yeni Cami (Figure 3.10). The exterior courtyard walls of Yeni Cami and Mısır Çarşısı are seen in the Grelot's engraving. Loos has recorded the state of Yeni Cami in 1712. The gates and the stairs preserved their form (Figure 3.11). The engraving of W. H. Bartlett shows that the five exterior courtyard gates of the mosque were still standing at the beginning of the 19th century (Figure 3.12, 3.13). The *harim* of the mosque can be seen in different engravings by the 19th century (Figure 3.14, 3.15, 3.16, 3.17). After the second half of the 19th century, commercial stores increased and invaded the exterior courtyard. As a result, the exterior courtyard of the mosque was demolished (Ülgen, 1974: 390). The mosque was started to be surrounded by several buildings (Figure 3.18). The congested fabric of wooden buildings in Eminönü can be seen in the pictures of Bartlett and Lewis from the early 19th century (Figure 3.13, 3.18). The water addiction map of 1815 (Su Yolu Haritası) (Figure 3.19) that incorporates Eminönü and Balıkpazarı, shows the stairs that descend into the Custom Square and its pier (Eldem, 1979: 44).

The mosque is situated along the shore, which stretches between the outer garden and Balıkpazarı gate. However, the shore is crowded by storehouses, shops and custom buildings occupying it. When compared the water addiction map of 1800s (Figure 3.19) with the air photograph of 1930s (Figure 3.20), there is not a significant change in the urban character of the area. There are Vezir and Bahçekapı pier in front of the mosque. The Custom Square, Bahçekapı and Balıkpazarı gates extend along the shore. The gate at west opens in the direction of Hocapaşa. To the west various shops for fishes, grains fruits and lemons extend up to the Yemiş Pier. Zindankapı is located at this point.

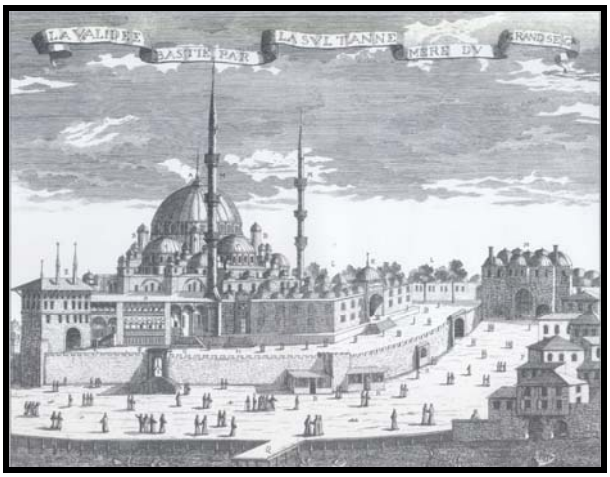

Figure 3.10: Yeni Cami and its courtyard in the 17th century (Gravürlerle Türkiye, İstanbul 2, 2002. *Guillaume Joseph Grelot, Relation nouvelle d'un voyage de Constantinople, Paris, 1680*)

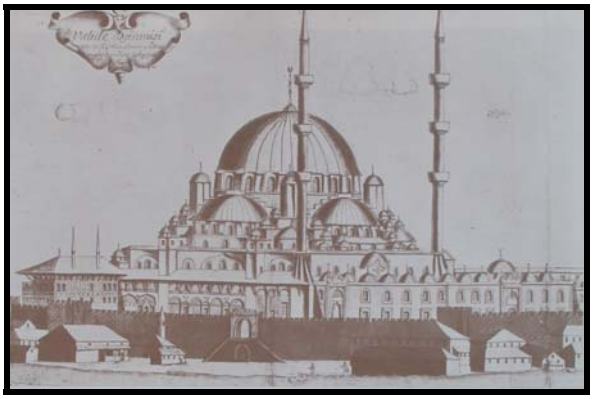

Figure 3.11: Yeni Cami and its courtyard in the 18th century (Eldem, 1979: 46, *Loos, 1712*)

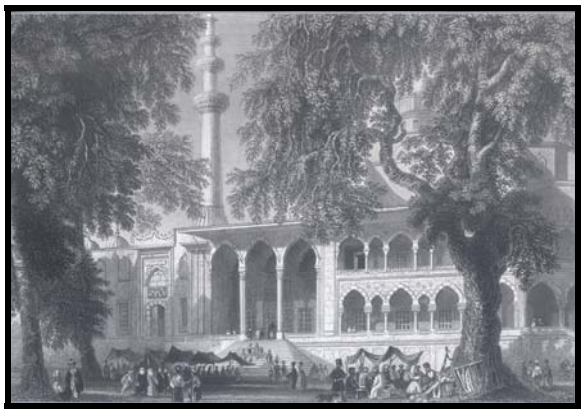

Figure 3.12: The seaside of the courtyard of Yeni Cami. (Gravürlerle Türkiye, İstanbul 2, 2002. *William Henry Bartlett & J.C. Varrall Julia Pardoe (edt), The beauties of the Bosporus, London, 1835*)

Figure 3.13: Yeni Cami seen from Haliç. (Gravürlerle Türkiye, İstanbul 2, 2002. *William Henry Bartlett & J.C. Varrall Julia Pardoe (edt), The beauties of the Bosporus, London, 1835*)

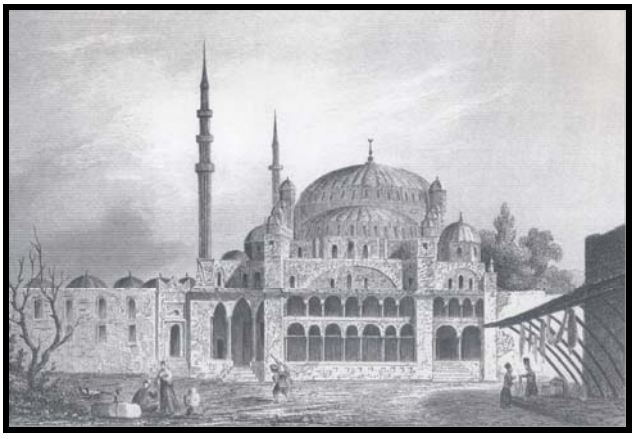

Figure 3.14: The backyard of Yeni Cami and the tomb. (Gravürlerle Türkiye, İstanbul 2, 2002. *J Arnout José Maria Jouannin-Jules Van, Turquie, Paris, 1840*)

Figure 3.15: The backyard of Yeni Cami and the muvakkithane. (Gravürlerle Türkiye, İstanbul 2, 2002. *Eugéne Flandin, L'Orient Paris, 1853*)

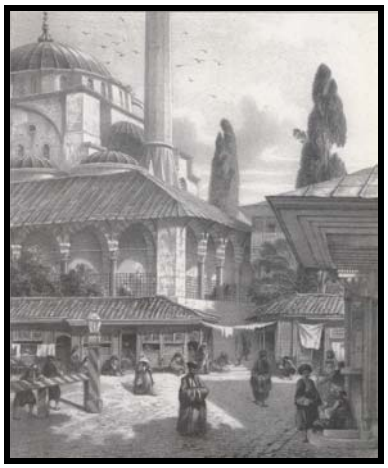

Figure 3.16: The backyard of Yeni Cami and the fountain. (Gravürlerle Türkiye, İstanbul 2, 2002. *Eugéne Flandin, L'Orient Paris, 1853*)

Figure 3.17: The backyard of Yeni Cami, the Sibyan School, the *muvakkithane* and the entrance of the Sultan Kiosk. (Gravürlerle Türkiye, İstanbul 2, 2002. *Aderoy, L'Illustration: Journal universel, Paris, 1865*)

Figure 3.18: Yeni Cami seen from Haliç (Gravürlerle Türkiye, İstanbul 1, 2002. *J.F. Lewis, Lewis's illustration of Constantinople,London, 1838*)

The Sultan's kiosk is elevated above a vaulted passageway at the eastern corner of the mosque, resting on a tower that was once part of the city walls (Figure 3.21). It is a rectangular apartment composed of a wide corridor. A long ramp, attached to the back of the kiosk, allowed the sultan to accede on his horse and a short passage at the end of the corridor lead into the sultan's lodge inside the mosque (Figure 3.22). This structure is supported by a triangular arch and vault.

The tomb is located inside the walled-in cemetery that adjoins Mısır Çarşısı to the south of the mosque (Figure 3.23). In the tomb, lie the bodies of its founder, and a number of princes and princesses of the Ottoman dynasty, so many, in fact, that "there is not an inch of space left anywhere" (interviewed with Eyice, 2004). Two smaller tombs, named Havatin and Cedid Havatin, were added to the northwest of the tomb in the nineteenth century (Önkal, 1999: 62). A small library, built by Ahmed I, adjoins the portico (Önkal, 1999: 62).

Mısır Çarşısı is part of the complex of Yeni Cami, construction of which began during the reign of Mehmed III and was completed in 1663 by the architect Mustafa Ağa. It was therefore originally known as the Yeni Çarşı or Valide Çarşı (Adım Adım İstanbul, 2003: 39).

Figure 3.19: The water addiction map of 1815 (Eldem, 1979: 44).

Figure 3.20: The air-photograph of 1930s (Eldem, 1979: 445).

At the corner where the two arms of the building meet, there is a prayer dome and a place from which the call to prayer was chanted (Figure 3.24). Its 'L' shape is typical of the *arasta* type of bazaar consisting of rows of shops devoted to trade. Mısır Çarşısı has six gates, which are the main Eminönü Gate, Balıkpazarı Gate, Ketenciler Gate, Çiçekpazarı Gate, Yeni Cami Gate and Bahçe Gate (Figure 3.9).

The Directorate of Religious Endowments (Vakıflar Genel Müdürlüğü) restored the mosque first in 1936 by collaboration of Ali Saim Ülgen and the Fine Arts Academy (interviewed with Karakaya, 2004). Later, Yeni Cami was restored in 1957, the Turhan Sultan tomb in 1959 and the fountain in 1960 by Cahide Tamer from the same directorate (interviewed with Karakaya, 2004).

Figure 3.21: The Sultan's kiosk resting on a tower that was once part of the city walls. It shows the permanency of the public monuments in urban space (Çin, 20.09.2004)

Figure 3.22: A long ramp, attached to the back of the kiosk, allowed the sultan to accede on his horse and a short passage at the end of the corridor lead into the sultan's lodge inside the mosque (Çin, 20.09.2004)

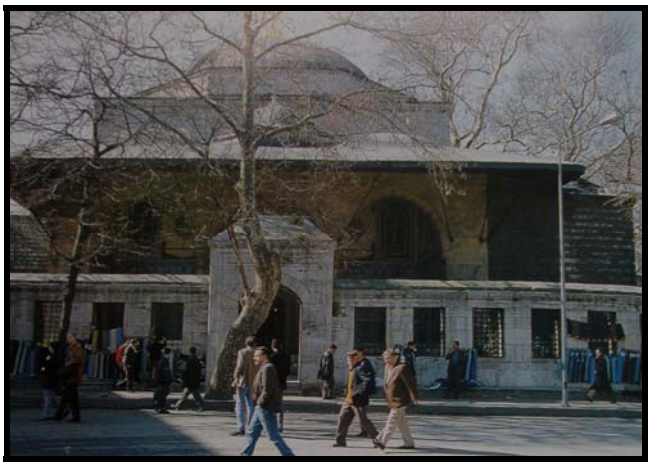

Figure 3.23: The tomb of Hatice Turhan Sultan (Adım Adım İstanbul, 2003: 36)

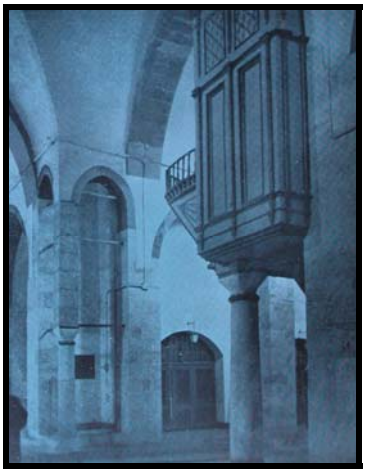

Figure 3.24: The prayer dome inside Mısır Çarşısı (Güzelleşen İstanbul, 1943: 27)

3.4. 19TH CENTURY: THE URBAN REFORMS, THE BIG FIRES, CHANGING TRANSPORTATION SYSTEMS AND LARGE-SCALE URBAN PROJECTS

The 19th century is generally accepted as a period of modernisation of Istanbul in the urban history writing. The administrative and urban reforms, the big fires, changing transportation systems and large-scale urban projects for Istanbul are regarded as the main issues to understand the re-shaping of Istanbul. These will be studied with regard to their effect on the Eminönü Square.

19th century was the era when a series of urban reforms were put into implementation in the Ottoman Empire. Economic and administrative reforms were realized by the beginning of 1820s. The Ottoman State tried to put various social and institutional reforms inspired from the West (Çelik, 1998). For İ.Ortaylı (1995:9 cited in Erkal, 2001: 210), the modernity project had started in the late 18th century as a "piecemeal" modernity project in the Ottoman State. Yet, Z. Çelik, in her book *The Remaking of Istanbul*, states that "the modern era had not yet left its mark on the Ottoman Capital in the early decades of the nineteenth century" (Çelik, 1998:3).

According to Çelik, 1838 Trade Treaty and 1908 Jeune-Turc Revolution were the turning points of the Ottoman history (Çelik, 1998:27). With the Trade Treaty, similar privileges of trade and tax exemptions were given to foreign traders (Erkal, 2001: 210). Foreign investment entered in the Ottoman territory by the declaration of Ottoman Empire as a European state after the Paris Congress in 1856 (Erkal, 2001: 211).

According to Ergin, the first urban regularization projects were realized in the time of Selim III (Ergin, 1938: 27). The Selimiye district and the Barracks of Selimiye were realized in the time of Selim III (Ergin, 1938: 27). The second development movements were seen in the time of Mahmut II (Ergin, 1938: 28). He invited Von Moltke from Germany. Later, Moltke prepared the map and the plan of Istanbul (Ergin, 1938: 28). The plan was not realized.

The Ottoman administrative reforms started with the abolition of the Janissary Corps in 1826 (Ergin, 1938:36). By the *Tanzimat* Edict, the structure of the Ottoman state was started to modernize. Planning and administrative reforms re-shaped the structure of Istanbul. Before getting into the planning reforms, it can be instructive to summarize the hallmarks of Ottoman reforms and the changes in urban administration specifically.

3.4.1. URBAN REFORMS AND FIRES

The *Tanzimat* Edict brings along the necessity of new urban institutions. The administrative system was revised depending on the model of European

institutions. The municipal services had been left to religious and ethnic guilds before reformations (Çelik, 1998:36). There was a hierarchic administrative system, which was controlled by the Grand Vizier. The real authority on the urban administrative system belonged to the *Kadı*. Kadı's authority was reduced after the *Tanzimat* Edict and replaced with European institutions (Çelik, 1998:36-37). New municipal institutions like *Ebniye-i Hassa Müdürlüğü* (Imperial Building Office) in 1831, *Nafia Nezareti* (Ministry of Public Works) in 1849, *Şehremaneti* (municipal administration) in 1855, *Intizam-ı Şehir Komisyonu* ('the City Order Commission' or 'commission municipals') in 1855 formed in the 19th century. Meanwhile, the city was divided districts with the various *nizamnames* in 1868, 1877 and 1878.

Besides the municipal laws, property relations and laws were also changed in 1858 with *Maruzat-ı Ebussud* (Land Law). According to Günay (1999:235), "it was the first comprehensive real property legislation, converting customary or traditional rules into a legal framework". In the Classical Ottoman system, land theoretically belonged to God. Community pattern was seen rather than private property. In 1858, the private property started to change the physical structure of the city (Figure 3.25). Günay states about the appropriation of the Land Law and the other legislations, which changed the physical structure of the city. He (1999:246) mentions:

> "It is in the nineteenth century that changing production relations enforced the land law in the country, parallel to the enactment of *ebniye* (buildings) and *turuk ve ebniye* (roads and buildings) legislation between 1848 and 1882 in the cities, and a municipal authority in Istanbul totally dominated by commerce holding minority groups. It is true that they were intended to regulate the physical structure of especially port towns where the western influence was dominant. But more than that, the local authority was given the power of eminent domain, and regulation of real property with legal documents. Hence the spontaneous possession based urban growth of the Ottoman city was being replaced by planned, ownership based real property."

Another effect of the *Tanzimat* Edict was seen in the regularization of the city fabric with the new urban planning reforms. According to Çelik, the planning reforms can be stated as three “imported custom” from the European system (Çelik, 1998:3). First are rules and regulations about urban planning problems. Second, new urban design criteria aimed to create road network, monumental squares, regular facades and monotonous urban fabric according to the new rules and regulations. Thirdly, new building types in the architecture (Çelik, 1998:3).

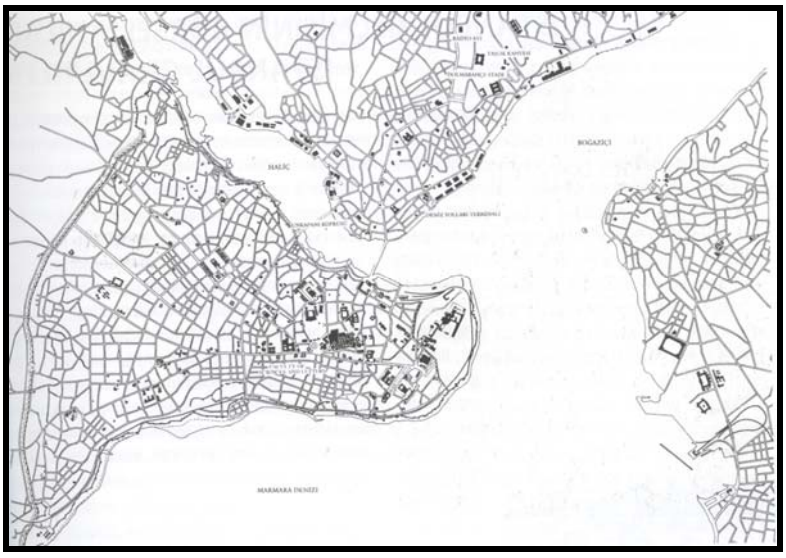

Figure 3.25: The regularized urban fabric, 19th century. (Kuban, 1996a: 377)

Figure 3.26: the fired area of the Hocapaşa Fire. (Çelik, 1998: 47)

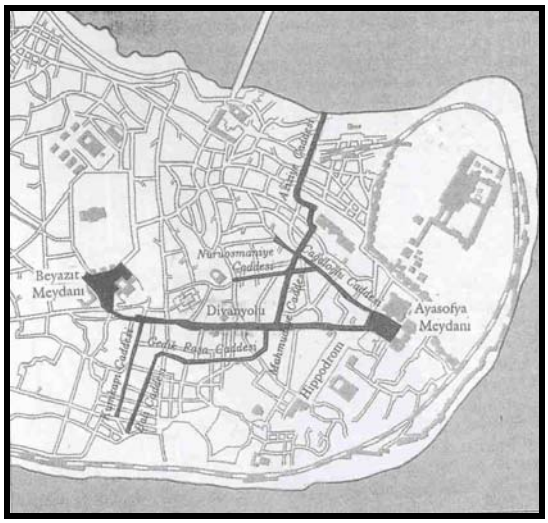

Figure 3.27: The regularized streets after the Hocapaşa Fire. (Çelik, 1998: 48)

In order to regularize the traditional street fabric and to create the principles about urban design of Istanbul, many legislations were enacted in the 19th century. Several foreign engineers and architects were commissioned to reorganize the street network and make the map of Istanbul. Although, these projects were not executed, they formed the basis of new legislations (Çelik, 1998:42).

Six legislations were enacted between 1848 and 1882 (Çelik, 1998: 41). *Ebniye Nizamnamesi* of 1848 (Building Legislation) categorized the city streets. Transportation comfort was the most important principle in the legislation. The importance and technological advantages of the masonry buildings were mentioned. *Sokaklara Dair Nizamname- İstimlak Nizamnamesi* of 1858 (Street Legislation) regulated plots according to European models (Yerasimos, 1996). *Turuk ve Ebniye Nizamnamesi* of 1863 (Street and Building Legislation) added two more categories to the streets (Çelik, 1998:42). It was the regulation that brought forth renovation of the city centre in the Historical Peninsula (Tapan, 1998: 76). It was the first time that the urban infrastructure was mentioned. It proposed orthogonal blocks. Expropriation rules were defined. A Government Edict of 1864 ordered the construction of buildings in masonry; only the non-wealthy citizens would be let to build wooden buildings (Çelik, 1998:43). *Istanbul ve Belde-i Selasede*

Yapılacak Ebniyenin Suret-i İnşaiyesine dair Nizamname of 1875 separated the city into two categories as main and side sectors. In main sectors, it was forbidden to constructs buildings in timber, while in side sectors timber construction was permitted with the construction of firewalls (Çelik, 1998:44). Eminönü Square was in the Sirkeci-Unkapanı section making part of the main sector. *Dersaadet Belediye Kanunu* of 1877 (Istanbul Municipal Law) separated the city into twenty districts. *Ebniye Kanunu* of 1882 (Building Legislation) states that when adjacent ten properties were diminished, it will be accepted as empty field and planned from start (Çelik, 1998: 43). This was specifically suitable for areas destroyed by fire. The expropriated area could not be more than a quarter of the former land. This quarter land was expropriated for free. The infrastructure costs were to be obtained from the landowner (Tapan, 1998: 77).

As conclusion, Çelik (1998:44) states, "the aim of the legislations ordered in the 19th century was to create a city with orthogonal streets and masonry buildings". In the Eminönü Square and surroundings, the outcomes of the legislations were seen as a change in the construction and style of buildings. Especially the buildings on the northern side of Yeni Cami reflected the new construction and style of buildings.

Besides *Tanzimat* reforms and regulations on urban planning and building codes, the big fires had also important effects, in the creation of a new urban fabric in the second half of the 19th century.

The fire of Aksaray in 1856, Hocapaşa fire of 1865 and Pera fire of 1870 were the most important fires, which provided the possibility to apply the new urban regulations (Çelik, 1998:45). Although the fire of Hocapaşa included the Eminönü district, the fire did not cause significant changes in the fabric of Eminönü Square (Figure 3.26).

Islahat-ı Turuk Komisyonu (Commission of Street Regularization) worked for the planning of the burnt area between 1865 and 1869. The commission regularized the enlargement of main streets (Figure 3.27) (Çelik, 1998: 46-47).

The fires played an important role in the widening of the streets in Istanbul. Ergin (1938: 45) states:

> "Wherever you see wide streets and a few storey new buildings,
> you can say that this is the fire district."

Besides the big fires and the projects of regularization, small-scale regularizations were applied in different parts of the city again after fires such as in Ayvansaray, Samatya, Beşiktaş and Pangaltı (Çelik, 1998: 55-60). The fire areas of the Historical peninsula is seen in the map of 'Istanbul Development and Construction Inc.' in 1920s (Figure 3.28). Opening up new arteries and cleaning up the coast on both sides of Haliç were the other regularizations in the city in the 19th century.

Figure 3.28: The areas destroyed by fires of the Historical peninsula, the map of 1920s. (Kayra, 1990: 156)

3.4.2. CHANGING TRANSPORTATION SYSTEMS AND THEIR EFFECT ON THE EMINÖNÜ SQUARE

3.4.2.1. The Maritime Transportation

The rowboats were used for transportation between the two custom zones on both sides of the harbour. The construction of Haliç Bridges in the 19th century affected the system of transportation on both two sides of the inlet. The bridges brought new relations and patterns to the city. With the opening of new arteries in the city; the vehicular traffic was directed at the points of bridgeheads. They also affected the inner fabric of the city. Commercial activities congested these points of interchange. Thus, the urban fabric where the bridges landed was differentiated from the other part of the shore of Haliç. The traffic increased at the point of bridgeheads. It caused transformation in the fabric of these areas.

The first Haliç Bridge was constructed between Unkapanı and Azapkapı in 1836 (Çelik, 1998: 72). It was known with the name of *"Hayratiye", "Cisr-i Atik", "Eski", "Azapkapısı", "Unkapanı", "Mahmudiye"* and *"Kasımpaşa"* (Evren, 1994:37). After 1838, Galata became a dense commercial centre (Çelik, 1998: 73). Thus, the new bridge –the first Galata Bridge- between Karaköy and Eminönü was constructed for fast and easy transportation between the two sides of Haliç (Çelik, 1998: 73).

3.4.2.1.1. The effect of Galata Bridges

In this part, the Galata Bridges, built in the late Ottoman period, will be mentioned with their effects on Eminönü square.

The first Galata Bridge was constructed by the elder children of Mahmud II, Sultan Abdulmecid and Bezmi Alem Valide Sultan in 1845 (Figure 3.29) (Evren, 1994: 63). The bridge was known as 'Cisr-i Cedit', 'the new bridge', 'the big bridge', 'the Valide Bridge' and 'the Yeni Cami Bridge' among the people (Evren, 1994:63). It was built as a wooden structure. Passage tolls were collected from the pedestrians and vehicles passing from the Bridge by

the *Müruriye* (passage toll) officials (Figure 3.30). *Müruriye* had continued to be collected until 1930 (Evren, 1994:71).

Figure 3.29: The first Galata Bridge. The only photograph that is known of the first Galata Bridge was taken by James Robertson (Evren, 1994: 62).

Figure 3.30: The Eminönü entrance of the 1876 Galata Bridge and the shed of the *Müruriye* officials in the right in 1900s. The white wearied men are the *müruriye* officials. The vitality of the Square can be observed from the photograph. The boats, the officials, the pedestrians are all constitute vivid life in the Square. (Evren, 1994: 77)

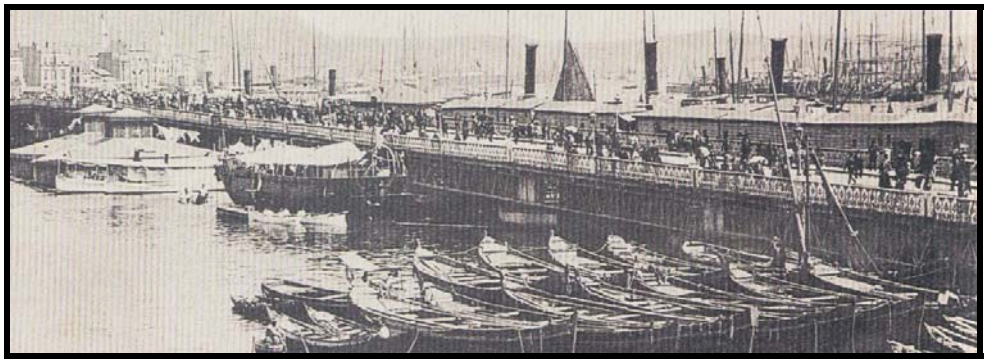

Figure 3.31: The Traveler Steamships seen one side of the 1876 Galata Bridge and boats seen on the other side. The place in the middle of the Bridge, which projected towards sea, is the sea-bath. Shops, restaurants and coffeehouses were placed on the bridge. The commercial activities on the bridge provide active life both on the bridge and also both sides of the bridgeheads: the Eminönü Square and the Karaköy square (Evren, 1994: 96).

In 1853, the bridge was restored for 18 years until the construction of a steel bridge in its place (Erkal, 2001: 226).

According to Evren (1994:86), the second bridge of Galata, constructed by Sultan Abdulaziz, was also built for being the showpiece for the visit of Napoleon III. Besides, the old wooden bridge could not reply the dense traffic and the opening of *Sergi-i Osmaniye* at Sultanahmet can be counted as the main reasons for the construction of the second Galata Bridge (Evren, 1994: 86). The second bridge was completed in 1863. It could resist the heavy pedestrian and vehicle traffic about twelve years. Then, the construction of a third bridge came into agenda, because of the unsuitable condition of the former wooden bridges.

The third bridge was built during the reign of Abdülaziz, in 1876 (Figure 3.30) (Evren, 1994:106). Shops, restaurants and coffeehouses were placed on the bridge (Çelik, 1998:74). Besides these, a floating sea-bath building was attached to the bridge (Figure 3.31) (Çelik, 1998:74). The bridge of 1876 was transferred to Unkapanı where it serviced until 1936, when a new bridge was constructed in its place in 1912 (Çelik, 1998:74).

The crowd of the bridge is seen in many photographs (Figure 3.32). In the beginning of 1900s, the steamships, the boats and the Bridge brought a lively and crowded life to the Eminönü Square (Figure 3.33, 3.34). The Galata Bridge of 1875 brought along changes in the building style and construction in the area. They emerge as masonry buildings of two, three or four-storey height. Masonry buildings first covered the fortifications in front of Yeni Cami, which in the former periods were sided by shops (Figure 3.35) (Erkal, 2001:228). Then, the wall was replaced by new constructions. The walls replaced by the buildings, which continue the line of the walls until 1930s (Erkal, 2001:228).

Three projects were proposed in 1902 in the place of the existing bridge. None of them was executed (Çelik, 1998:74). A German engineering firm, M.A.N., finally constructed the fourth Galata Bridge in 1912 (Figure 3.36). The bridge served Istanbul until 1992 (Evren, 1994:130). Underneath the

bridge platform were shops on both sides except the central bay (Evren, 1994: 109). This kind of a commercial use of the bridge is also maintained today. The tramway and the Bridge met in 1914 (Figure 3.37). The surface of the former Bridge was covered with wood, which obstructed the tramway passing. The fourth Galata Bridge was restored several times. The unsuitable condition of the Bridge brought out the construction of a new bridge. The historical Bridge was listed by 'the Board of Istanbul for Preservation of Cultural and Natural Entities'. Then, in 1992, the bridge was burned by a fire that started in one of the restaurants of the bridge heavily affecting the traffic on both side of the Golden Horn (Evren, 1994: 173).

The fifth Galata Bridge was opened to pedestrian traffic in 1992 (Evren, 1994: 180). The General Directorate of Highways commissioned the STFA-THYSSEN group for the project of the bridge. The firm was responsible for the construction of the new Galata Bridge and Eminönü and Karaköy junctions.

The impact of the construction of the bridge had been considerable on Eminönü Square at the 19th century. The bridge had provided access between the two important commercial districts of Istanbul, Karaköy and Eminönü. Moreover, the bridge added new congestion to the Square especially with the vehicular traffic. These flows did not immediately change the plan of Eminönü Square through the 19th and the early decades of 20th century (Erkal, 2001: 228). The map by *Kauffer* of 1776 (Figure 3.38), *the water addiction map* of 1815 (Figure 3.19), by *Stolpe* of 1866 (Figure 3.39), the map of 1882, redrawn by *Ayverdi* (Figure 3.40), *Goad* map of 1905 (Figure 3.41) and by *Alman Mavisi* of 1911-1919 (Figure 3.42) define almost a similar fabric and well-defined boundaries for the Eminönü Square. As a conclusion, it can be argued that, the bridge added more traffic and stimulated the urban life on the Square. Besides, it changed the construction and style of buildings at the points of bridge heads.

Figure 3.32: The Bridge brought an active life both side of the Golden Horn, Eminönü and Karaköy. The big shops were in the Eminönü Square as in Pera. (Eski İstanbul Resimleri, www.34tr.com, 2004)

Figure 3.33: The Eminönü quay in 1900s and the Galata Bridge on the right (Çelik, 1998: 61). The two-three storey buildings enclosed the square and form the foreground. Yeni Cami is the dominant vertical element on the background in the 1900s.

Figure 3.34: The Eminönü Square in the beginning of 1900s (Eski İstanbul Resimleri, www.34tr.com, 2004). The new buildings which were constructed as masonry can be observed on the west.

Figure 3.35: The commercial buildings made of masonry in the Eminönü Square in 1900s (Eski İstanbul Resimleri, www.34tr.com, 2004)

Figure 3.36: The Galata Bridge in 1915 (Evren, 1994: 117).

Figure 3.37: The Galata Bridge, the Eminönü Square and the electric tramway. (Eski İstanbul Resimleri, www.34tr.com, 2004). The tramway brought new regularization to the Square.

3.4.2.1.2. The Modern Docks

The harbour development projects and the construction of modern docks in Istanbul had an impact at the section between Eminönü and Sirkeci. These impacts will be presented in this part.

The relations with the sea have always played important roles in Istanbul. The planners of the 19th century of Istanbul had aimed to clean the shores. For Çelik (1998: 61), this had three main reasons. First, the increased sea traffic and trade needed orderly quays. The second reason is the public health. The inconvenient conditions of public health should have been remedied. The third one is the image of the city. It should have been put in order (Çelik, 1998:61).

The developments in the types of sea transportation systems like new ships and boats necessitated the new developments of new wharfs, quays, entrepots and customs etc. This type of development had seen on the maritime cities in the 19th century (Erkal, 2001:230).

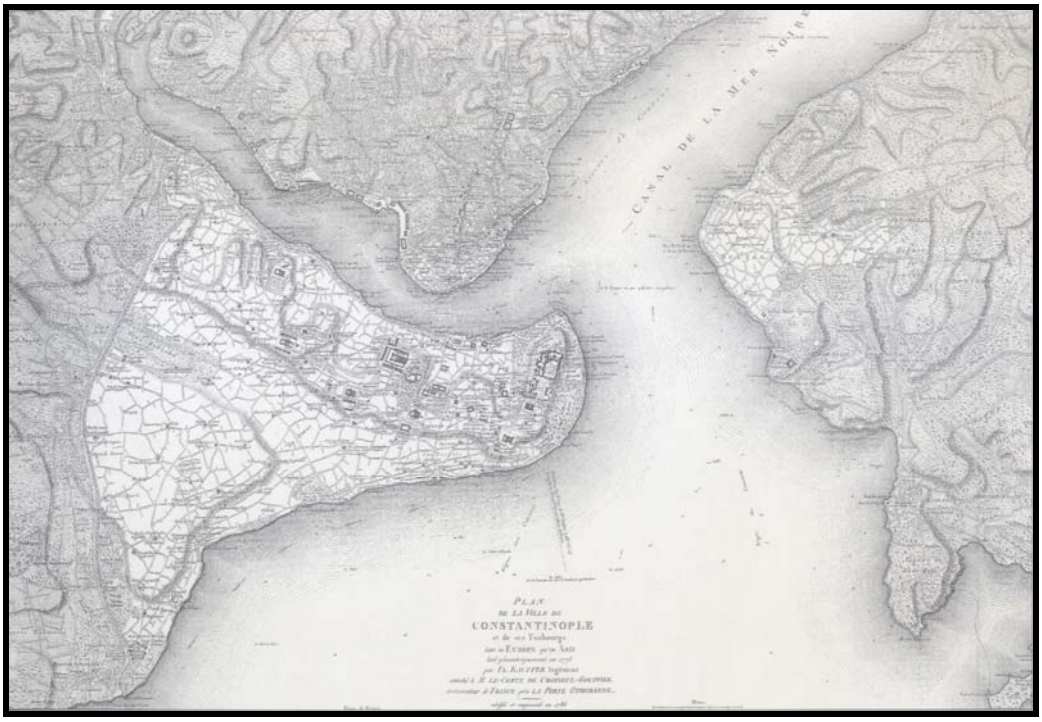

Figure 3.38: the map by *Kauffer*, 1776. (Gravürlerle Türkiye, İstanbul 1, 2002. *Comte de Choiseul- Gouffier, Voyage pittoresque de la Grèce, Paris, 1782-1822*)

Figure 3.39: the map of 'Stolpe', 1866, special focus on Eminönü district. (Kayra, 1990: no page)

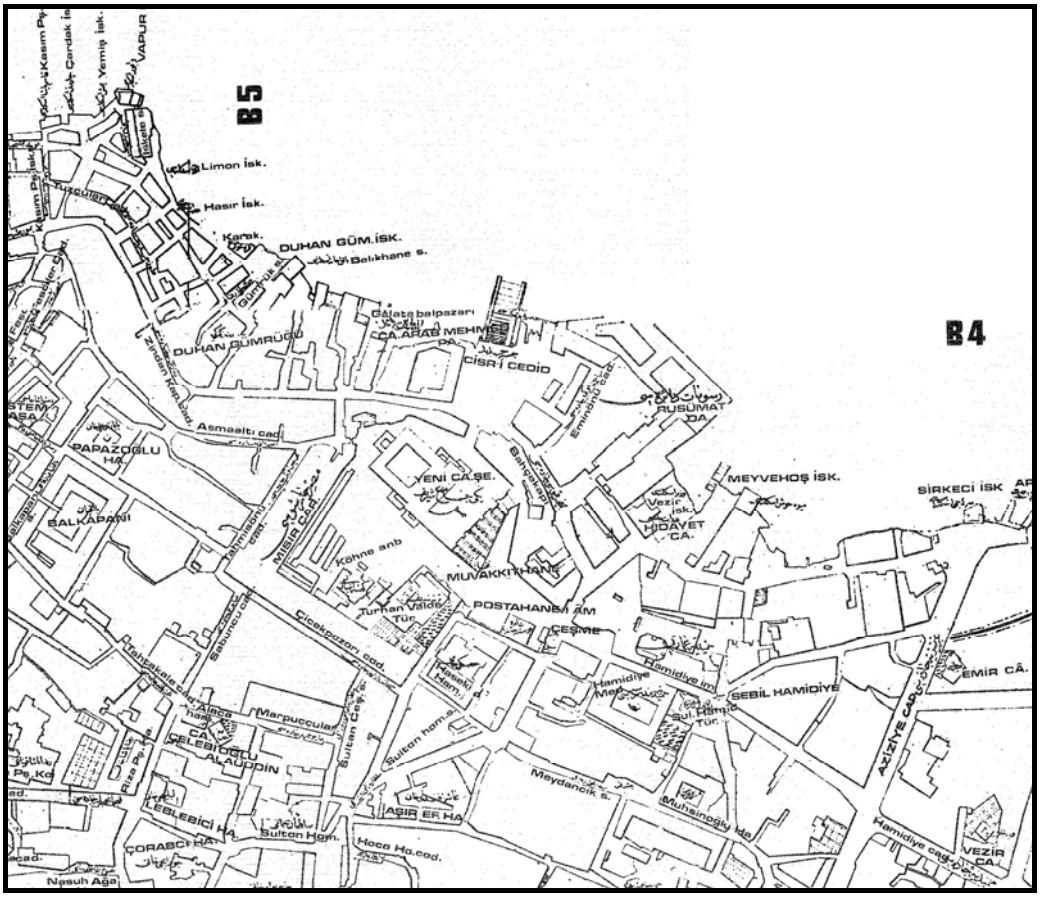

Figure 3.40: the map of 1882 by *Ayverdi*. (Ayverdi, 1978)

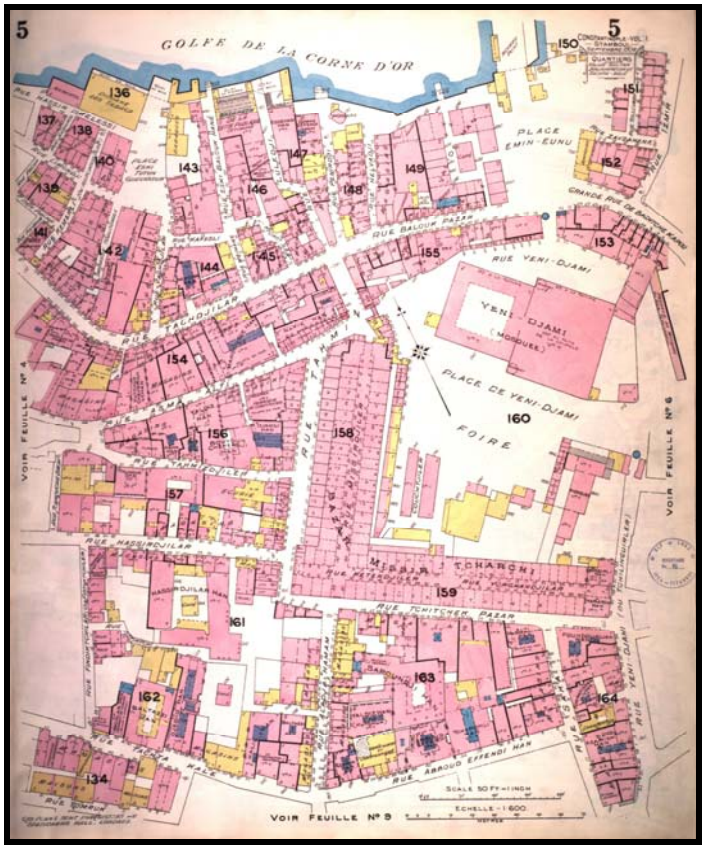

Figure 3.41 the map of 'Goad', 1905, the section of Yeni Cami-Balıkpazarı-Tahtakale. (Goad Pasha Map, no: 05, Atatürk Library Maps Archives, 2004)

Figure 3.42: the map of 'Alman Mavisi', 1911-1919, the section of Tahtakale-Sirkeci. (Alman Mavisi Map, no: H8, Atatürk Library Maps Archives, 2004)

In the historical peninsula of Istanbul, reorganization of the quays from Sirkeci to Eminönü was first seen in 1848 at the Eminönü Quay (Çelik, 1998: 62). The second operation was in between the Yalıköşkü and Eminönü in 1858 (Çelik, 1998: 62).

"Istanbul Wharfs, Docks and Entrepots Company" was founded in 1875 (Çelik, 1998:63). The construction of the wharf at Eminönü started in 1894 and went on until 1900. The wharf was constructed from Sirkeci pier to Galata Bridge, which was the area of the Byzantine Neorion Harbour (Erkal, 2001:232).

The city traffic around Sirkeci and Eminönü caused problems in the construction of the buildings on Istanbul Wharf (Erkal, 2001:232). In the contract, the Galata Bridge was to be moved towards west. In addition, the company reclaimed some parts of Eminönü Square from the State. (Erkal, 2001:233). These were not realized. The company constructed the entrepots at the back of the Customs. Reşadiye Street was opened for providing communication with the entrepots at the back (Erkal, 2001: 233).

Before the buildings were constructed, the state of Istanbul wharf can be seen in the map of 1882. In 1909, *Rüsümat Dairesi*, the main Customs building, was completed (Erkal, 2001:233). The entrepots and annex were added around it. The zone which was constructed by the company between Sirkeci and Eminönü, acted as a boundary between these points until the destruction of the buildings on the quay in 1960s (Erkal, 2001:234).

3.4.2.1.3. The Steamers and Ferry Stations

The inner city maritime transportation was developed with the increasing population between the two sides of Istanbul after the 18th century. The boats and barges had been used until the regular steamer lines started in 1851 for inner maritime traffic (Çelik, 1998: 68). The boats served in three directions from Eminönü to Galata, the districts on Haliç and the Bosporus villages (Çelik, 1998: 68). The most of the boats terminals were located between the Galata and Eminönü (Çelik, 1998: 68).

In the middle of the 19th century, the maritime traffic increased. The foundation of new ferry terminals and the steamers traffic started to change the physical structure of Eminönü.

Şirket-i Hayriye, the first Ottoman steamer company, was founded in 1851 (Çelik, 1998:69). The foreign steamers were forbidden from inner city maritime transportation between Üsküdar and Eminönü after the foundation of the *Şirket-i Hayriye* (Çelik, 1998:69). The number of steamers gradually increased from six steamer to thirty-six by 1909 (Çelik, 1998:71). The Galata Bridge itself was the central terminal of the urban ferries working to Bosporus (Erkal, 2001: 235).

The ferry terminals on Haliç were built in the same place as in the wharfs and jetties of the former Ottoman Period (Erkal, 2001:235). Erkal (2001:235) enumerates these ferry terminals as Yemiş (Hal) station, Cibali, Ayakapı, Balat and Ayvansaray.

The first ferry station at Yemiş-Zindankapı was seen in the map called '*Alman Mavisi*' (Figure 3.42).

Figure 3.43: The tramway lines in the legislations of 1864, of 1869, of 1881 and of 1907. (Çelik, 1998: 78)

Figure 3.44: The Sirkeci Railway Station (Çin, 06.09.2004)

3.4.2.2. The Tramways

The steamers of the *Şirket-i Hayriye* eased the inner city transportation. However, the inner part of the Historical Peninsula and the shores of Marmara were problematic in transportation. Several proposals were formulated to establish a tramway system. Legislations were enacted in 1864, in 1869, in 1881 and in 1907 (Çelik, 1998:75). The legislation of 1864 was the forerunner of the following legislations and new transportation network in Istanbul (Çelik, 1998:75). The first tramway line connected the Eminönü Square to the Beyazıt and At Meydanı by the main street-Divanyolu. The routes extended from Beyazıt Square to Aksaray then, separated into two routes, one route kept on Samatya Avenue and reached the Yedikule, the other was connected Aksaray to Topkapı. The starting point of the other route was again Eminönü; it followed the shore of Haliç and ended in Eyüp (Figure 3.43) (Çelik, 1998: 78).

The Tramway Company was founded in 1869. Then, three legislations were enacted, which took the legislation of 1864 as a base (Çelik, 1998: 77). The first lines were realized in the Galata side. The line of Eminönü-Aksaray was construted in 1872 (Çelik, 1998:77). The tramway increased the accessibility of the Eminönü Square and brought liveability by creating a new transportation node.

3.4.2.3. The Sirkeci Railway Station

In this part, the impacts of the railway on the general structure of Eminönü and the relations between Eminönü Square and the railway station will be studied.

The first railway lines were laid in the time of Abdülaziz to connect the capital to Edirne and Europe (Çelik, 1998: 82). The lines passed through the gardens of the Topkapı Palace and reached Sirkeci.

The process of change around Sirkeci started before the construction of the railway station. According to Erkal (2001: 237), the fire in the waterfront palace and parts of the Topkapı Palace at the tip of the promontory by the early 19th century started the changes in the area. A factory was founded for the production of steam engines in 1855 (Erkal, 2001: 237-238). The walls of Topkapı Palace to Eminönü disappeared by the fire of Hocapaşa in 1865 (Çelik, 1998:47). With the construction of the docks at Sirkeci in 1876, the railway station was planned to be located in Sirkeci for providing connection with the harbour and customs (Çelik, 1998:49). The fire and the demolition of the walls at this section created a vacant area for the construction of the railway station (Erkal, 2001:238).

Aziziye Street was opened from Sirkeci pier to Divanyolu. The extension of railway lines until Sirkeci acted as a means of connection between the inner city and the Marmara waterfront (Erkal, 2001:238). The Sirkeci railway terminal has been the focus of international, national and suburban flows (Erkal, 2001:238). It added new flows or traffic to the already congested traffic of the area between Sirkeci and Eminönü.

The Sirkeci railway station was completed in 1890. A German architect A. Jasmund designed the building, which elongated parallel to the railway tracks (Figure 3.44) (Çelik, 1998: 83). Its façade oriented to the waterfront. Jasmund designed the façade in an eclectic style that Çelik calls (Çelik, 1998:83).

By the end of the 19th century, various public transportation systems were seen in Istanbul. The steamships, the railway, the tramways and the Galata

Bridge changed the structure of Eminönü turning it into a hub of transportation systems. However, this situation caused congestion in traffic and over densification of activities and population in the area. This congested structure of Eminönü has continued in contemporary Istanbul.

3.4.3. LARGE-SCALE URBAN PROJECTS IN 19TH CENTURY

Three comprehensive urban design projects were prepared by the foreign architects and engineers from 1839 until 1908. The aims of these projects were to modernize the transportation systems and to develop a Western city image (Çelik, 1998:84). These projects were not executed. The first project belonged to Helmuth Von Moltke. He suggested five main arteries to develop a transportation network, which connected the main districts and the gates of the city, the connection between the north and south axis was not considered by the designer (Figure 3.45). The second project was prepared by F. Arnodin. He proposed two bridges over Bosporus by connecting them with roads (Figure 3.46). The first bridge had connected Sarayburnu and Üsküdar, the second Rumelihisarı and Kandilli. The third project which was not executed, is important however for being the first project that rearranged Eminönü Square as a public square as seen in Western cities. It was Antoine Bouvard who made the project. He re-designed four districts; the At Meydanı, the Beyazıt Square, the Galata Bridge (Figure 3.47) and Yeni Cami Square (Figure 3.48, 3.49) (Çelik, 1998: 91). According to Çelik (1998:92), Bouvard did not relate the projects areas, he did not design the projects according to the topography and he did not take into consideration the traditional urban fabric.

Eminönü was the centre of trade, transportation, storage, administrative and military functions in the Byzantine period. The gates and jetties determined the commercial activities, the urban fabric and the city frontier in that period. The Jewish community had lived in the Eminönü district until the construction of Yeni Cami. The mosque and its complex, '*külliye'*, with its annex buildings constituted a new urban structure in the Eminönü both physically and socio-economically. The mosque's *harim* both on its northern side, with its three

gates on the fortifications, and the southern side, constituted by the 'L' shaped Market was gradually started to be demolished by the 1900s. The *harim* was completely covered by buildings and transformed into an open public space. The walls and the mosque's gates were replaced by new buildings in the course of time. The 19th century modernization reforms, especially the construction style of building, the bridge, the new steamers and ferry stations, the Eminönü wharf and its annex buildings, introducing the tramway had started to change the morphology and activity pattern of the Square. The square started to turn into a hub of urban transportation in the 19th century with various transportation systems.

Figure 3.45: The plan of 'Helmuth Von Moltke', 1839. (Çelik, 1998: 85)

Figure 3.46: The plan of 'Arnodin'. (Çelik, 1998: 86)

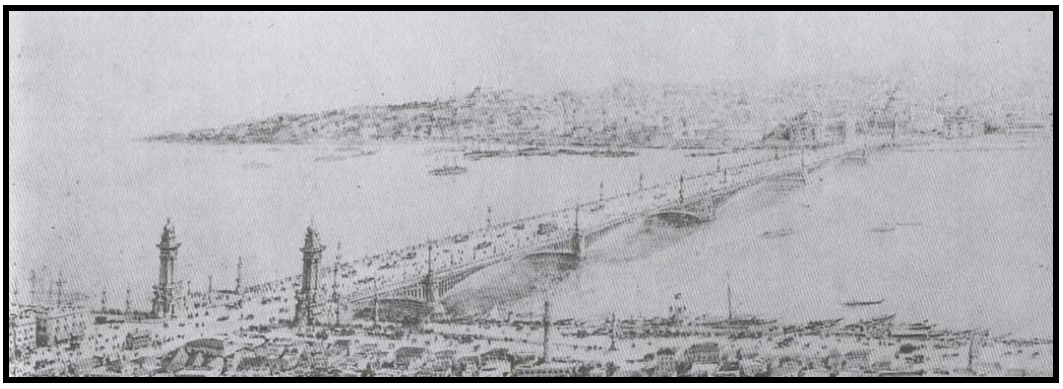

Figure 3.47: The project of 'Bouvard' of the Galata Bridge. (Çelik, 1998: 95)

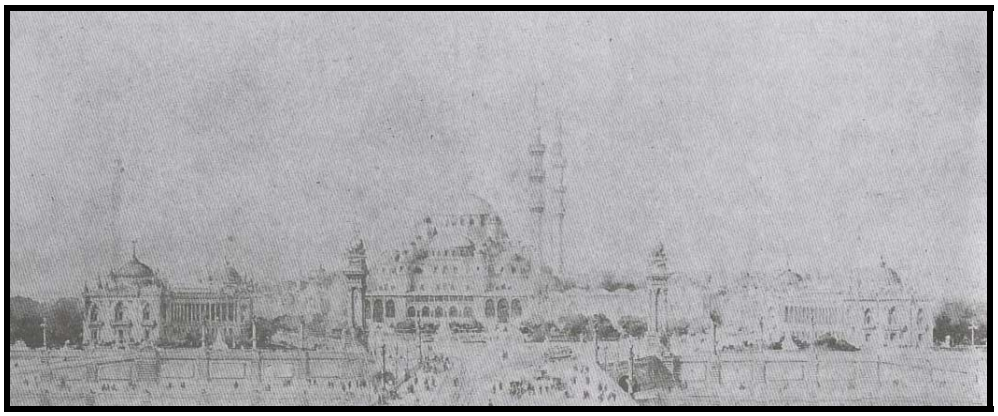

Figure 3.48: The Project of 'Bouvard' of the Yeni Cami Square. (Çelik, 1998: 96)

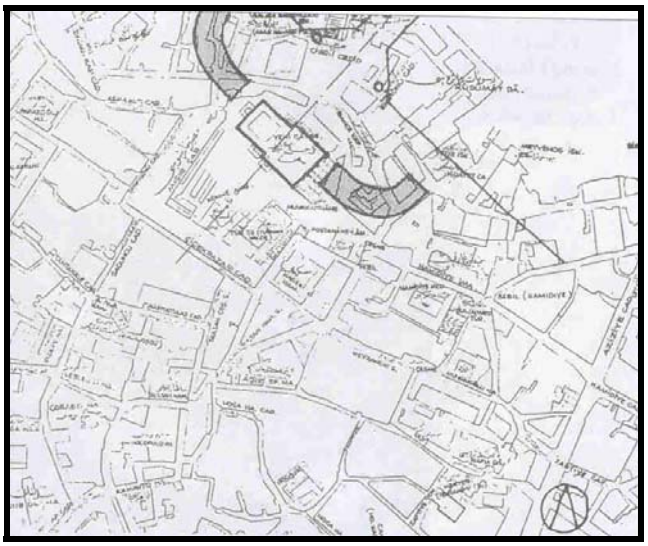

Figure 3.49: The Project of 'Bouvard' of the Yeni Cami Square. (Çelik, 1998: 97)

CHAPTER 4

TRANSFORMATION OF THE EMINÖNÜ SQUARE FROM THE 1920s TO THE 21ST CENTURY

4.1. INTRODUCTION

This part of the study covers the important changes that occurred on the Eminönü Square as part of the urbanization process of Istanbul between 1920s to the beginning of the 21st century. As the urban operations that affected the morphology of the Square coincide with the planning process, the sections of the chapter are divided according to the planning process from 1920s to the present time. At the end of the 19th century, the construction of the Galata Bridges, changes in the maritime transportation, the Sirkeci railway station, the tramways, the increased congestion with the increased traffic between the two sides of the Galata Bridge, new commercial facilities, the new ferry stations, wharfs, entrepots, quarantine station and customs changed the appearance of the Eminönü district. However, the most radical changes in the Square were put into implementation in the time of Mayor Lütfi Kırdar.

In the first part of this chapter, the Eminönü Square and its surrounding area will be examined from 1920s to 1950s. During this period, Istanbul undertook a major planning process directed by the French urban planner Henri Prost. Prost's planning decisions had a considerable influence on the future development of Istanbul.

Certain decisions of Prost's plan were implemented over the fifteen years. Prost continued to revise and develop the plan in ways, until he left in 1950.

This marks the beginning of the second phase of the reconstruction of Istanbul during which Prost's plan was revised.

The second part of this chapter explores the rapid urbanization period between the 1950s and 1960s. In this period intensive operation of road, street widening, and demolition of old buildings and construction of new ones were realized under the directives of the Prime Minister A. Menderes.

The third part explores the *regional* planning period from the 1960 to 1966. This period shows how the regional planning concept affects the physical or socio-economical structure of Eminönü. The conservation plan of Özdeş for Historical Peninsula had effects on Eminönü.

The fourth part makes a review of the period from 1966 to 1990s. It contains the metropolitan planning process, the demolitions of Dalan and Historical Peninsula conservation planning process.

Finally, the last conservation plan of Historical Peninsula and urban design project on the Square will be examined within both physical and socio-economical perspective.

4.2. PLANNING AND LEGISLATIVE ARRANGEMENTS IN THE REPUBLICAN ERA (1920s- 1950s)

In 1923, a new era started with the establishment of the Turkish Republic. Istanbul, which for centuries had been a capital city, lost this identity when the capital was moved to Ankara. Losing its administrative power, the city entered into a new socioeconomic and spatial transformation period.

The period from the 1923 to 1928 is known as an unplanned period and the Building (*Ebniye)* Law continued to be implemented in Turkey. Carl Lörcher prepared a plan for Istanbul during this period. In his plan, since the growth of the city was not taken into account, no provision was made for opening up new areas for residential use (Tekeli, 1993: 29-30). Emphasis was on the renewal of public squares, the creation of new green spaces, the

reorganization of former burnt out areas, and the reestablishment of an integrated transport network (Tekeli, 1993: 29-30).

The period between 1930 and 1950 may be taken as a specific period in the city's development. This period may be seen as the beginning of an urban transformation, which was to follow the war; however the overall impact of the changes taking place was not apparent or observable at that time (Tekeli, 1993: 30). In the early 1930s all urban administrative procedures and reconstruction laws dating from the Ottoman period were changed by the Republic (Tekeli, 1993: 30).

The New Fruit Exchange buildings and the new Unkapanı Bridge were constructed in 1930s. The exchange building was designed by the Technical Board of the Municipality in 1934 *(Fenni Heyeti)* (Erkal, 2001: 251). They were not directly affected the fabric of the Eminönü Square, but they affected the urban fabric of the surroundings of the Square and brought forth new functions to the area. The exchange was built on the former site of *Odunkapanı* (Figure 4.1). The small size urban blocks pattern, provide spaces for variety of activities, started to change with the construction of new fruit exchange buildings.

In the early 1940s, other additional buildings were constructed near the Fruit Exchange Building. This can be observed from the Pervititich maps (Figure 4.2). The area of *Odunkapanı* completely appeared as a Fruit Exchange zone in 1943 (Erkal, 2001: 252). Despite the size of construction area, the exchange buildings harmonize with the line of the street. It did not change the curvilinear pattern of main street network. The construction of the Atatürk Bridge in the place of the old Unkapanı Bridge brought a new artery on the Historical Peninsula; the Atatürk Boulevard. Many demolitions were realized during the opening of the Atatürk Boulevard. It affected the structure of the former Unkapanı (Figure 4.3).

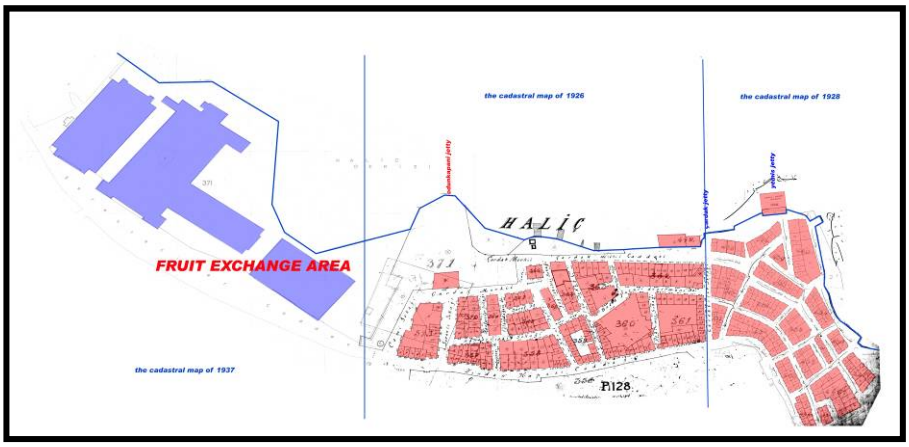

Figure 4.1: The cadastral map of 1926, 1928 and 1937 for the Fruit Exchange area (the maps are matched and rendered by the author) (Kıyıcı, 2004, private archive). The small size urban blocks pattern started to replace by bigger size blocks that obstructed to existing of spaces for variety of activities.

Figure 4.2: The Fruit Market area in 1940s. (Istanbul in the Insurance Maps of Jacques Pervititich, 2004: 148). The traditional fabric of the *kapans* area started to loose its characteristics.

Figure 4.3: the *Yemişkapanı* area from the Unkapanı Bridge toward the Galata Bridge (Kıyıcı, 2004). Despite the size of construction area, the exchange buildings harmonize with the line of the street. It did not change the curvilinear pattern of main street network.

4.2.1. THE COMPETITION FOR THE DEVELOPMENT PLAN OF ISTANBUL

In the time of Mayor Muhittin Üstündağ, preparation to obtain a master plan for Istanbul started. The municipality of Istanbul organized an international competition amongst well-known city planners of the period; *Herman Elgötz Alfred Agache*, *Jacques H. Lambert* and *Henri Prost* (Duranay, Gürsel, Oral, 1972: 67). With the exception of Prost, other planners came to Istanbul to make field analysis and then submitted their plans and reports to the municipality. Although Elgötz won the competition, his plan was not put into implementation for reasons that are not well known (Tekeli, 1993: 30). The projects were generally proposed the rationalisation of the traffic and the functional zoning of the city (The Commission Report, *Arkitekt*, 1935: 61-68).

The transportation systems (including the harbour, tramway lines, subway systems, the airport area, the railway lines and stations, the new bridges), the protection and preservation of the old monuments and buildings, new industrial areas, opening of new boulevards, squares and plazas in conformity with the modern city image, a new harbour, and new tourist hotels, sports buildings and open green areas, cultural and social buildings were the common points in the reports of Agache, Lambert and Elgötz (Eyice, 2002: 21-22).[1]

For Tekeli (1993: 30), these plans were focusing on the development within municipal boundaries and local requirements of the settlement without considering the regional data and the other settlements around the city. They depended on the concept of beautifying the urban setting without socio-economic research, and data.

An analysis for the future development of Istanbul was not obtained from the reports of the competition of 1932. Subsequently, German planner Martin Wagner was invited to prepare a report for the urbanization of Istanbul. His proposals considered the hinterland of Istanbul, land and maritime

[1] For detailed information about the reports of Agache, Lambert and Elgötz, see the Commission Report, *Arkitekt*, 1935.

transportation, industrial development and recreational areas (Duranay, Gürsel, Oral, 1972: 73-75). Although regional analyses were very useful, his planning approach was not taken into consideration (Tekeli, 1993: 30).

In 1936, Prost was invited to Istanbul again. Prost was considered as an experienced planner who knew well Istanbul and Turkey (Akpınar, 2003: 23). He completed the first master plan in 1937 comprising plans of the Historical Peninsula and Beyoglu. Immediately afterwards, the master plans for the other districts have been prepared and approved. In 1939, the plan of Istanbul for the Asian side, in scale of 1/5000, was prepared by Prost. In addition to these master plans, he made several urban design projects for plazas, squares, avenues and parks (Bilsel, 2004: 1). The urban design project of the Eminönü Square was also one of these.

4.2.2. HENRI PROST'S PLAN FOR ISTANBUL

The implementation of Prost's project for Eminönü could be executed by the innovative of the governor –Mayor Lütfi Kırdar.

The railway and maritime transportation, the commercial centre, small-scale industry and its developments, general developments of industry and commercial, modern buildings and their orders, historical and archaeological surveys constituted the main subjects of inquiry in Prost's plan (Duranay, Gürsel, Oral, 1972: 76) (Figure 4.4). He gave importance to the history and archeology of the city. However, he proposed radical operations for the Historical Peninsula. The road network of Istanbul is particularly significant (Figure 4.5). He proposed a main road, which providing connection between the north and the south of the city (Bilsel, 2004: 4). The road started from Taksim Square, crossed Haliç by Atatürk Bridge and ended at Yenikapı in the Historical Peninsula. The Historical Peninsula was divided into two parts by this 'spine' road (Bilsel, 2004: 4). The central business district was located on the east and the settlements areas were on the west (Bilsel, 2004: 4). Prost mentions that the new roads completed by tunnels, bridges and viaducts, take advantage of the topography of the City, and are important for reducing the coast of the expropriation and thus prevent the land speculation (Akbulut,

1993).[2] He not only proposed the north-south connection but also proposed a new network in the Historical Peninsula (Bilsel, 2004: 5). The new network required the opening of new avenues and streets (Bilsel, 2004: 5). The east to west connection in the Historical Peninsula was proposed on the Byzantine axes (Bilsel, 2004: 8). He also proposed that the city silhouette should be preserved by limiting all buildings on a level of over 40 meters from the sea level at a maximum of three storeys (Akbulut, 1993). He proposed a new port in connection with the central train station at Yenikapı, an archeological park as Sarayburnu and urban design projects for squares (Bilsel, 2004: 4).

One of the major achievements of Prost was his project for the Eminönü Square. He designed a new public square in Eminönü by the demolition of buildings on the northern side of Yeni Cami. Creating vistas and perspectives was among the main design principles of the Prost plan (Bilsel, 2004: 7).

Figure 4.4: The Prost's Plan for Historical Peninsula.

[2] Vatan and Millet Roads were realized in 1950s and 1980s. The idea of becoming forth Yenikapı as transfer point were started to realize in 1980s. All of them are seen in the Prost's plan.

Figure 4.5: Prost's road network for Istanbul (Angel, 1999: 36). The road network of Istanbul is particularly significant. Prost proposed both a main road, which providing connection between the north and the south of the city and proposed a new road at the bank of Haliç and Marmara. The new network required the opening of new avenues and streets. The widening of Unkapanı-Eminönü road was also one of the ideas of Prost's network scheme.

4.2.2.1. The Eminönü Square in Prost's Plan

Prost (1997: 274 in *İstanbul Araştırmaları Dergisi*) states about the projects of Eminönü Square in his report, '*İstanbul'un Nazım Planını İzah Eden Rapor'*, in the *'espaces libres'* section as follows;

a) The demolition of the '*parasite*' buildings for bringing out the mosque
b) To catch the Süleymaniye view towards the university and Beyazıd with the road. (Road number 4)
c) The road, going up towards the museums, the At Square, Ayasofya and Archeological region, should have a view towards the garden of Sarayburnu. (Road number 1)

d) The opening of a new road towards the Grand Bazaar (Road number 5)
e) The opening of a new road towards the *Hal* and fish market.

These changes are meant to rearrange the Eminönü Square as the gate *par-excellence* the historical city of Istanbul.

The buildings around Yeni Cami, the sultan kiosk and the Mısır Çarşısı can be seen in the photographs of 1934 where 'parasite' buildings, in Prost's terms, wrapped up the Mosque, the sultan kiosk and the Bazaar (Figure 4.6, 4.7, 4.8, and 4.9). These buildings were defined the southern boundaries of the Square in that period. The triangular arched vault of the Sultan's kiosk gave access to the automobile traffic passage (Figure 4.9). Figure 4.10 shows the former condition of buildings in front of Yeni Cami.

From the square in front of the Mosque, the panoramas, perspectives and axis are captured towards Süleymaniye (road number 4), The Grand Bazaar (road number 5), Sirkeci (road number 1), the Rüstem Pasha Mosque and the Bosporus.

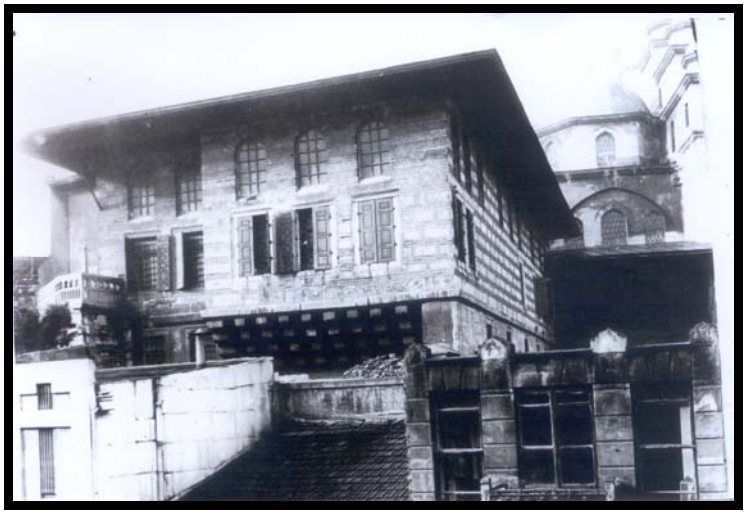

Figure 4.6: The Mosque, the Kiosk and the buildings in front of them in 1934 (Karakaya, 2004, private achieve). The buildings surrounding the mosque provided well-defined boundaries for the southern side of the Square in the 1930s.

Figure 4.7: The Mosque, the Kiosk and the buildings in front of them in 1934 (Karakaya, 2004, private achieve). The buildings defined a courtyard on the northern side of the Mosque.

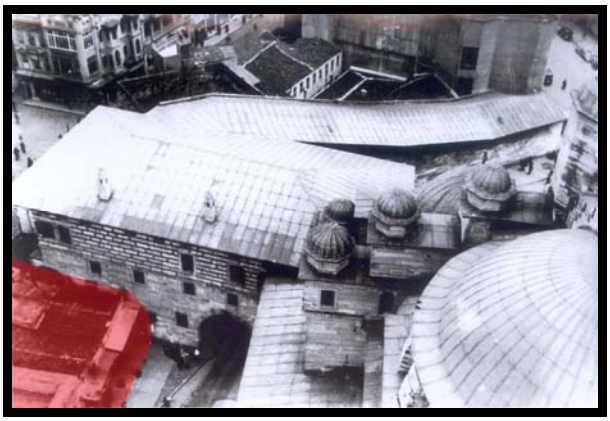

Figure 4.8: The Mosque, the Kiosk and the buildings in front of them in 1934 (Karakaya, 2004, private achieve).

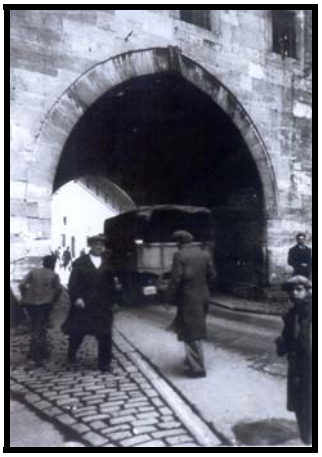

Figure 4.9: The triangular arched vault gave access to the automobile traffic passage in 1934 (Karakaya, 2004, private achieve)

The demolition of the buildings and the arrangement of the Square can be followed from the book of *'Güzelleşen Istanbul'.* The removed buildings or the expropriated areas can be seen in on an aerial photograph of 1930s (Figure 4.11). These buildings defined the southern edges of the Square before the operation of Prost. The foreground of the Eminönü Square was totally changed by the demolition of the buildings. The *'beauty'* of the Mosque, the kiosk and the Bazaar are brought forth (Figure 4.12 and 4.13). These monumental buildings become the major elements defining the modern square. Especially, the Mosque as a principal vertical element dominated the Square. A new terrace and staircases are added in front of the Mosque to increase its visual effect when coming from the Galata side. The Mosque now dominates the square. Mısır Çarşısı restored in that period (Figure 4.14). The buildings in front of the Bazaar were demolished as well to open up the entrance façade of the building (Figure 4.15). However, it caused the interruption of the public and private domain with introverted organization of Mısır Çarşısı on the Square.

The shops between the southern side of the Mosque and Mısır Çarşısı, where was the Mosque's *harim* in the Ottoman period, were cleaned and instead of them, a park was arranged (Figure 4.16). The complex relation between the religious and the commercial activities on the southern of the Mosque was disappeared.

When compared with the Pervititich maps of 1940, the Prost's plan and the photographs after the operation on Eminönü Square, the changes in the urban fabric are striking: the modern Square, the new park in the place of the old *Harim* of the Mosque and new roads. These operations completely changed the traditional space of Eminönü.

In the Pervititich maps of 1940, the buildings on the western side of Mısır Çarşısı are seen. The Asmaaltı Street, The Balıkpazarı Road and the Fish Market that constituted curvilinear street pattern still exist. In the eastern side of the mosque, the Eminönü Warehouse and the customs are still in the situ as well (Figure 4.17).

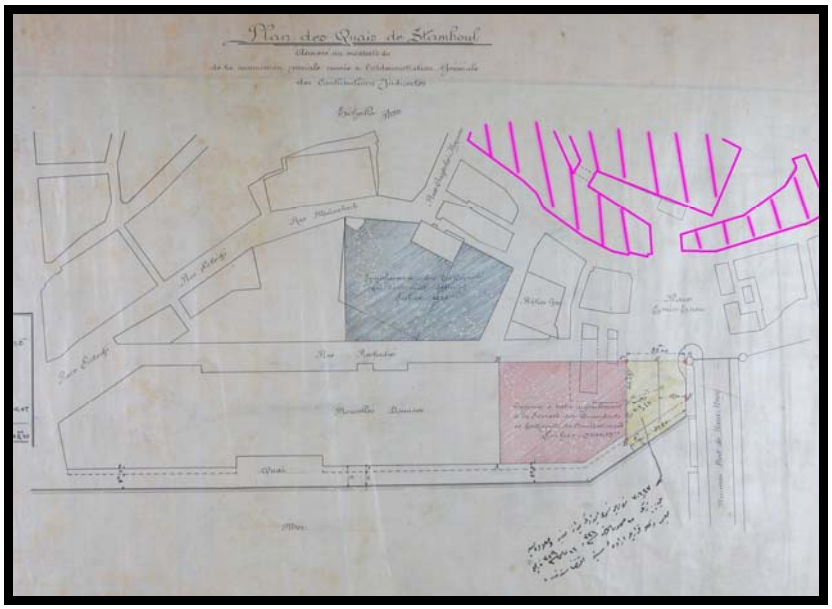

Figure 4.10: The buildings on the line of the fortifications (marked with pink line by the author) (Eminönü-Plan des Quais de Stamboul, Atatürk Library Map Archives, 1913, 352.961 Emi 1913, NO: 7258, 2004).

Figure 4.11: The expropriation areas according to the Prost's Project of the Eminönü Square (Güzelleşen İstanbul, 1943: no page).

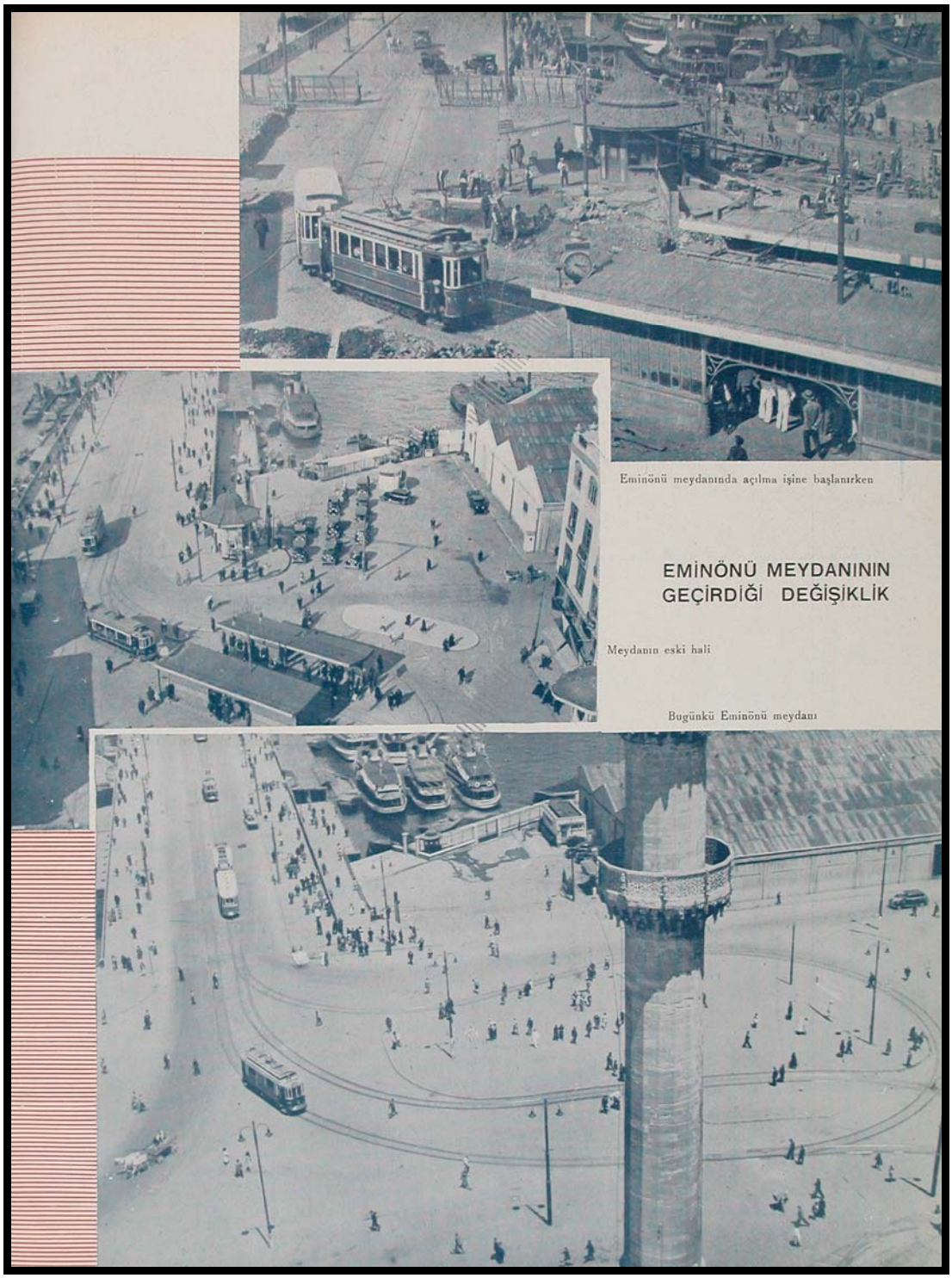

Figure 4.12: The transformations of the Eminönü Square in the 1940s. First picture shows the works on the Square for demolition. The second shows the old condition of the Square. The last picture shows the Eminönü Square in 1940s after the Prost's operation. (Güzelleşen İstanbul, 1943: no page). The demolitions of the buildings were broadened the area of the Square. In addition to this, the tramway station was moved to other place. The transportation nodes started to change its position by the operations.

Figure 4.13: Two pictures comparing the foreground of the Square (Güzelleşen İstanbul, 1943: no page). The foreground of the square was defined by the two-three storey buildings in the first picture. They defined cluster space for the Square. The only opening which was the former Yeni Cami Gate let the eye move out of the Square. The horizontal elements of the foreground dominated the vertical ones like the Mosque. The second picture shows the changes of the foreground of the Square. Now the Mosque as a vertical element dominated the Square that easily noticed from the Galata part.

Eskiden bu çarşıya girenler; adeta harabeyi andıran çirkin bir manzara ile karşılaşır, tarihî bir âbide içinde olduklarını aslâ hissedemezlerdi. Fakat onun eski ve kıymetli bir sanat eseri olduğunu bilen ve tanıyanların duydukları ıstırab çok derin ve acı idi.

Belediye, şimdi bu âbideyi tamir ederek canlandırmakla eski eserlerimizi korumak ve sanat tarihimizi dile getirmek yolunda kuvvetli bir adım daha atmış bulunuyor.

Müteaddit mevzii yangınlardan müteessir olan büyük kemerin ayaklarındaki kesme taşlar restore edilmiş, kubbeler yeniden kurşunlanmış ve tarihî alemleri üzerlerine konulmuştur.

Binanın dahili mimari zenginliğine nakisa veren ve estetik hiç bir kıymeti olmayan ahşap saçaklar kaldırılmıştır.

Bunlar dokuzuncu yüzyıl yapısı uydurma yamalardan başka bir şey değildi. Yapılan tamirat sona ermiş, bu tarihî bina İstanbul halkının coşkun sevinç tezahürleriyle halkın istifadesine açılmıştır.

Mısır Çarşısının içi: tamirden evvel ve şimdiki hali

Mısır ÇARŞISI

17 inci yüz yıl medeniyet âbidelerimizden biri olan (Mısır Çarşısı), mimarî bakımdan yüksek kıymete sahip olduğu kadar ticarî bir faaliyetin merkezi sayılan tarihî bir çarşımızdır.

İstanbul Belediyesi; imar faaliyeti arasında burasını, şehrin ihtiyaçlarını karşılayacak yardımcı bir hâl haline getirmeyi düşünmüş, arkeoloğ mimarlarımızın da rey ve mütalâalarından istifade ederek binanın orijinal bünyesine zarar vermiyecek şekilde tamir ettirmiştir.

Figure 4.14: Mısır Çarşısı before the restoration and after the restoration (Güzelleşen İstanbul, 1943: no page). The introverted organization of Mısır Çarşısı provides vivid life inside of it. However, it cannot satisfy the direct relations between inside and outside.

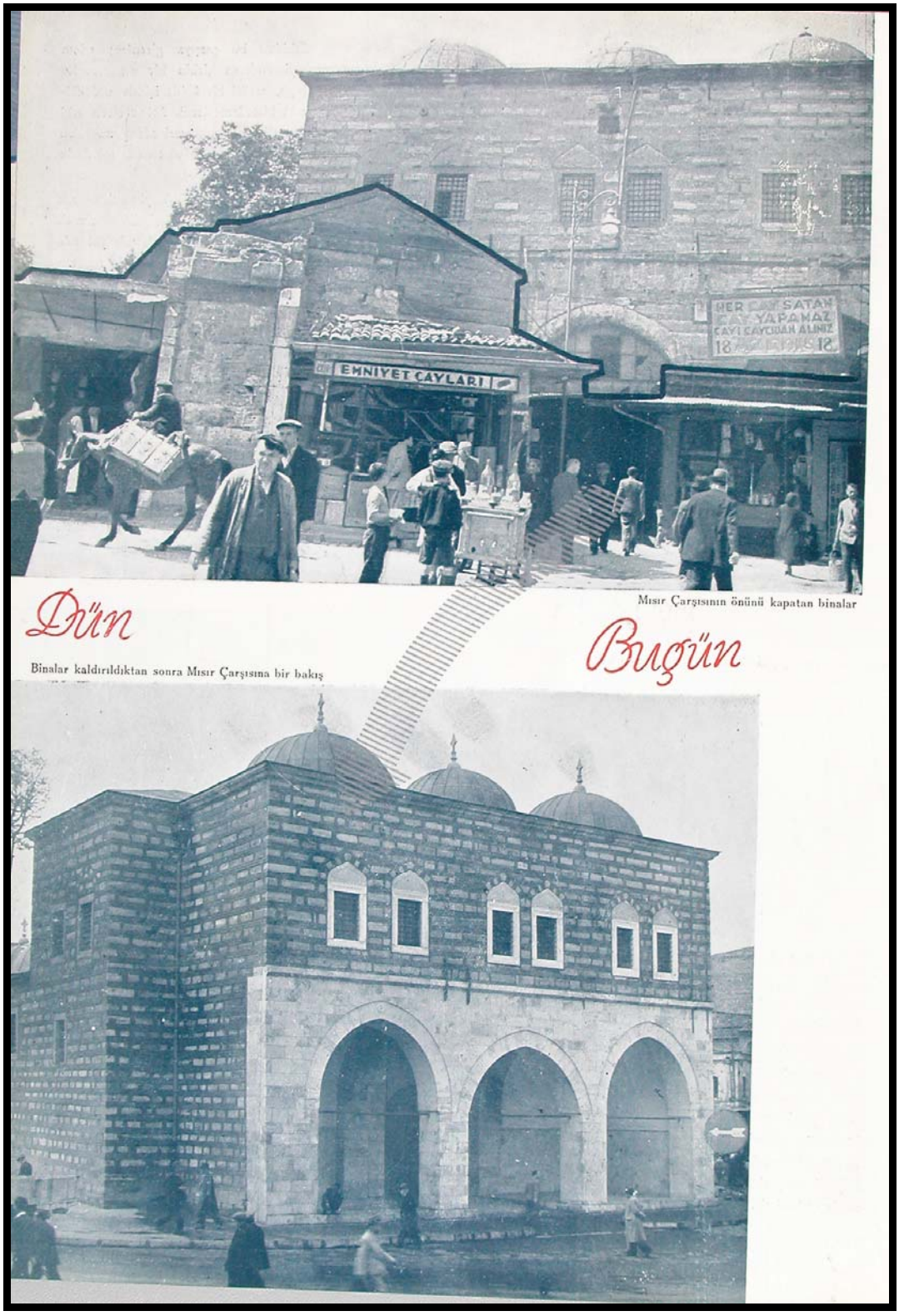

Figure 4.15: The buildings in front of the Bazaar were demolished as well to open up the entrance façade of the building (Güzelleşen İstanbul, 1943: no page). They provide interrelation between the public and private domains with their opening through the street. There were no shops on the entrance of the Bazaar in the 1940s. The relation between the inside of the Bazaar and outside could not be seen anymore.

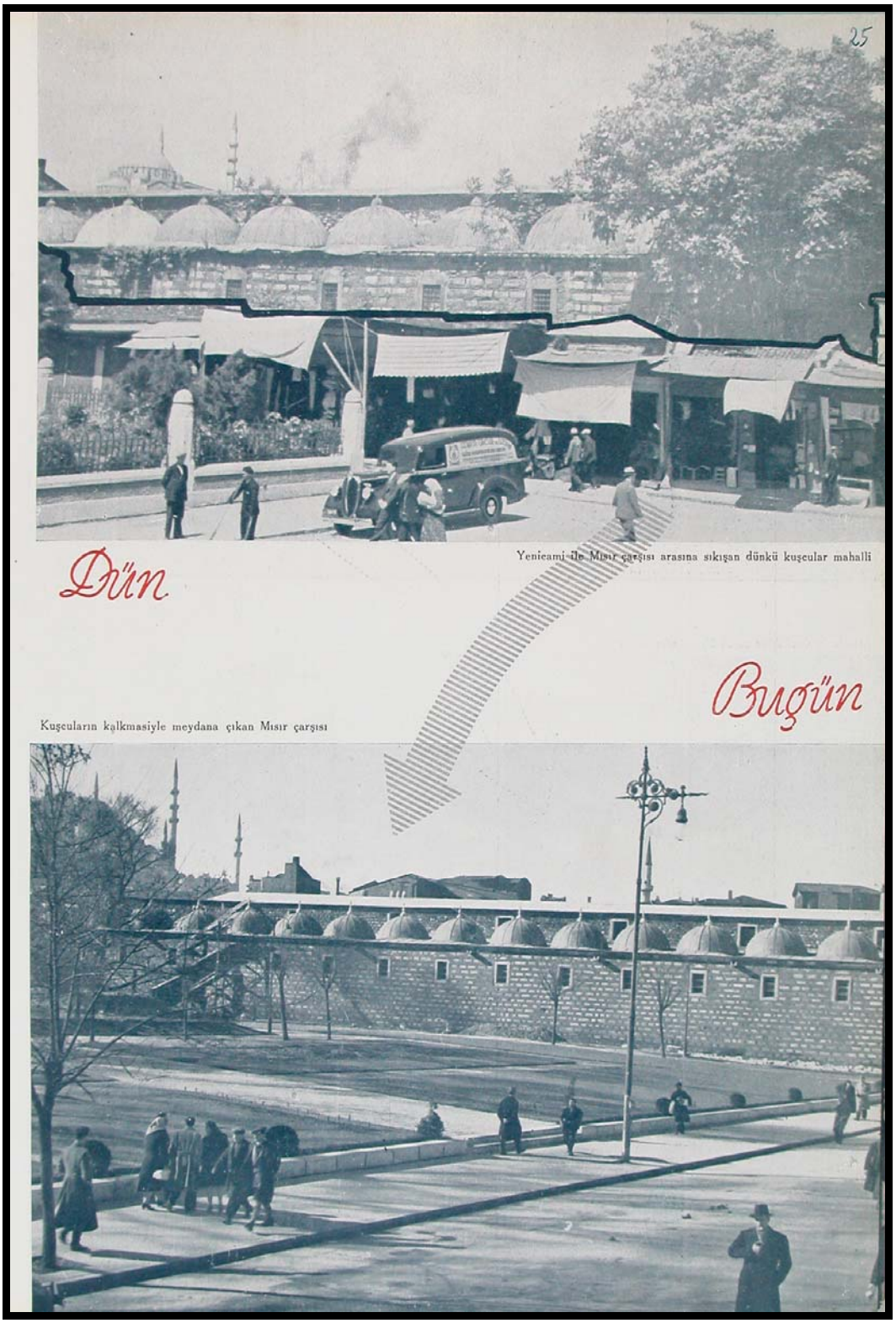

Figure 4.16: The shops between the southern side of the Mosque and Mısır Çarşısı, where was the Mosque's *harim* in the Ottoman period, were cleaned and instead of them, a park was arranged (Güzelleşen İstanbul, 1943: no page). These shops provided vivid life on the ground level before the demolition.

Figure 4.17: the Eminönü Square, the customs house the fish market is seen after the Prost's operations (Istanbul in the Insurance Maps of Jacques Pervititich, 2004: 134). The boundary of the Square was still defined by the buildings due to the many breaks in continuity of the edges of the buildings.

Prost's project on Eminönü Square brings a new context to both the Square and to the concept of the open spaces in the city. The Square was to resemble a plaza as in European cities. The *harim* of the mosque is opened thoroughly to the public. This was representing the understanding of open public space also representing within the context of the 'modernization' ideology of the Republic (Bilsel, 2004: 4-5).

Akpınar (2003: 21-22) states that the Prost plan represent the secularization ideology of the nation-state. She evaluates the Prost plan as a city-beautiful project, influenced by the 'city-beautiful' movement of the 19th century. According to her, Prost's plan included the protection of the natural heritage, the restoration of the monuments, opening new roads, the understanding of a hygienic and healthy architecture and urban environment and the most important the 'espaces libres'/open spaces. For Akpınar (2003: 21-22), the 'espaces libres' which is the most important idea in Prost's planning give some clues about the understanding of the Republic concerning public spaces.

As a result, it can be said that, The Plan of Prost could not only be evaluated as a physical demolition-building project but also as an expression of new social and political relations and perspectives. The gradual demolition of the *harim* of the Mosque shows a conversion of the courtyard of the mosque to a public square, a process which started in the 19th century and obviously accomplished in the time of L.Kırdar with the project of Prost.

4.3. THE RAPID URBANIZATION PERIOD (1950-1960s)

The period of 1950-1960 brought radical changes in urban and architectural area. The broadening of municipal boundaries, the law of reconstruction *(İmar Kanunu)*, the expropriation law, the condominium law, massive population flow to cities and the squatter formation characterize that period (Kuban, 1993b).

In 1951, with the new government, the Commission of Revision (Revizyon Komisyonu) was founded for the planning of Istanbul. The commission evaluated the Prost's plan and found Prost's works insufficient in many aspects (Duranay, Gürsel, Oral, 1972: 81). However, the same commission found the laws, which Prost proposed, appropriate and useful for the application of the plan ("Planlama", in Dünden Bugüne Istanbul).

The commission worked on several analyses for the *'Greater Istanbul Master Plan',* then they accepted the Plan of Historical Peninsula in general aspects ("Planlama", in Dünden Bugüne Istanbul).

Again, in 1951, in parallel with the increased dwelling problem, the Ministry of Public Works published a new report prepared by the experts of the firm, Skidmore, Owings and Merrill (Duranay, Gürsel, Oral, 1972: 82).[3]

The years between 1952 and 1956 are called as the period of the Commission of Consultants (*Müşavirler Heyeti*) in Istanbul. The development plan of Beyoğlu in 1/5000 scale, the industrial plan in 1/10.000 scale, the plan of Beyoğlu in 1/500 scale and the plan of Bosporus villages in 1/2000 scale

[3] See, Skidmore, Owings and Merrill müteahhısları, Türkiye'de Yapı İmar ve Mesken Konuları Hakkındaki Rapor.

were the main planning works in that period (Duranay, Gürsel, Oral, 1972: 82).

In 1956, the Prime Minister Adnan Menderes took over the responsibility for the reconstruction of the city that he followed in the next four years, until his fall from power. This was a period of intensive road building, street widening, demolition of old buildings and construction of new ones (Cansever, 1993: 53). There was in fact continuity between Prost's plan and works carried out under Menderes. The general decisions of Prost's plan were followed by the reconstruction carried out under Menderes.

4.3.1. MENDERES OPERATIONS ON EMİNÖNÜ AND ITS SURROUNDINGS

With the direct involvement of the Prime Minister, Adnan Menderes, new boulevards were opened in the fabric of the Historical Peninsula (Figure 4.18). The opening of Vatan and Millet Avenues, Eminönü-Unkapanı road, Beyazıt-Aksaray road and Saraçhane-Aksaray road can be counted, which caused large-scale destruction in the historical built-environment. The new road along seashore on the Marmara coast was constructed as a motorway on land fills at the foot of former fortifications. This loop is between Eminönü and Unkapanı (Kuban, 1993 cited in Erkal, 2001: 255). The Fish Market – *Balıkpazarı*- disappeared by the opening of the road of Eminönü-Unkapanı in 1955-1956. The area that was arranged in the time of Menderes can be observed from the Figure 4.19.

In the book, *'Istanbul'un Kitabı'* (1957), the buildings that were to be constructed between Eminönü and Unkapanı are telling. Several large commercial buildings around the two side of the new road were planned to be built (Figure 4.20). The buildings between *Eminönü* and *Unkapanı* were thoroughly demolished except the *Hal*-Fruit Market Building in the time of Menderes. The well-defined boundaries of the Eminönü Square started to lose its characteristics. The demolitions caused big voids on the western side of the Galata Bridge. The dense-built fabric of the Square was replaced by the voids. The foreground of the Square on the western side started to

change. The demolished buildings can be observed from the maps of Goad, the Pervititticch and the cadastral maps of 1926-1928-1937 and the photographs of 1960s (Figure 4.21, 4.22, 4.23). A wharf was to be constructed near the *Hal*-Fruit Market Building for the export of goods to every point of Anatolia (*İstanbul'un Kitabı*, 1957). In the direction of Unkapanı, big warehouses were to be constructed. These can be observed from the photograph of 1966 (Figure 4.24).

The new condition of the Eminönü Square can be observed from the map of 1960. It can be observed that the fish market was already demolished. The Fruit Market and the new Unkapanı warehouses are seen on the western side of the Galata Bridge on the shore of Haliç. The customs house is still in situ in 1960s (Figure 4.25).

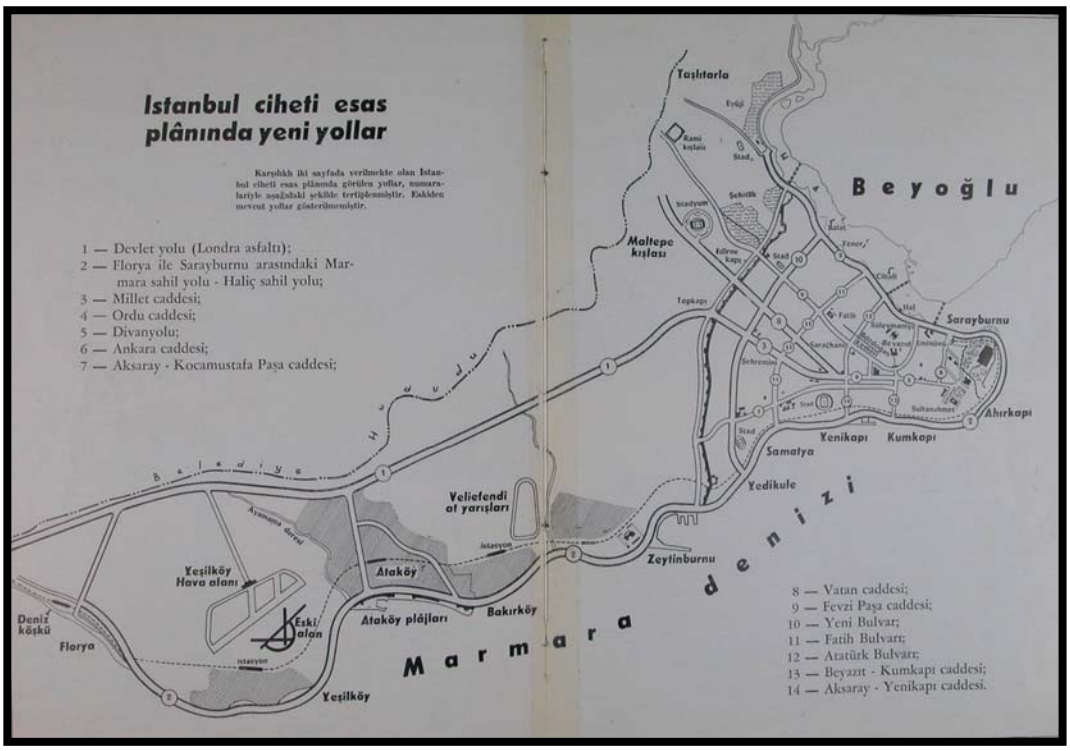

Figure 4.18: The road network constructed during Menderes period (Istanbul'un Kitabı, 1957, no page). The new road along seashore on the Marmara coast was constructed as a motorway on land fills at the foot of former fortifications. After the 1950s, the motor vehicle transportation started to increase in Istanbul which necessitated the construction of new arteries.

Figure 4.19: The demolitions of the Fish Market while opening the Unkapanı-Eminönü Road (İstanbul'un Kitabı, 1957: 59). The south-western and northern sides of the Square were changed by the demolitions. The new voids on the Square could not provide the continuity of the edges of the buildings. It lacked of providing the sense of enclosure.

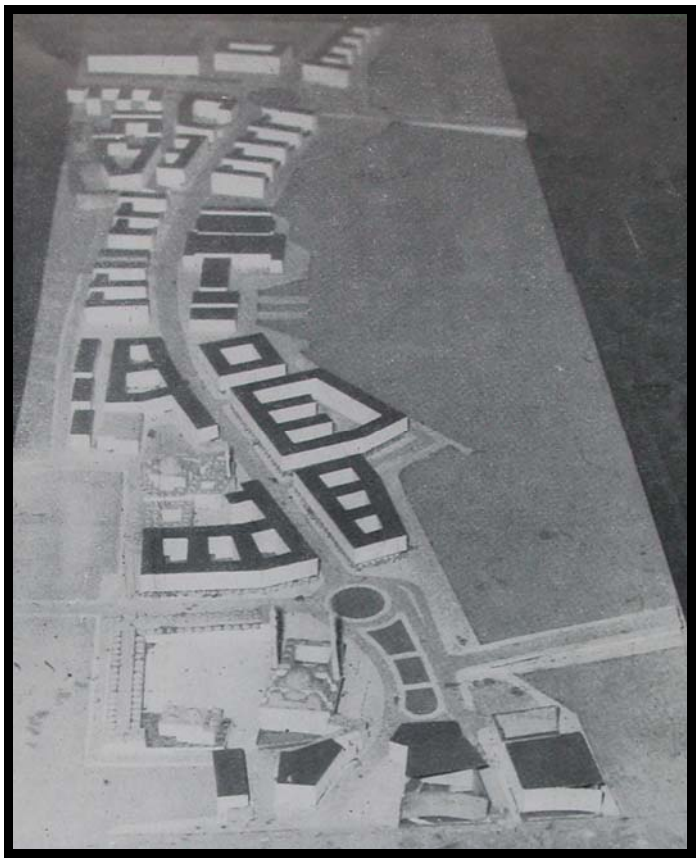

Figure 4.20: The model of the Square and the Eminönü-Unkapanı Road (İstanbul'un Kitabı, 1957: 65). The model shows well-defined boundaries for the Square. The main road keeps its curvilinear shape. The proposed urban blocks on the shore are different from the fabric of former *kapans*. However, the mutual relation between the urban blocks and the street network is still provided well-defined urban spaces. Unfortunately, the project executed differently which resulted undefined urban voids in the structure of Eminönü Square.

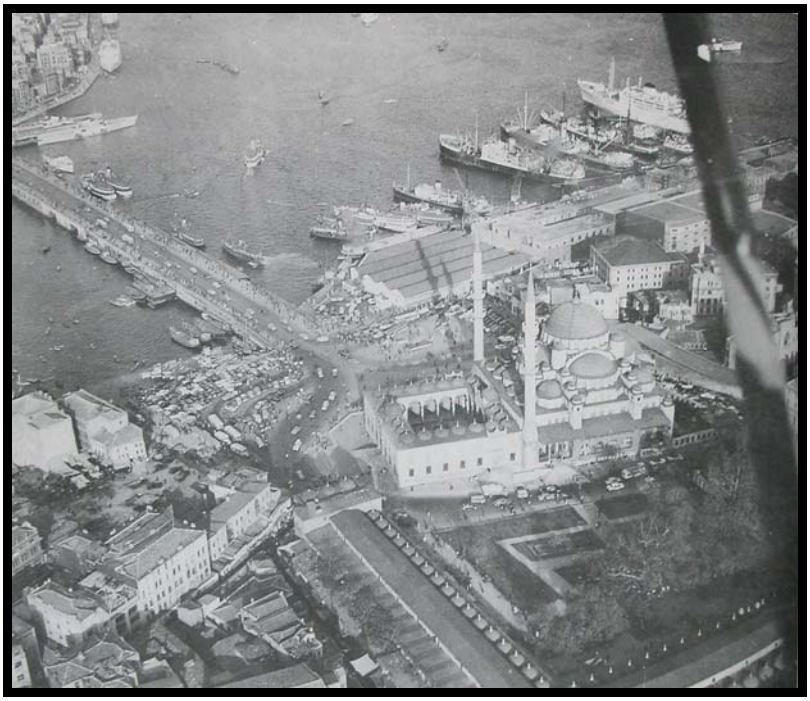

Figure 4.21: the Eminönü Square before the demolitions of Menderes (Şehsuvaroğlu, 1999: no page). The edges of the buildings provide well-defined boundary. The Mosque was the principal vertical element while the other buildings provided horizontal composition on the Square.

Figure 4.22: the Eminönü Square after the demolitions of Menderes (Şehsuvaroğlu, 1999: 159). The new openings on the western side of the Galata Bridge interrupt the continuity for defining the edges of the Square.

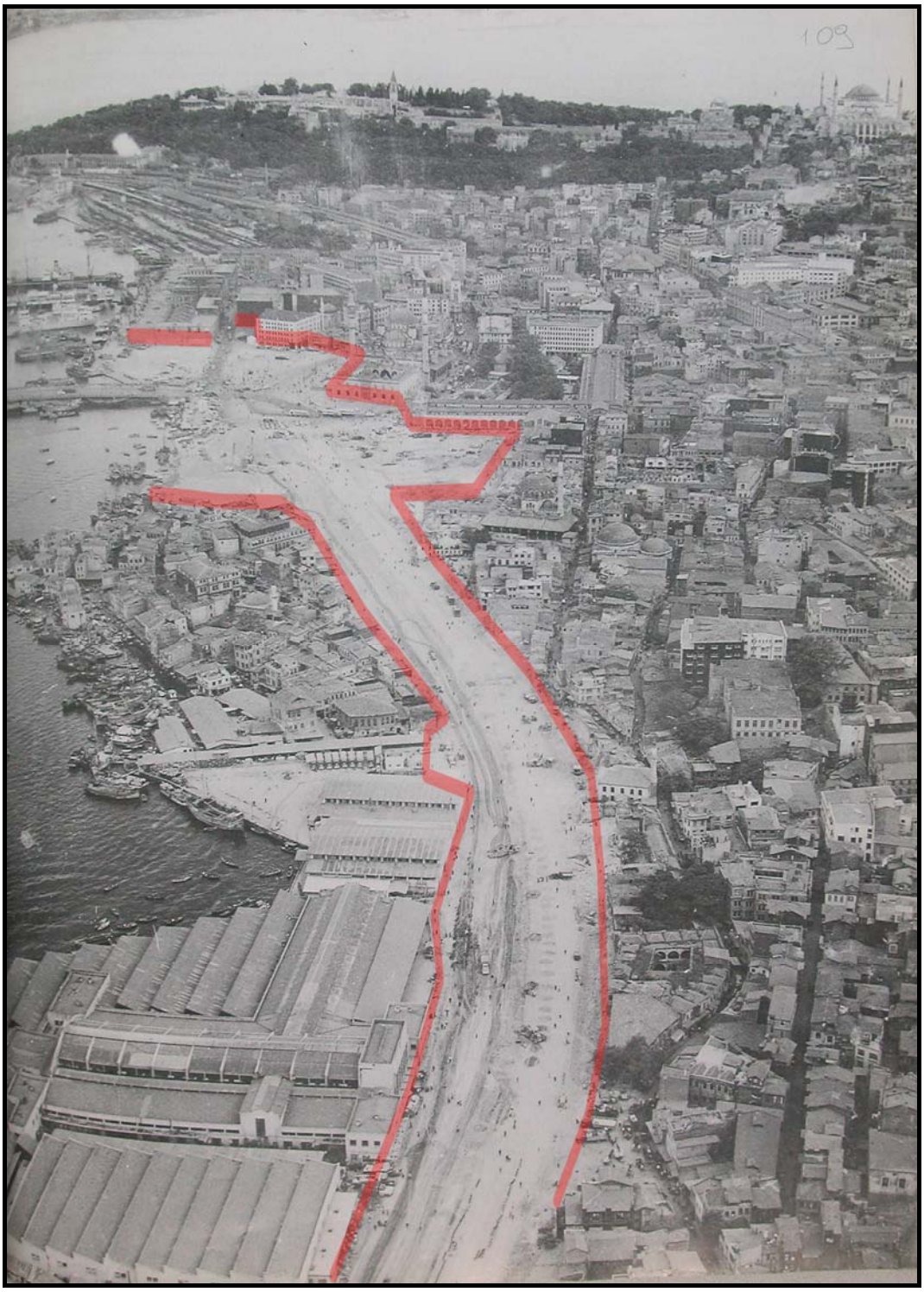

Figure 4.23: The opening of Eminönü-Unkapanı Road in the time of Menderes operations (Şehsuvaroğlu, 1999: no page). The edges of the urban blocks could not provide definite boundaries. The wide openings on the western side let the eye move out of space. The vertical and horizontal relations were also not satisfying harmony.

Figure 4.24: The warehouses that constructed near the Unkapanı Bridge (Kıyıcı, 2004, private archives). The constructions were totally changed the urban fabric on the eastern side of the Unkapanı Bridge.

Figure 4.25: The map of 1960 (Atatürk Library Map Archives, the map of 1960). The custom house is still in situ in 1960s. The Balıkpazarı district was already demolished.

4.4. THE REGIONAL PLANNING PERIOD, 1960-1966

1958-1960 was the period when the planning of Istanbul was undertaken by the Bank of Provinces (*İller Bankası*), the Directorship of the Planning of Istanbul and the works of Prof. L. Piccinato. The works were called '*Geçit Devresi Nazım Planı*' (Transition Period Master Plan) (Duranay, Gürsel, Oral, 1972: 87-93). A program for the year of 1961, 1962 and 1963 was prepared. The program includes the analyses, the maps and the regional/metropolitan planning concepts (Duranay, Gürsel, Oral, 1972: 95-100). Piccinato's Plan was important with its decision for the adoption of a development model for Istanbul from radial-concentric to linear. According to Özdeş (1988: 186) it helped the protection of Historical Peninsula from urban collapse and the problem of transportation.

In 1964, the 'Development Plan of Intra-Mural Istanbul' (*Istanbul Sur İçi İmar Planı*) was prepared. It aimed to protect the Historical Peninsula from the pressure of development. It included zoning concept. It is also known as *'Istanbul Kat Nizamları Planı'* (Figure 4.26). The plan separated the Historical Peninsula into six decision zones.

The traffic was changed on the Unkapanı area in 1960s (Erkal, 2001: 256). New additional Fruit Market buildings were constructed between this point and older market buildings. The customs and market buildings in the Ottoman period in between Eminönü and Unkapanı were to be replaced by a Fruit Market (Erkal, 2001: 256). These changes affected the relations of commercial activities in Eminönü.

In 1960s, Istanbul Trade Centre *(ITO)* was built near the New Fruit Exchange (Erkal, 2001: 256). In 1963, an architectural competition was opened which included the area between the New Fruit Market Building and Eminönü. The competition project was not executed. Besides, the western part of *Yemiş* area was demolished. The existing fabric of Yemiş-Zindankapı area was preserved until 1980s (Erkal, 2001: 256) (Figure 4.25). The ITO building is an important building which defines the edge of the north-western side of the Eminönü Square.

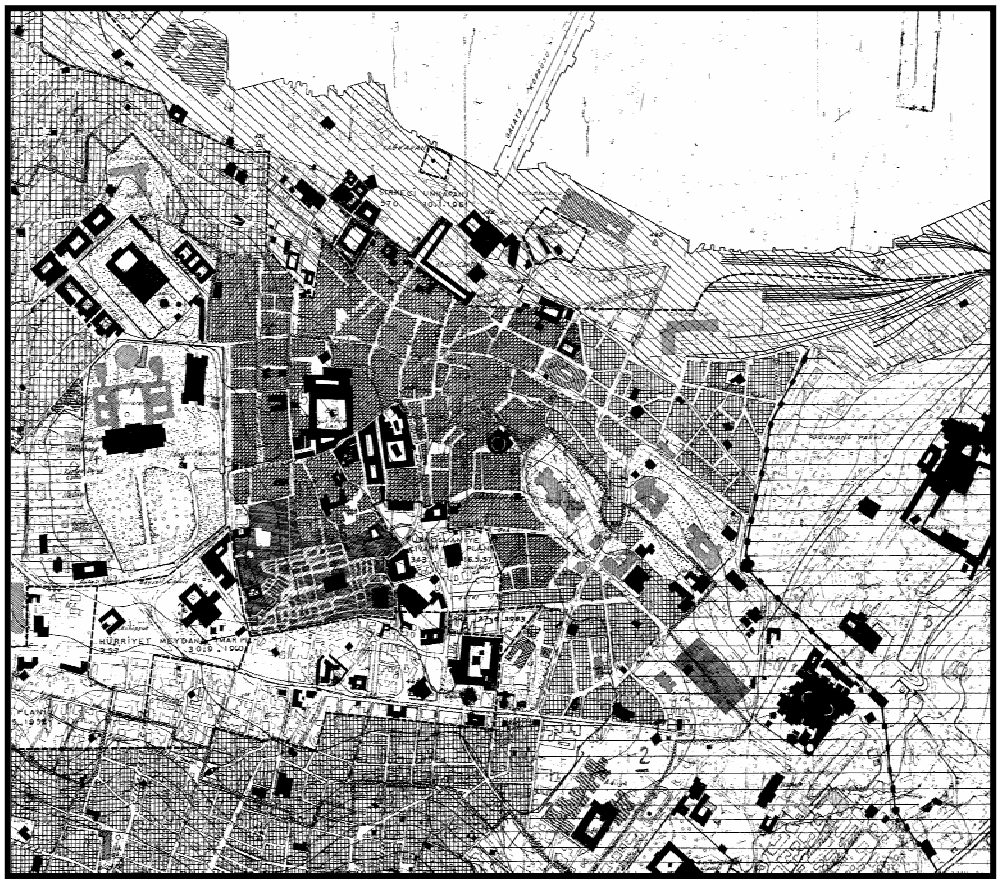

Figure 4.26: The 'Development Plan of Intra-Mural Istanbul' of 1964, with special focus on Eminönü district. (Istanbul Greater Municipality, 2004)

4.5. THE METROPOLITAN PLANNING PERIOD, 1966-1990s

In 1966, 'Master Planning Office of Greater Istanbul' (*Büyük Istanbul Nazım Plan Bürosu)* was founded. Again, in this year, the plan of industrial areas was approved for preventing the development of irregular industry (Duranay, Gürsel, Oral, 1972: 103-104). In Prost plan, Haliç was defined as an industrial zone. In 1955, the plan made by 'the Commission of Consultants' froze the development of the industry in Haliç. However, In 1960s, a rapid industrialization was seen around Haliç. Erkal (2001: 257-258) mentions the public use and access were minimized by the industry around the Haliç shores.

In 1971, 'Master Planning Office of Greater Istanbul'[4] included Gebze within the Greater Istanbul Metropolitan area. The office prepared the plan in 1/25000 scale. According to the Metropolitan plan, the plan for the Historical Peninsula in 1/5000 scale was prepared as a tourism and historical center (Cansever, 1993: 58)

For Cansever (1993: 58), the Greater Metropolitan plan of Istanbul could not produced anything between 1975 and 1980. However, the plan with its main aspects was the most comprehensive plan until this time.

Again in 1980, Metropolitan Plan of Istanbul in 1/50.000 scale was approved ("Planlama", Dünden bugüne Istanbul: 272).

1980s urban operations marked yet another period of transformation for Istanbul, including Haliç. Under the leadership of the Mayor Bedrettin Dalan, major projects were undertaken. One of the most radical projects of the period was to clear the banks of Haliç from the industrial uses (Hamamcıoğlu and Yerliyurt, 2005). The building stock that formed the industrial heritage was all torn down and the whole shoreline was turned into a green area. The Golden Horn Culture Valley Project that was prepared by the Metropolitan Municipality of Istanbul includes museums, art and exhibition facilities (Hamamcıoğlu and Yerliyurt, 2005). While in the picture of 1986, the Fruit Market (*Hal)* buildings are seen, in the picture of 1987 the Fruit Market buildings area was turned into open green area (Figure 4.27, 4.28). The traditional fabric of the shores of Haliç was totally disappeared.

Yemiş İskelesi and its surroundings were thoroughly demolished by the operations of Dalan in between 1984 and 1989 (Kuban, 1993a: 163). The whole shore was cleaned except from the *Zindan Han*, *Ahi Ahmet Çelebi Mosque*, some parts of the City Wall and the *Değirmen Han*. Not only the historical heritage was lost but also not supported by a diversity of other functions, the area was turned out to be a huge "no man's land" (Kuban, 1993a: 163). The only positive effect of the project is that it cleared Haliç from

[4] See for the details, 'Büyük İstanbul Nazım Plan Bürosu 1971-1972 Çalışmaları', 1972, *Mimarlık*, Volume7.

further pollution. The Eminönü Square started to turn into a traffic square. It lost its characteristics by the construction of the new Galata Bridge and the Unkapanı road. It also lost its conjunction between the central business district and the sea (Kuban, 1993a: 163).

Pedestrian bridges and a new area were constructed in the 1980s at the Eminönü Square (Figure 4.29). The western side of Mısır Çarşısı, new commercial buildings like Gima, Migros etc. emerged (Figure 4.30). The southern boundary of the Square was defined by these buildings.

In 1990, Historical Peninsula Conservation Development Plan of Istanbul was prepared by Prof. Dr. Gündüz Özdeş (Figure 4.31). The Historical Peninsula is described according to the elements which represent the image of the city in conformity with K. Lynch's cognitive model. The "image map" of the Historical Peninsula in the report shows the relation between districts. *Sahil yolu, Fevzi Paşa, Vatan, Millet, Ordu* Avenues and *Atatürk Boulevard* are the important *paths* of the Historical Peninsula. They are the channels along with the observer moves around. *Sahil yolu* is the important path because of the power of its visibility and connectivity with other parts of the city. The road has definite connectivity with the shore and the inner part of the city. The jetties and the stations along the road give sense of scale. Besides, Yedikule, Aksaray, Sirkeci, Eminönü, Unkapanı and Ayvansaray give more broad sense of scale for the decision point of the changing path (Özdeş, 1988: 39-41).

The Historical Peninsula is limited by the sea with Haliç and Marmara coasts and from the land with the fortification between Yedikule and Ayvansaray (Özdeş, 1988: 42). They are the primary *edges* of the Historical Peninsula. Yeni Cami, the Galata Bridge, the Fish Market, Mısır Çarşısı are the landmarks of the Eminönü Square. The Eminönü Square is one of the strategic spots in the city. It is the node of transportation systems and of activities (Özdeş, 1988: 43).

The Topkapı Palace, the district of Khans, the Sirkeci-Eminönü area, Sultanahmet, the Grand Bazaar have different characteristics. The dense

build-up areas, the density of activities give different characteristics to the Eminönü district (Özdeş, 1988: 117).

When the central business axis has shifted towards Sirkeci, Karaköy, Beyoğlu, Şişli and Levent, the Historical Peninsula lost its characteristics at a certain extent. Besides, the Peninsula has kept its central business district character with its commercial, industrial, storage and administrative activities. However, removing industry from the Haliç shores and the wholesale commercial, storing and small manufacturing facilities from Unkapanı, Eminönü-Sirkeci, Beyazıt-Yenikapı outside the Peninsula has changed central and commercial functions of the Historical Peninsula. It has started to transform into a cultural-commercial-tourism centre (Özdeş, 1988: 117). The area at the back of Sirkeci-Eminönü is specialized in commercial and central functions.

The plan of Eminönü in 1/500 scale shows the existing condition of the Eminönü Square and its surroundings at the beginning of 1990s (Figure 4.32). The *dolmuş* stops, the underground passages from the old fish market towards the west of Mısır Çarşısı, and pedestrian bridges from the west of the Galata Bridge towards the old building land of the 1960s has seen on the left side of the Galata Bridge.

From west to east, Paşabahçe-Beykoz Jetty, Çengelköy Jetty, Üsküdar Jetty, Kadıköy Jetty, Sirkeci-Harem Car Ferry Jetty, Sirkeci Jetty and the Prince Island Jetty are located on the east of the Galata Bridge. On the northern side of Yeni Cami, underground passages, pedestrian bridges and bus stops are situated (Figure 4.32).

The fifth Galata Bridge was built by the construction company STFA – THYSSEN exactly on the same place of the previous bridge, between Karaköy and Eminönü, and was completed in December 1994 (Evren, 1994: 178). It is a bascule bridge, which is 490 m long with a main span of 80 m. The deck of the bridge is 42 m wide and has three vehicular lanes and one walkway in each direction (Evren, 1994: 180).

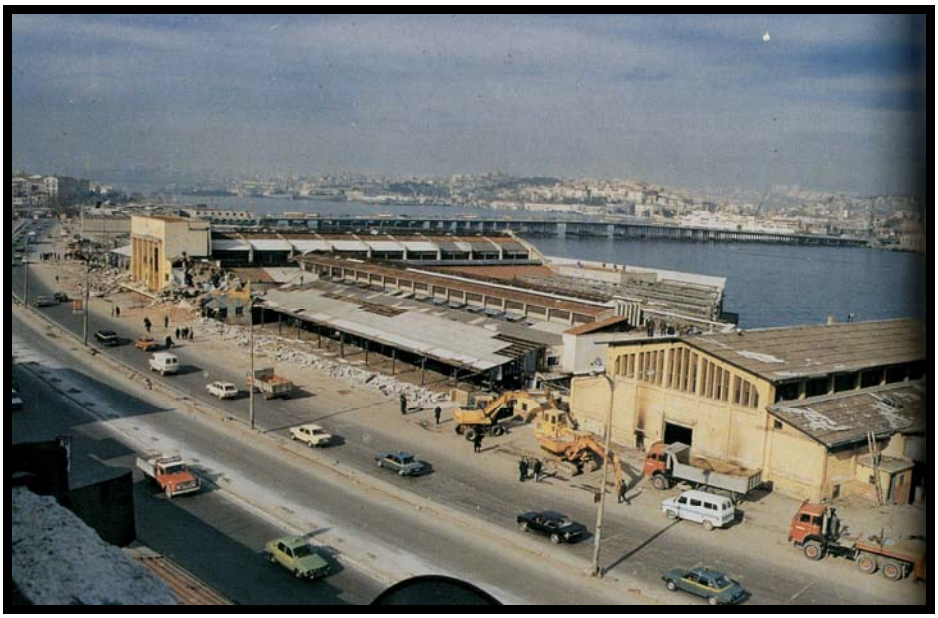

Figure 4.27: The Fruit Market Buildings (*Hal* Buildings) of 1986. (Kıyıcı, 2004, private achieves)

Figure 4.28: The Fruit Market Buildings (*Hal* Buildings) of 1987 (Kıyıcı, 2004, private achieves). The area turned into a green space. The traditional fabric of the Haliç shores was totally disappeared by the operation of Dalan.

Figure 4.29: The Eminönü Square in 1980s, the pedestrian bridges, the parking lots on the both sides of the road are seen (Kıyıcı, 2004, private archives). The commercial shops and the bus stops on the western side of Mısır Çarşısı acted as a border that provide well defined boundary for the Square.

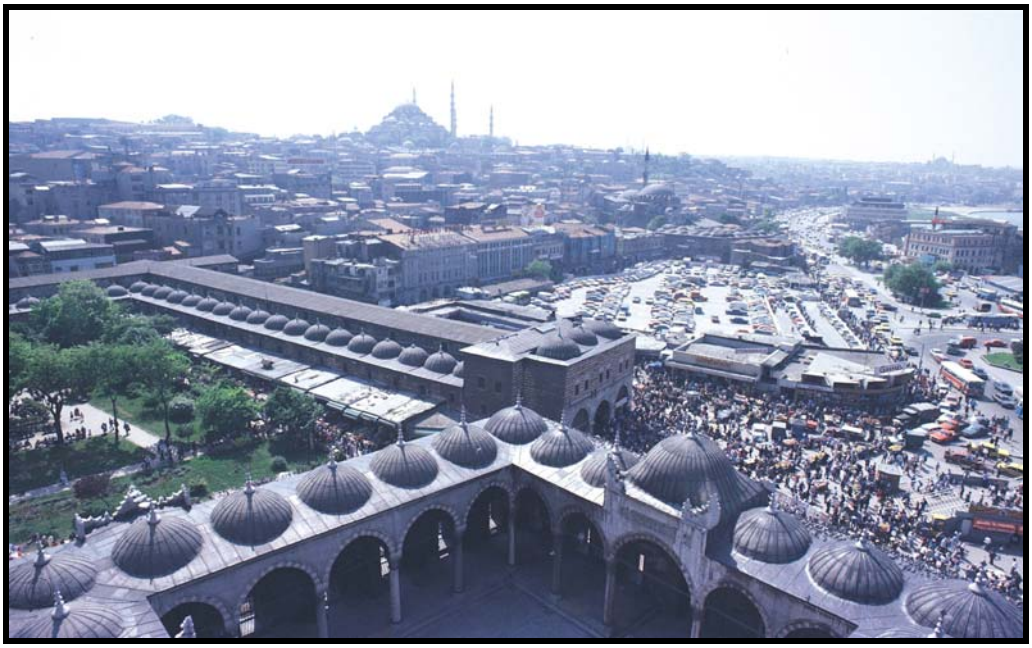

Figure 4.30: The Eminönü Square in 1980s (Kıyıcı, 2004, private archives). The shops like Gima, Migros etc, which define the western side of Mısır Çarşısı, and the pedestrian bridges increased the congestion of Square.

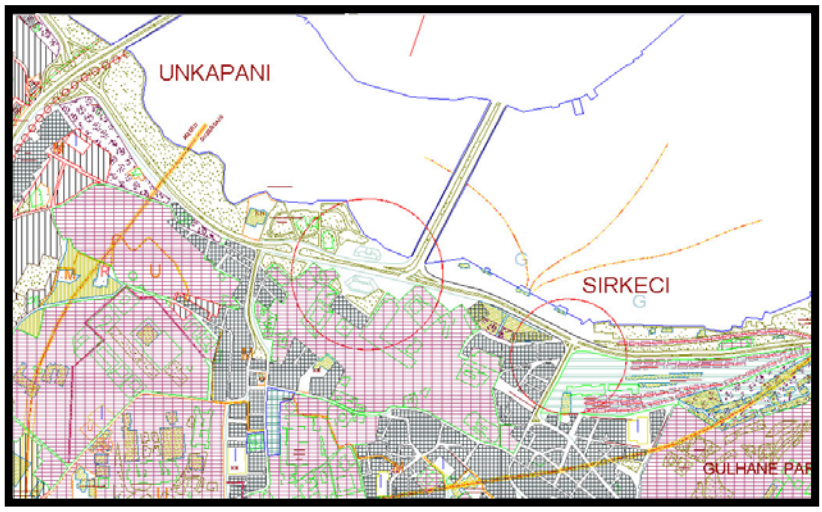

Figure 4.31: The plan of Historical Peninsula of 1990 by Özdeş (Istanbul Greater Municipality, 2004). The Eminönü Square and its surroundings are marked as first degree protected area and commercial district. The Haliç shores from the Unkapanı Bridge to Sarayburnu are marked as recreational areas.

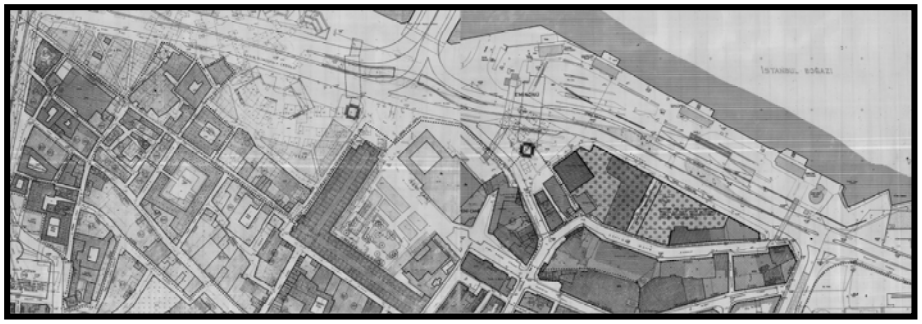

Figure 4.32: The plan of the Eminönü district of 1990 by Özdeş in 1/500 scale (Istanbul Greater Municipality, 2004)

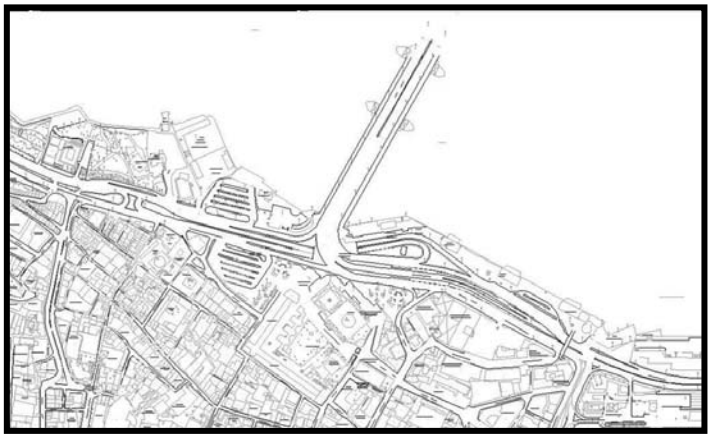

Figure 4.33: The map of 1996 (Istanbul Greater Municipality, 2004). The roads, the bus stops, the metro stops, the steamer jetties, the Galata Bridge and the pedestrian under passages create transportation nodes in the Eminönü Square.

The map of 1996 shows recent state of the Eminönü Square before the urban design project that realized in 2000s. The bus stops that occupied the square can be observed from the map of 1996. They were concentrated on the western side of the Galata Bridge and at the opposite side across the road (Figure 4.33). The roads, the bus stops, the metro stops, the steamer jetties, the Galata Bridge and the pedestrian under passages create transportation nodes in the Eminönü Square.

The historical peninsula was listed by 'the Board of Istanbul for Preservation of Cultural and Natural Entities of number 1' in 1995 as Urban, Historical and Archaeological Area (The report of the Conservation Plan of Historical Peninsula, 2005). The plan of 1990 for the historical peninsula was cancelled in 1994 with the objection of the ITU Faculty of Architecture. The plan in many ways was not in accord with the Metropolitan Plan of Istanbul and its density decisions for the peninsula etc. (The report of the Conservation Plan of Historical Peninsula, 2005).

4.6. RECENT DEVELOPMENTS IN EMİNÖNÜ SQUARE AND ITS SURROUNDINGS

The project of Eminönü Square was put out to tender by the Istanbul Municipality in 2001. It was one of the package projects in the Culture Valley Projects. The *Proje Mimarlik Müşavirlik Ltd Co.* prepared the project. The project finds the traffic problem as the most important point. It aims to make the square a pedestrian square. All vehicle traffic, the stops and the tramways are taken underground (Sağdıç, 2002: 44). The stops are designed on the most suitable point for both pedestrian and vehicle traffic. Haliç shores is designed as the cultural, recreational and tourism district. Besides, the Galata Bridge is thought to be the pedestrian connection, recreation and tourism area between the Square of Eminönü and Karaköy (Sağdıç, 2002: 48). The main objective of the project is to obtain uninterrupted the pedestrian circulation between the Sarayburnu and Unkapanı shore road (Sağdıç, 2002: 48). It also aims to remove the IETT bus stops from the square and the shoreline. The bus stops not only occupied wide area but

also make environmental pollution (Sağdıç, 2002: 48). The project maintains the maritime transportation systems between the two sides of Haliç for making the maritime transportation as important as before (Sağdıç, 2002: 48).

To obtain a rhythmic continuity between the open green areas, to arrange the green areas not to obstruct the historical buildings and the city silhouette, to afforest the hard ground areas for the pedestrians are another aims of the project (Sağdıç, 2002: 48, 56). The project also aims to clear additional buildings from the historical buildings (Sağdıç, 2002: 48, 56).

The project has similarities with the Prost plan as it clears the buildings between Yeni Cami and Mısır Çarşısı and aims to capture different perspectives (Sağdıç, 2002: 48, 56).

Figure 4.34 and 4.35 shows the project of the Square that is prepared by the *Proje Mimarlik Müşavirlik Ltd Co.* The *Zindan Han*, *Ahi Ahmet Çelebi Mosque*, the *Değirmen Han* and ITO (now İstanbul Commercial University) are marked as the buildings to be preserved on the Haliç shores. The old *Yemiş* İskelesi quarter is designed as the hard ground area. The old Fruit Market *(Hal)* Buildings area and the depots of Unkapanı buildings area are completely designed as the open green public areas in the project.

Figure 4.36, 4.37 and 4.38 shows the present condition of the Eminönü district. The urban design project is not completely realized. Only the bus stops areas on the west of Mısır Çarşısı are removed and arranged as hard ground area of the Square.

The last Conservation Plan of Historical Peninsula was approved at the beginning of 2005 (Figure 4.39). The Eminönü district which was planned as the secondary commercial centre been the commercial centre throughout the history (The report of the Conservation Plan of Historical Peninsula, 2005). The whole shore is planned as open areas for public use. The western side of the bridge generally consist of green areas. While the eastern side of the Bridge consist of open areas that are related with the jetties (The report of

the Conservation Plan of Historical Peninsula, 2005). The urban design project of 2001 is taken into consideration in the plan. Though, the project is not completely realized yet.

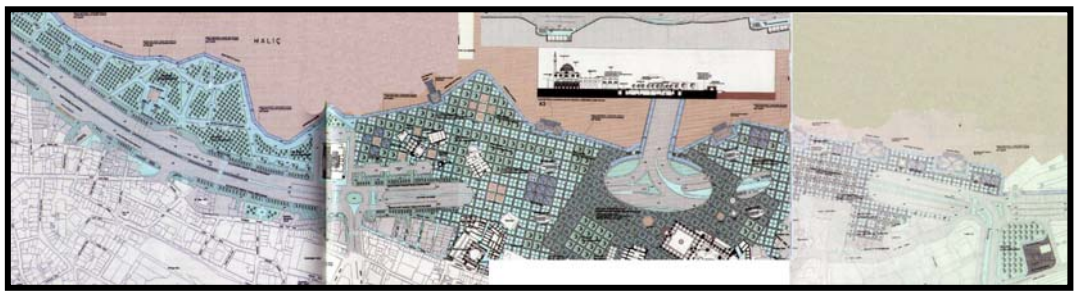

Figure 4.34: the project of the Eminönü Square from Unkapanı to Sirkeci (Sağdıç, 2003: 50, 51, 52). The project emphasizes the pedestrian circulation on the ground instead of underground. On the other hand, the boundaries of the Square cannot be providing sense of enclosure. The huge voids dominate the Square. The landscape elements are dispersed whole area of the Square that can stimulate the optional activities.

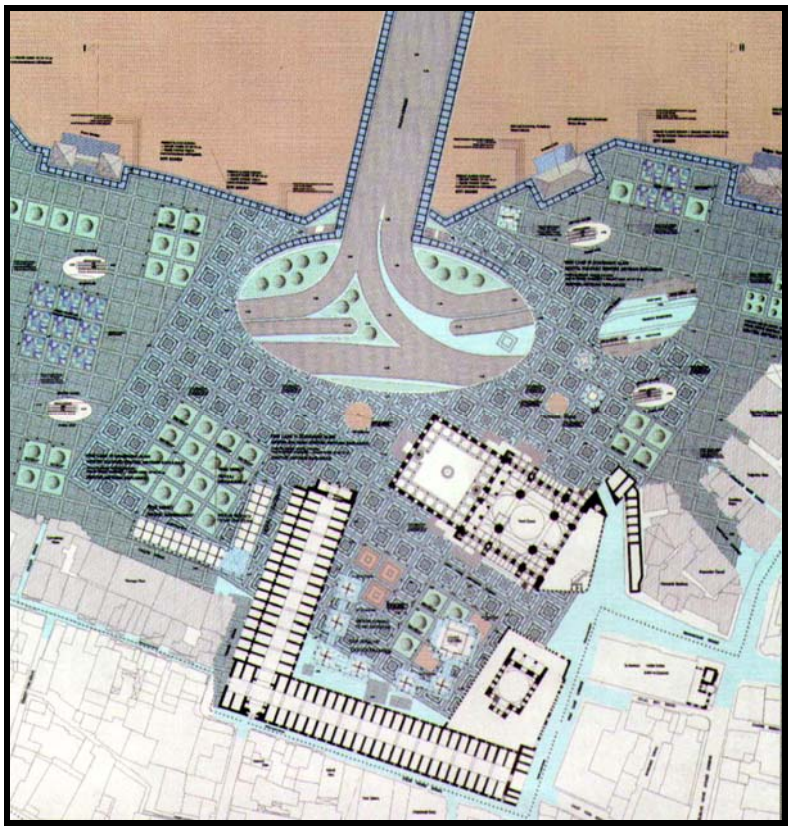

Figure 4.35: the project of the Eminönü Square (Sağdıç, 2003: no page). The northern, north-western and north-eastern sides of the Square cannot give sense of enclosure due to the lack of soft and hard landscape elements.

Figure 4.36: The south-western sides of the Eminönü Square in 2004. (Çin, 2004). The hard pavement materials with grey color stones separated the vehicular traffic from the pedestrian traffic. This part of the Square, which is lacked of landscape elements, is used as a passageway.

Figure 4.37: The Eminönü Square. (İstanbul, Eminönü, www.googleearth.com, 25.08.2005)

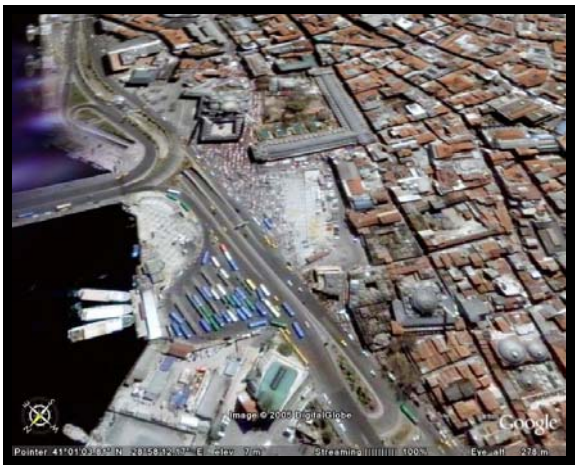

Figure 4.38: The Eminönü Square. (İstanbul, Eminönü, www.googleearth.com, 25.08.2005)

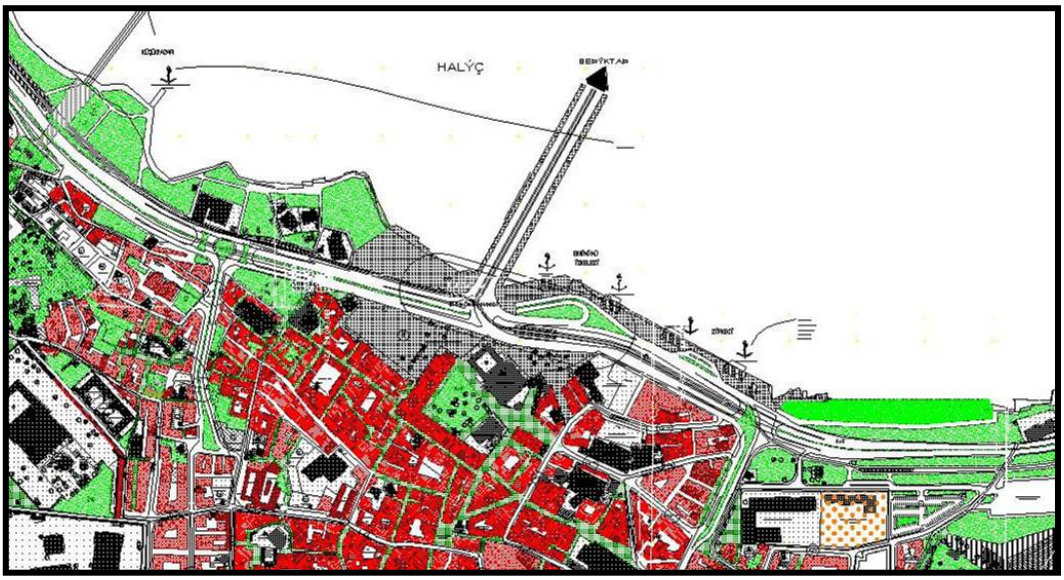

Figure 4.39: The Conservation Plan of Historical Peninsula of 2005, special focus on Unkapanı-Eminönü district (Istanbul Greater Municipality, 2005). The pedestrian flows on both sides of the Galata Bridge constitute two nodes on its both sides of the bridgeheads. The bus stops are removed from the area. The road is still acting as a border on both sides.

In this chapter, the transformations of the Eminönü Square are studied from the beginning of Republican era to the present time. The radical changes in Eminönü start with the Prost plan. The understanding of beautification and modernisation ideology of the Turkish Republic show itself on the Prost's works. With the demolition of the buildings, which were located on the line of the former fortifications, the *Harim* of the mosque was turned into a public space. Besides the physical changes, the social relations and activity customs started to change.

In continuity with Prost's projects, Menderes's operations marked the second step in the physical and social transformation of the Square. The widening of the Eminönü- Unkapanı road changed completely the appearance of the traditional Haliç shore removing jetties, market buildings etc.

In 1980s with Dalan operation, the Square and especially the Haliç shores were modified once more. It also brought a new land use concept to the Haliç shores.

Besides these “demolition-building” projects, a series of development plans, regional and metropolitan plans and conservation plans were prepared for Istanbul in different scales. All of them affected physical and social structure of the district in various degrees.

The Square has been a node of transportation and node of activities throughout the history and keeps on its mission today.

CHAPTER 5

THE SPATIAL ANALYSIS OF THE TRANSFORMATION IN EMINÖNÜ SQUARE

5.1. INTRODUCTION

In the previous chapters, theoretical frameworks for evaluating the quality of urban spaces and the historical background of the Eminönü Square and its surroundings have been discussed. The historical background of the Eminönü Square and its surroundings help us to understand the reasons of operations and to understand how they affected the quality of space. The operations on the Square, in parallel with the transformation of economic, social, political aspects gradually affected the urban public space. In this section, these aspects will be evaluated under three main components of the quality of space: urban form, urban activity and urban image referring to the categorization of J. Montgomery (2003: 4).

The analysis area is defined according to the edges of the Square today (Figure 5.1). The western side of the area starts from the Istanbul Trade Center (ITO) and ends with Denizcilik Bankası, Yalı Köşkü Street on the eastern side. Kutucular Street, Hasırcılar Street, Çiçekpazarı Street and Vakıf Han Street are forming the southern side of the boundary of the Square. The edge of buildings and surrounding urban plots are taken as the boundary of the study to understand the relation between the Square and surroundings.

In order to examine the change of the space quality in the Eminönü Square five base maps are used; the water addiction map of 1815, the map of 1882 by Ayverdi, the map of Pervititich of 1940s, the map of 1960, the map of 1996. The chosen maps show the formal changes on the Square before and

after the operations. In addition, photographs dated to the end of 1800s, beginning of 1900s, 1940s, 1950s, 1960s, 1980s and todays are used for the analysis.

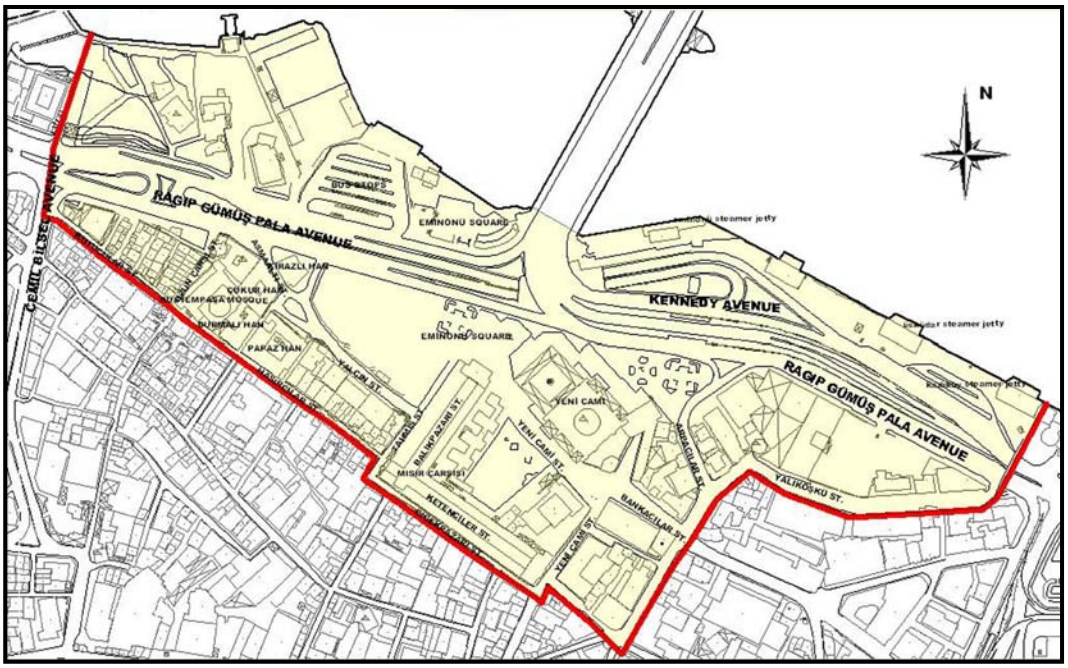

Figure 5.1: The boundary of the study area.

5.2. URBAN FORM ANALYSIS

Morphological analysis used for the formal analysis of the Eminönü Square. In this respect, the *figure-ground* and *linkage analyses* as two-dimensional types of analysis and spatial-visual analysis as a *three-dimensional analysis of built and open spaces* are studied.

5.2.1. TWO-DIMENSIONAL URBAN FORM ANALYSIS

5.2.1.1. Figure-Ground Analysis

Figure-ground analysis is a spatial diagram that defines and orders the urban structure (Trancik, 1986). It is used for determining the reciprocal relation between the urban solids and the urban voids.

The *urban blocks*, *building patterns, pattern of urban plots (parcel divisions)* and *public monuments* are taken as the components of urban solids for the figure-ground analysis. These urban solids also have a mutual relation to constitute the types of open spaces and geometry of open spaces. The *types of open spaces* and *geometry of open spaces* are taken as the determinants of urban voids for the figure-ground analysis. In this part of the analysis, urban voids and solids are examined with reference to these reciprocal relations.

a. Urban Blocks and the Network of Open Spaces

The network of open spaces determines the size of urban blocks as the size of urban blocks defines the configuration of open spaces. This reciprocal relation between the urban blocks and open spaces helps to figure out the boundaries of urban blocks and open spaces.

In ***the water addiction map of 1815***, the figures i.e. urban solids dominate the area (Figure 5.2). The urban blocks are generally full of buildings. They define five type of open space: the streets, the closed streets of Mısır Çarşısı and Yemiş Kapanı, the *harim* of the mosque, the courtyards[5] and the Eminönü Square (or the Gümrük Square as it was called in 1800s).

The urban blocks from the Bahçekapı to Zindankapı are elongated following the city walls. The walls and urban blocks obstruct the accession of streets to the waterfront. From the Bahçekapı to Zindankapı only three main streets, *Uzun Çarşı Street, the Balıkpazarı Kapısı Street of Mısır Çarşısı and Arpacılar Street* give access to the waterfront from the inner city. However, the narrow strip of land along the waterfront is divided into small blocks by a frequency of small streets perpendicular to the waterfront and the city walls. They give access to the jetties along the shore. It can be stated that the city walls and the jetties determine the reciprocal relation between the urban blocks and street network.

[5] The khan's courtyards are not clearly observed from the water addiction map. However, the gates drawn on the street façade of the buildings show this kind of courtyards schematically.

The city walls, Mısır Çarşısı and the türbe of Turhan Sultan (Turhan Sultan Türbesi) define the boundaries of the *harim* of the mosque in that period. The walls joined the market building at either end to enclose this irregularly shaped courtyard.

The square is on the southern side of the Gümrük Jetty. It is in the place of the Eminönü Warehouse of 1940s or the Eminönü Steamship Jetty today. The square was well-defined by its built boundaries. The edge of buildings defined the form of open space-*the square*.

In ***the map of 1882 by Ayverdi***, the figure dominant relation in the area can still be observed (Figure 5.3).

The sizes of urban blocks show similarity with the map of 1815 except the city walls, which had defined the mosque's *harim*, was demolished. New buildings replaced the walls yet they follow the line of the old city walls. Thus, they still define the boundary of the Mosque's *harim*. As mentioned above the urban blocks between the shore and the Balıkpazarı Street are small in size depending on the frequency of jetties and the density of activities. The urban blocks are still bigger in size on the southern side of the Balıkpazarı Street. The linear effect of walls can still be observed from this map.

The construction of the Galata Bridge did not change the morphological structure of the square much. The boundaries of the square are still well defined by the buildings around it. The Valide Han, the customhouse and many commercial shops constitute the boundary of the square. The square is situated on the eastern side of the Galata Bridge.

In ***the map of 1940 by Pervititich***, the solids started to loose their domination over the voids (Figure 5.4). The urban blocks have the same pattern from the Mısır Çarşısı to the western side of it as in the previous maps. The small size urban blocks along the shoreline and the elongated urban block on the southern side of the Balıkpazarı Street can still be observed from the map. A significant morphological change is seen on the northern side of the mosque. The Prost operations in the time of the mayor

Lütfi Kırdar have totally changed the structure of urban blocks on the Square. The buildings on the northern side of the mosque, the Valide Han, the Helvacı Street, the Balıkpazarı jetty and the Balıkpazarı street were demolished in this operation.

The position of the square is changed from the eastern side of the bridge towards the bridge. The Esseyhan, Osman Efendi Han on the western side, the Yeni Cami on the southern side and the Custom and the Eminönü Warehouse on the eastern side now surround the new square. The boundaries of the square are still defined by the edge of buildings.

The map of 1960 shows a completely different urban structure from the pervious maps (Figure 5.5). The operations undertaken at the time of Adnan Menderes radically transformed the urban fabric of the Eminönü Square. The buildings between Eminönü and Unkapanı are demolished except the *Hal* (Fruit Market Building) at that period. The Fish market (*Balıkpazarı)* disappeared by the opening of the road of Eminönü-Unkapanı in 1955-1956.

When the maps of 1940 and **1960** are compared, it can be observed that the buildings on the western side of the Galata Bridge are demolished until the Yemiş İskelesi Street. The buildings from Büyük Çukur Han to Mısır Çarşısı totally disappeared at that period. The warehouse on the eastern side of the Galata Bridge is also demolished.

The relation between the urban blocks and open spaces that mutually defined each other started to lose its well-defined characteristics. The gradually disappearing solid-void relations on the Square also affected the *sense of enclosure*. The short edges of the urban blocks at the western side of the area are not sufficient to provide definite boundaries for the square anymore. The area of the square is extended from the western side of the Galata Bridge to the southern side of the highway (Ragıp Gümüş Pala Avenue today).

In ***the map of 1996***, shows a further change in the solid-void relations of the area (Figure 5.6). The urban strip along the shore was completely cleaned by

the operations of Dalan in between 1984 and 1989. The Zindan Han, a part of the city wall-tower, Ahi Ahmet Çelebi Mosque and the Değirmen Han are the only buildings left on the western side of the Galata Bridge. The customs were also demolished and replaced by the traffic road. The western and eastern sides of the Galata Bridge, the northern side of Yeni Cami and the western side of Mısır Çarşısı have become large open spaces. These open spaces can be defined by a few remaining constructions anymore due to the lack of definite block edges.

When compared with the other maps the size of the urban blocks is not changed. However, the blocks that used to define the open spaces were completely cleared off turning the area into a huge void. Although the buildings i.e. the Mosque and the Mısır Çarşısı on the southern side of the square define three-dimensional boundaries, the buildings on the northern side of the road cannot provide solid boundaries. The roads and the buildings just constitute the outlines of the open urban spaces. As a result, when the maps of 1960 and 1996 are compared with those of 1815, 1882 and 1940s, the urban blocks are not defining the boundaries of open spaces, as successful as before the 1960s (Figure 5.7). It can be argued that today two-dimensional boundaries of roads constitute the form of the Eminönü Square rather than the three dimensional urban blocks. Moreover, the permanency of urban blocks cannot be observed anymore.

b. The Pattern of Urban Plots

The landownership pattern or parcel divisions are another determinant of urban structure. It provides the permanence of urban fabric through time. However, in this part of the analysis, only the pattern of 1940 and 2000's can be analyzed because of the lack of information for other periods.

The map of 1940 shows generally a pattern of small parcel division (Figure 5.8). Small building parcels and khans constitute the urban fabric. The customhouse building, Yeni Cami and the türbe of Turhan Sultan are distinguished by their size within the fabric. Generally, small, adjacent parcel divisions constitute continuous blocks at the northern side of the Balıkpazarı

Street. As mentioned above it obstructs the accession to the inner city from the shore. The buildings on the western side of the Galata Bridge were constituted of various small size urban blocks that provide space for a variety of activities. A frequency of streets provides accessibility with the southern and northern sides of these blocks. However, the custom buildings obstruct accessibility with their long big parcels on the eastern side of the Galata Bridge.

The demolition of *kapans* area, which formed an urban strip along the shore, and the custom buildings etc. formed large voids in the area. The parcel divisions are changed and turned into large un-built parcels that can be observed in the map of 1996 (Figure 5.9). This has obstructed the possibility of interaction. In addition, it changed the physical aspect of the area creating undefined open areas as mentioned above. In this context, it can be said that when the division of the parcels and the size of the urban blocks are small a diversity of activities can be attained. Shorter urban blocks enhance the street life by generating more streets to walk down and more opportunities to turn corners (Jacobs, 1961: 178).

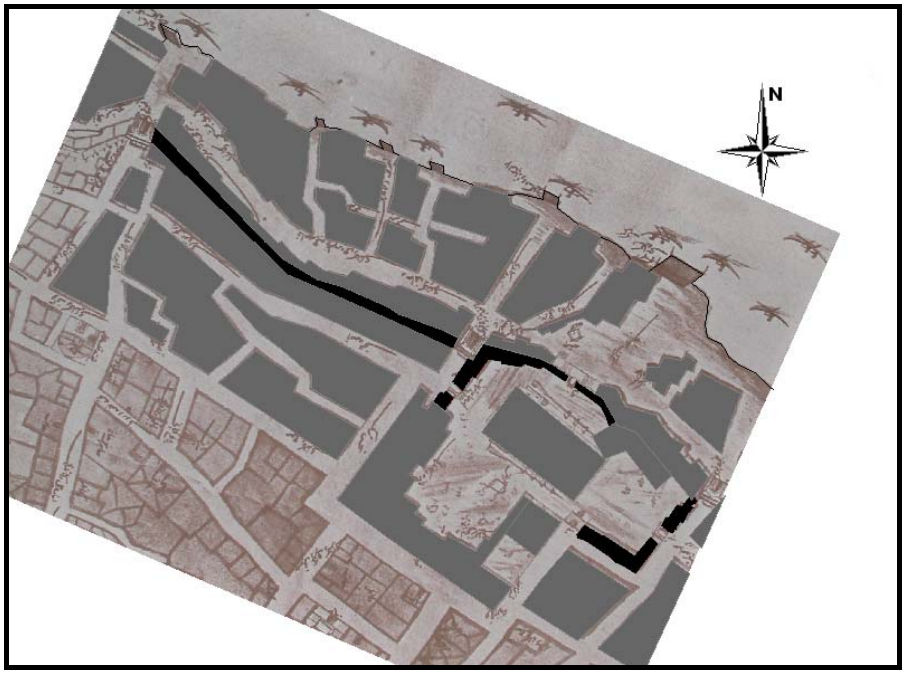

Figure 5.2: The urban solids in the water addiction map of 1815. The figures dominate the area and the Square.

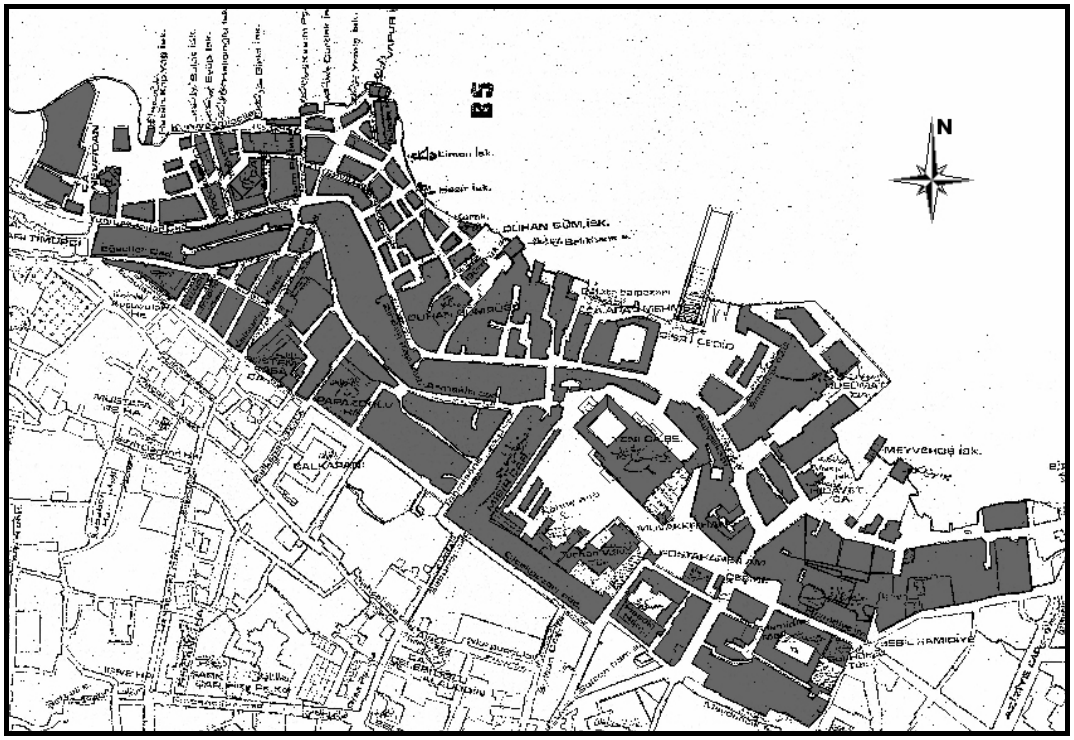

Figure 5.3: The urban solids in the map of 1882 by Ayverdi. The figures dominate the area and the Square.

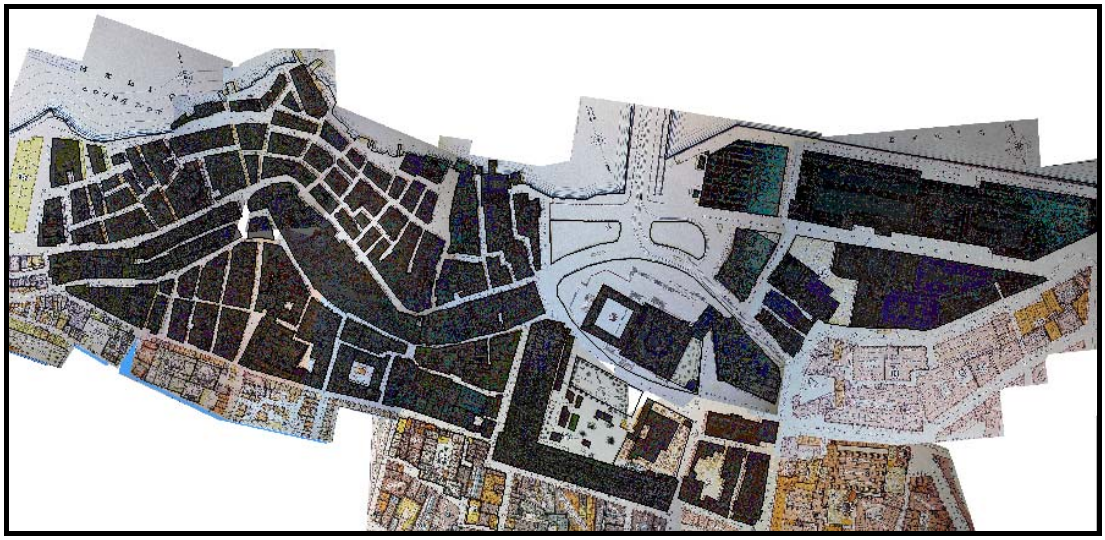

Figure 5.4: The urban solids in the map of 1940 by Pervititich. The figures dominate the area. However, the solids that determine the boundary or the edges of the Square are started to loose its domination over the voids.

Figure 5.5: The urban solids in the map of 1960. The domination of the figures is lost by the operation of Menderes. The gradually disappearing solid-void relation on the Square is affected the sense of enclosure.

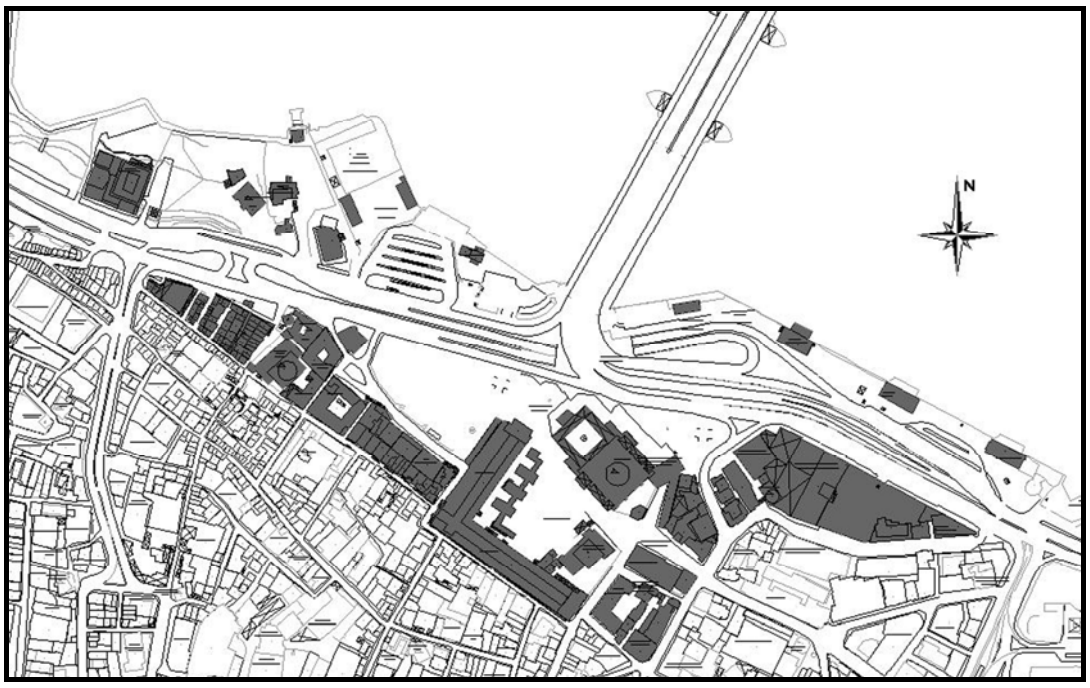

Figure 5.6: The urban solids in the map of 1996. The operation of Dalan cleaned the whole urban blocks on the shore except some buildings. The urban blocks cannot create the well-defined boundary for the Square.

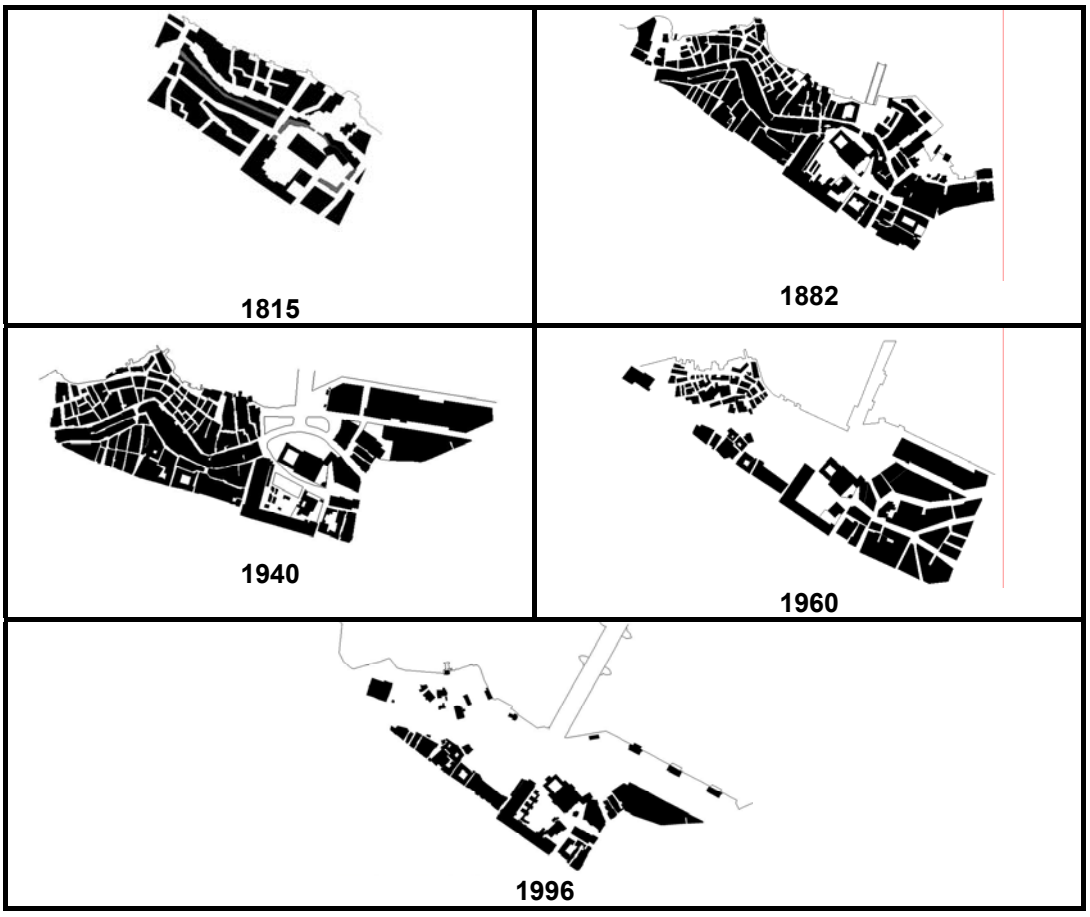

Figure 5.7: The urban solids in 1815, 1882, 1940, 1960 and 1996. The gradually disappearing of figure dominant relation can be observed from the figures.

c. Public Monuments

Primary public monuments have an important role in the formation of urban environment. They provide *continuity* and *permanence* in the city with their physical, historical, memorable values. In this context, primary elements or public monuments of the area are studied.

The Eminönü Square and its surroundings has always been a node of commercial, transportation, storage and religious activities in Istanbul all thoroughly its history. The buildings that reflect the diversity of the activity pattern have been concentrated on the area. The mosques, the khans, the banks, the post office, the baths, the stores etc. are these kinds of buildings.

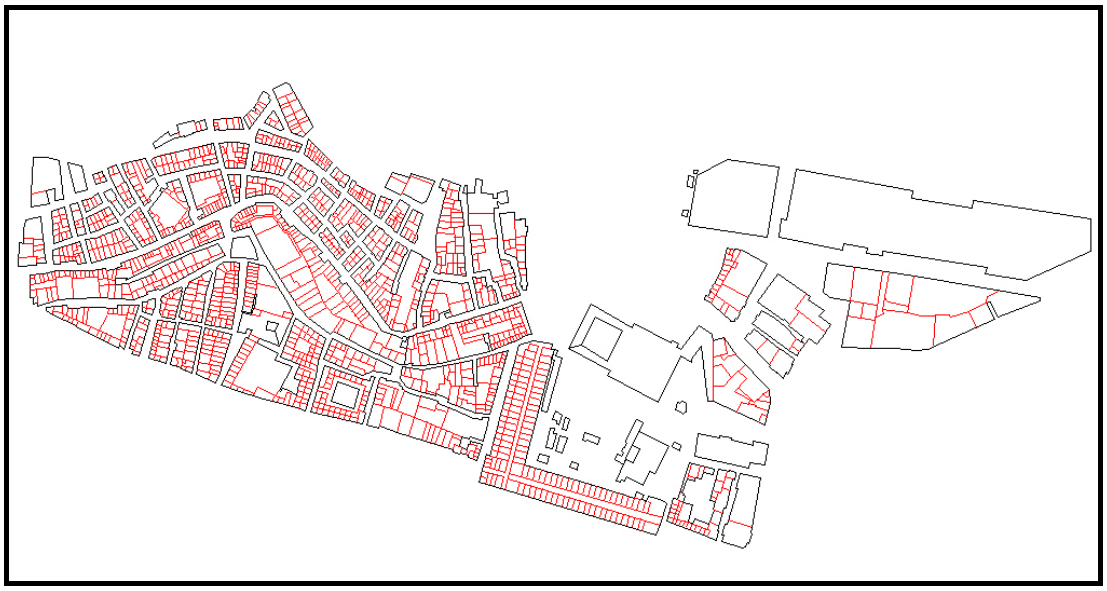

Figure 5.8: The pattern of urban plots in the map of 1940. The parcel divisions are generally small which satisfy the possibility and chance of getting into interaction. The shorter and small division urban blocks enable the street life. The parcel sizes enlarge through the Square. The square is defined mostly single parcels.

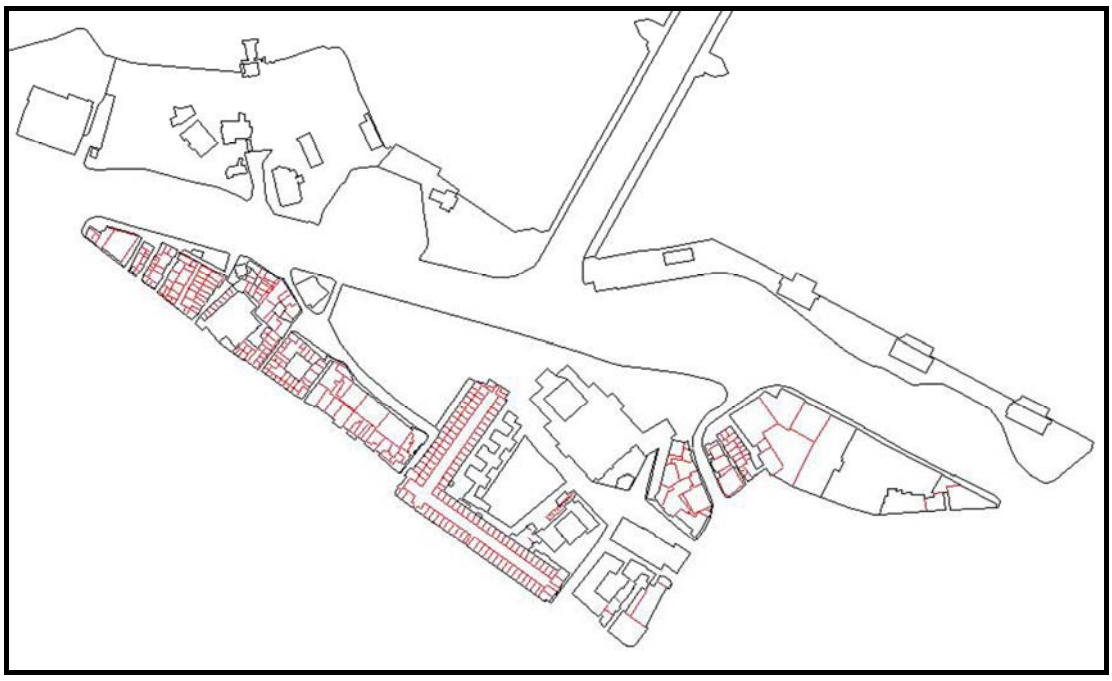

Figure 5.9: The pattern of urban plots in the map of 1996. The demolition changed the urban block pattern in the area. The small parcel divisions keep its structure on the western side of Mısır Çarşısı. The big un-built urban blocks determine the urban space.

It can be observed from the map of 1815 that, the city walls and gates, the customhouse, Yeni Cami, Mısır Çarşısı, the türbe of Turhan Sultan, the Sultan's Kiosk, the Haseki bath, Ahi Ahmet Çelebi Mosque, Zindan Han, Rüstempaşa Mosque, the fish market, the many khans are the public monuments of the period (Figure 5.10).

The map of 1882 shows almost the same public monuments except some parts of the city walls. The customhouse, Yeni Cami, Mısır Çarşısı, the türbe of Turhan Sultan, the Sultan's Kiosk, the Haseki bath, Ahi Ahmet Çelebi Mosque, Zindan Han, Rüstempaşa Mosque, Balkapanı han, Papazoğlu Han, The Hidayet Mosque, the fish market can be observed on the map of 1882 (Figure 5.11). The muvakkithane was built on the southeastern corner of the mosque. The post office (the *postane-i amire*) was built in the place of courtyard walls of the Mosque. The Galata Bridge is also another public monument of the period. The buildings on the northern side of Mısır Çarşısı extended towards the Yeni Cami gate of the bazaar.

The map of Pervititich shows a few differences from the map of 1882 with respect to public monuments (Figure 5.12). On the southeastern side of the mosque, the courtyard walls and gates were completely demolished and in the place of the *postane-i amire*, the İş Bankası is built. The fish market still exists.

On the map of 1960, the same public monuments on the southern side of the road can be observed as well as on the map of 1996 (Figure 5.13 and 5.14). It can be interpreted that the small sized buildings with no historical value were demolished.[6] The monumental, historical buildings could persist until today.

To conclude, it can be said that the structural relationship between the public monuments and the urban form almost continued until the 1960's. Menderes and Dalan operations completely changed the urban form and public

[6] In this context, the expropriation of the private property is the easiest way of demolition. At least, it easier to expropriate private property than the foundation property.

monument relation in the area especially on the shoreline. The public monuments, Ahi Ahmet Çelebi Mosque, The Zindan Han, a part of city wall and the Değirmen Han, on the northern side of the road became dispersed self-standing buildings in the area. The relation between the buildings and the urban fabric in the 19th and the beginning of 20th century has totally disappeared. Yeni Cami, Mısır Çarşısı, the Sultan's kiosk, the türbe, the adjacent buildings of the Bazaar, the Rüstempaşa Mosque, Çukur Han, Papaz Han, Kirazlı Han and Burmalı Han are the only buildings that continue to define the form of the area and provide permanency. In addition, until the 1940s the customhouse, the Valide Han and the commercial shops in front of the city walls as well as the mosque were located in relation with the formal arrangement of the Eminönü Square. After the 1940s, Yeni Cami, Mısır Çarşısı, the kiosk and other buildings remained as single buildings that hardly define the form of the Square.

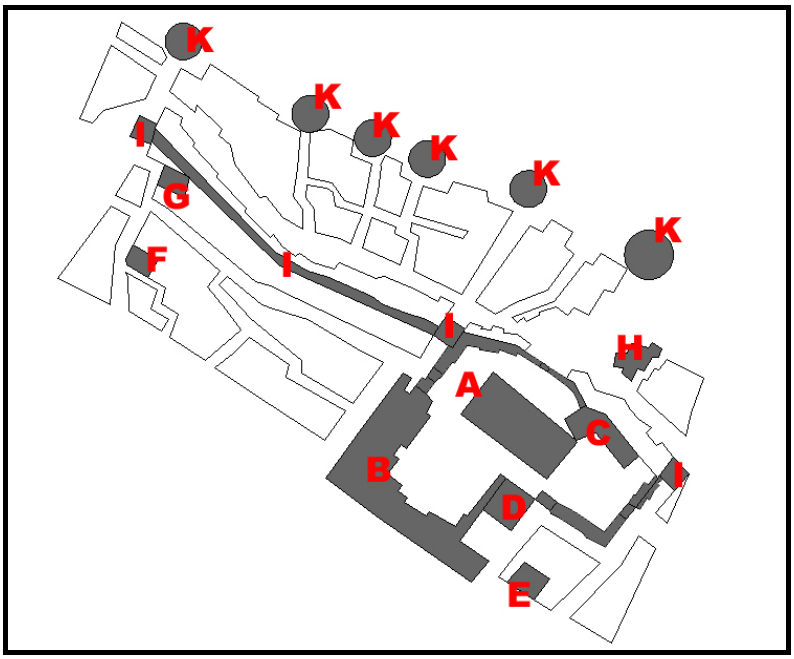

Figure 5.10: The public monuments in the 1815. (A-Yeni Cami, B- Mısır Çarşısı and its adjacent buildings, C- the Sultan's Kiosk, D- the tomb, E- the Haseki Bath, F- the Rüstempaşa Mosque, G- the Zindan Han, H- the Custom house, I- the City Walls and Gates, K- the jetties.)

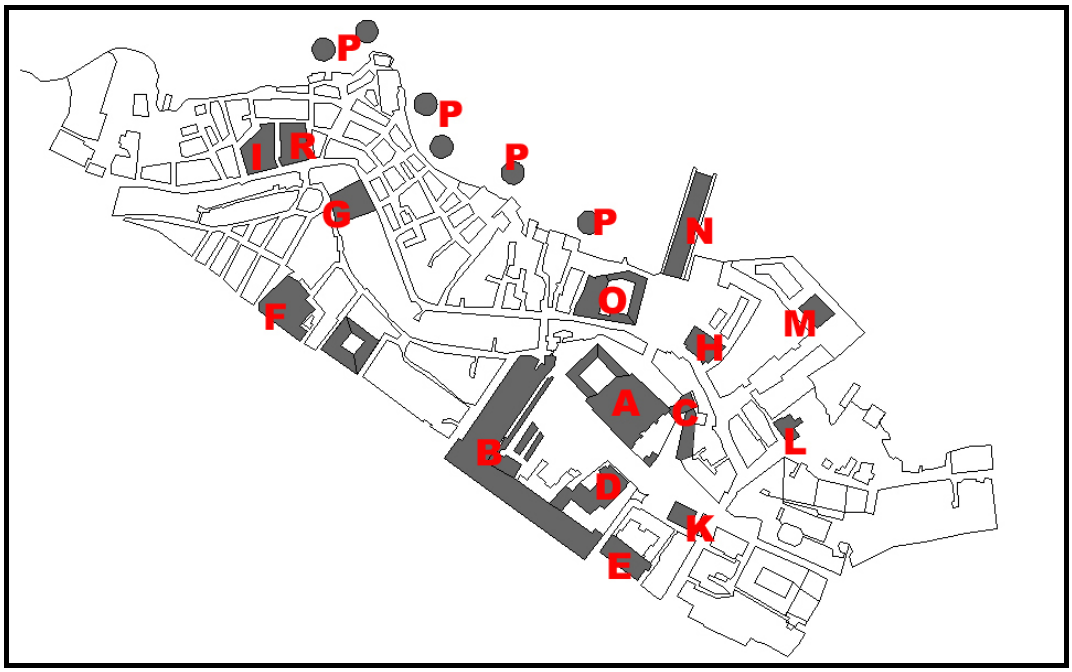

Figure 5.11: The public monuments in the 1882. (A-Yeni Cami and the muvakkithane, B-Mısır Çarşısı and its adjacent buildings, C- the Sultan's Kiosk, D- the tomb, E- the Haseki Bath, F- the Rüstempaşa Mosque, G- the Zindan Han, H- the Custom house, I- Ahi Ahmet Çelebi Mosque, K- Postane-I Amire and the sebil, L- the Hidayet Mosque, M- Rüsümat Dairesi, N- the Galata Bridge, O- the Valide Han, P- the jetties, R- the Değirmen Han)

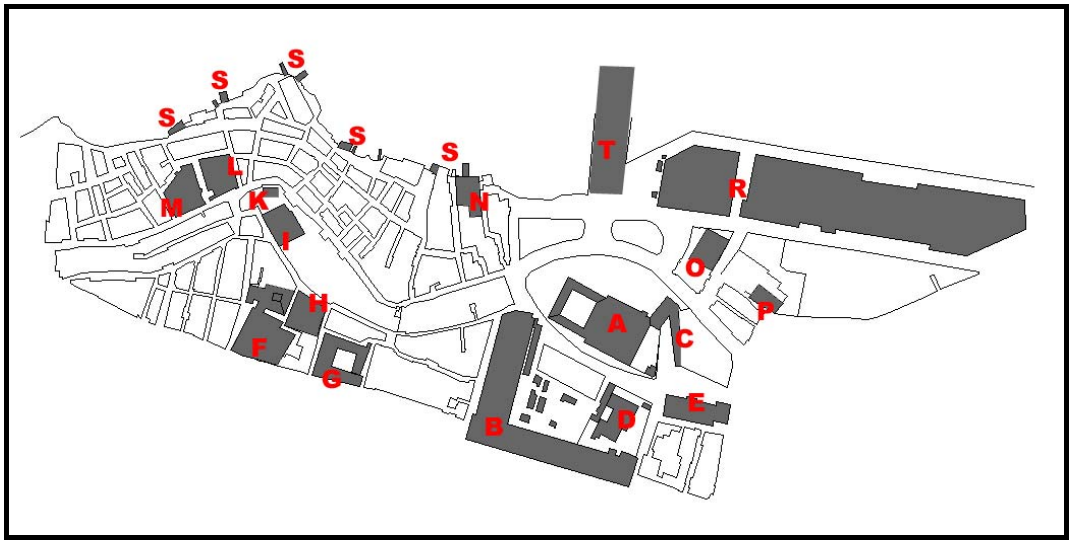

Figure 5.12: The public monuments in the 1940. (A-Yeni Cami and the muvakkithane, B-Mısır Çarşısı and its adjacent buildings, C- the Sultan's Kiosk, D- the tomb, E- İş Bankası and the sebil, F- the Rüstempaşa Mosque, G-the Papaz Han, H- the Çukur Han, I- the Zindan Han, K- the Baba Cafer Türbesi, L- the Değirmen Han, M- the Ahi Ahmet Çelebi Mosque, N- the fish market, O- the custom house, P- the Hidayet Mosque. R- the Eminönü Quay, S- the jetties, T- the Galata Bridge)

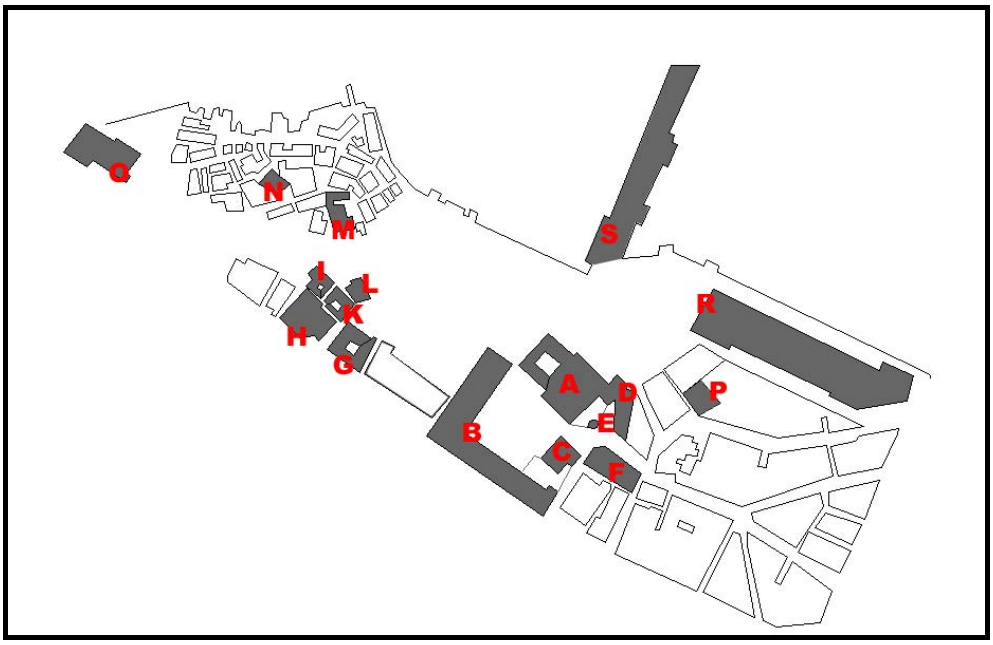

Figure 5.13: The public monuments in the 1960. (A-Yeni Cami, B- Mısır Çarşısı and its adjacent buildings, C- the tomb, D- the Sultan's Kiosk, E- the muvakkithane, F- the İş Bankası, G-the Papaz Han, H- the Rüstempaşa Mosque and the Burmalı Han, K- the Çukur Han, L- the Kiraz Han, M- the Zindan Han and the Baba Cafer Türbesi, N- the Ahi Ahmet Çelebi Mosque, O- the Hal building, P- the Hidayet Mosque. R- the Eminönü Quay, S- the Galata Bridge)

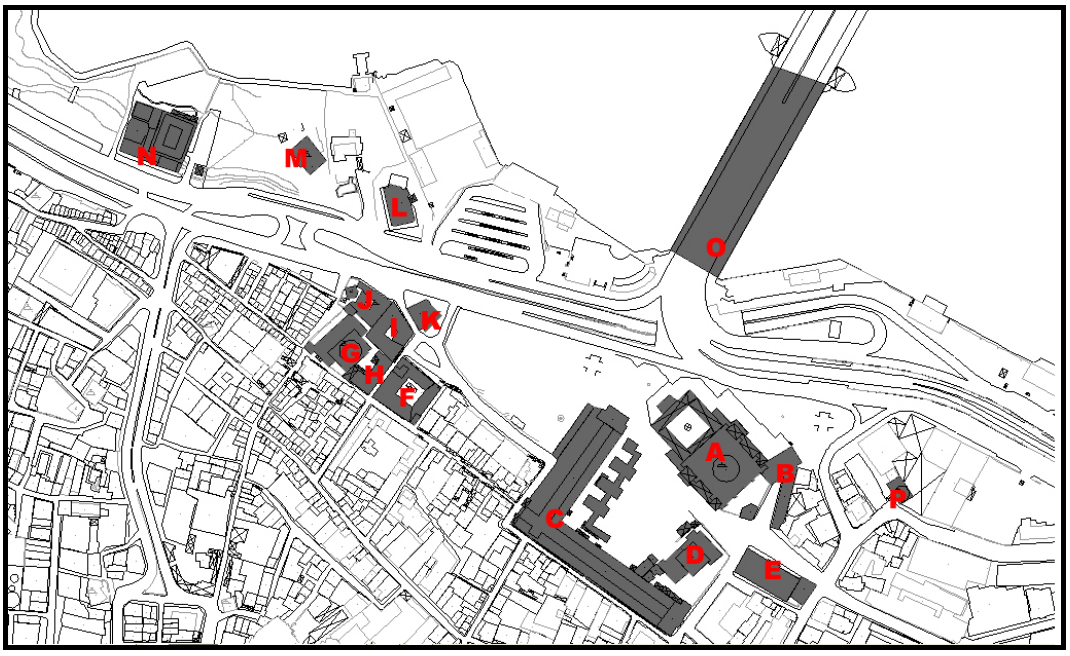

Figure 5.14: The public monuments in the 2006. (A-Yeni Cami and the muvakkithane building, B- the Sultan's Kiosk, C- Mısır Çarşısı and its adjacent buildings, D- the tomb, E- the İş Bankası and the sebil, F- the Papaz Han, G-J-the Rüstempaşa Mosque H- the Burmalı Han, I- the Çukur Han, K- the Kiraz Han, L- the Zindan Han and the Baba Cafer Türbesi, M- the Ahi Ahmet Çelebi Mosque, N- the ITO, P- the Hidayet Mosque. O- the Galata Bridge)

5.2.1.2. Linkage Analysis

The network of open spaces like streets, squares, green areas, pedestrian ways, and motor vehicle ways in the area is examined in this section. *The network of open spaces* and *the forms of urban blocks* are used as the determinants for a structure ordering the urban space.

It can be observed from ***the water addiction map*** that, a *curvilinear* street pattern dominates the urban structure along the city walls and adjacent buildings (Figure 5.15). On the shoreline and the southern side of the city walls, generally *irregular, angular* street pattern determine the urban blocks. The *axial* streets penetrate the gates of city walls. The Taşçılar and Balıkpazarı Street, defined by the city walls, is the primary street that separates the waterfront from the inner part of the city. The *Uzun Çarşı Street, the Balıkpazarı Kapısı Street of Mısır Çarşısı and Arpacılar Street* are the primary streets on the area. The other perpendicular streets to the shore are the secondary streets of the area. The streets are used mostly for pedestrian use until the construction of the Galata Bridge when the tramway was introduced. The pedestrian flows increased with relation to the bridge and tramway technology. This traditional pattern of the street network almost shows the same structure until the 1940s (Figure 5.16).

In ***the map of 1940's*** the street network of the western side of the Galata Bridge has almost the same structure (Figure 5.17). The electrical tramway line extends from the Galata Bridge, and then follows up the line of Arpacılar Street. The street structure based on pedestrian flow could still be observed in this period. However, the new warehouses and the custom buildings changed the street network on the eastern side of the Bridge. The Reşadiye Street was opened to provide the relation between the customs and the warehouses. The Reşadiye Street, which extends parallel to the shore, is a *regular* street opened in between these urban plots. The form of the Custom buildings determine the geometry of the Reşadiye Street. In this context, it can be argued that new activities, new transportation systems affect both the structure of urban plots and the network of open spaces. Until the 1950s, the

gardens of Yeni Cami, on the southern and eastern backyard of the mosque, were the only green areas in the area.

The network of open spaces had significant change with the demolitions undertaken at the time of Menderes as mentioned above (Figure 5.18). After the 1950s, the motor vehicle transportation started to increase in Istanbul. It necessitated the construction of new arteries.

The curvilinear Balıkpazarı Street was completely demolished and replaced by a *straight* and *wide* road, Ragıp Gümüş Pala Avenue. Neither the network of open spaces nor the patterns of urban plots determine each other any more. The perpendicular streets of 4-5 meters of the traditional urban fabric now open to the main road of 35 meters. The vehicle traffic flows from the Unkapanı to Sirkeci and from the Galata Bridge to Sirkeci.[7]

The demolition of the fruit market area and clearance of Haliç shores have changed the dense urban blocks pattern completely and turned the high-density solid pattern to huge urban voids on the shore. ***In the map of 1996***, significant changes in the network of open spaces can be observed (Figure 519). The variety of transportation systems and the density of both vehicle and pedestrian traffic turn the Ragıp Gümüş Pala Avenue into a highway. The Avenue follows the Kennedy Avenue towards Sarayburnu. It serves like a loop for the eastern part of the Historical Peninsula and connects the two pole of the Atatürk Boulevard. This loop serves to keep the traditional street structure of the southern side of the Avenue in the Eminönü Square district.

The Eminönü Square has witnessed the vehicular traffic since the construction of Galata Bridge and the tramways. In the 1980s, the motor vehicle priority is increased and the pedestrian traffic was taken under passages or the pedestrian bridges on the square. This structure obstructs the pedestrian flow and access directly to the square. The new network

[7] The network relations with the city from west to east and north to south can always be observed with the flow of peoples, goods, vehicles and activities in the history of Eminönü. The relation with Galata and Eminönü is existed much more before the construction of the Galata Bridge. This never-ended relation between the two sides of Istanbul makes the Eminönü square node of the Historical Peninsula. As mentioned before, Eminönü has been a gate *par-excellence* of the historical city of Istanbul.

system where the vehicular and pedestrian traffic is separated affects the area of the Eminönü Square. The pedestrians coming from the Galata side are obliged to use either the western or the eastern side of the bridgeheads as the first accession point of the square. The northern side of the Mısır Çarşısı and the Mosque are also used as a square but it is cut off from the bridgeheads by the road. The road now acts as a border between the northern and southern part of the Eminönü Square. The bus stops on the two sides of the Avenue constitute also large open spaces.

Figure 5.15: The urban voids (the network of open spaces) in the water addiction map of 1815.

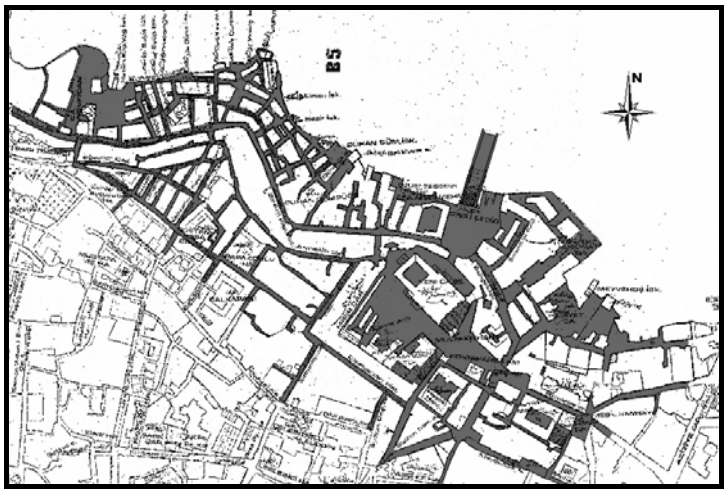

Figure 5.16: The urban voids (the network of open spaces) in the map of 1882 by Ayverdi.

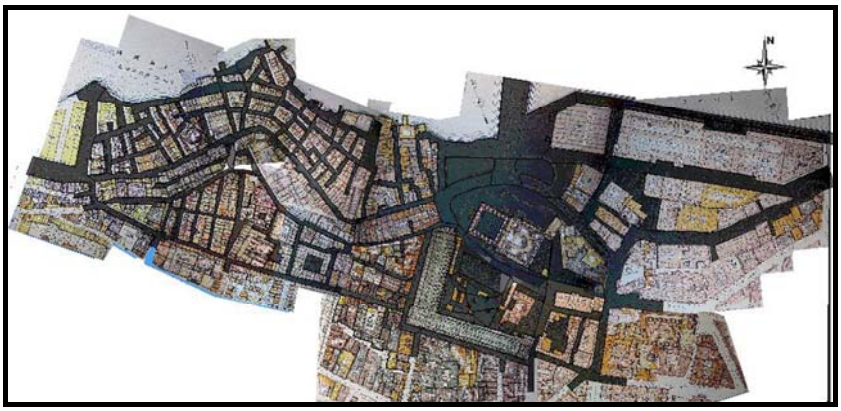

Figure 5.17: The urban voids (the network of open spaces) in the map of 1940 by Pervititich.

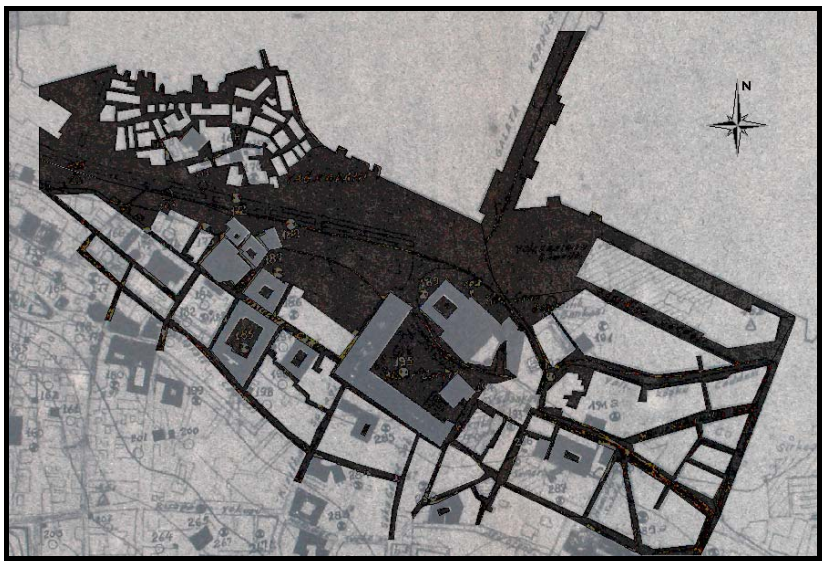

Figure 5.18: The urban voids (the network of open spaces) in the map of 1960.

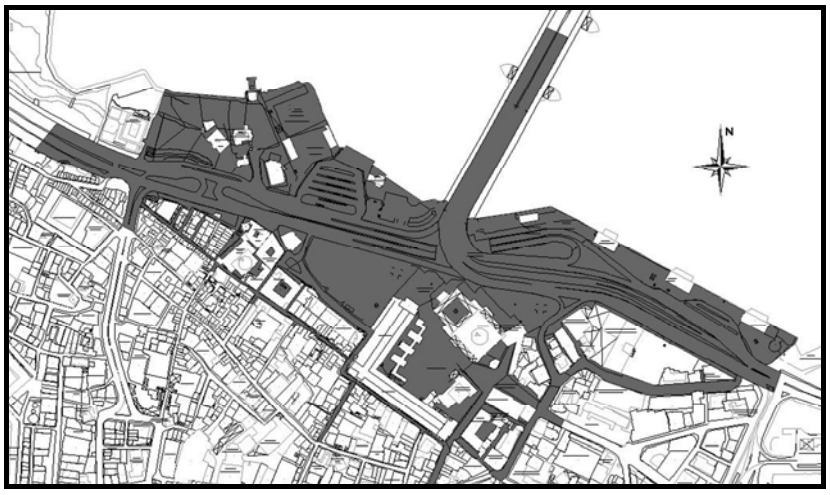

Figure 5.19: The urban voids (the network of open spaces) in the map of 1996.

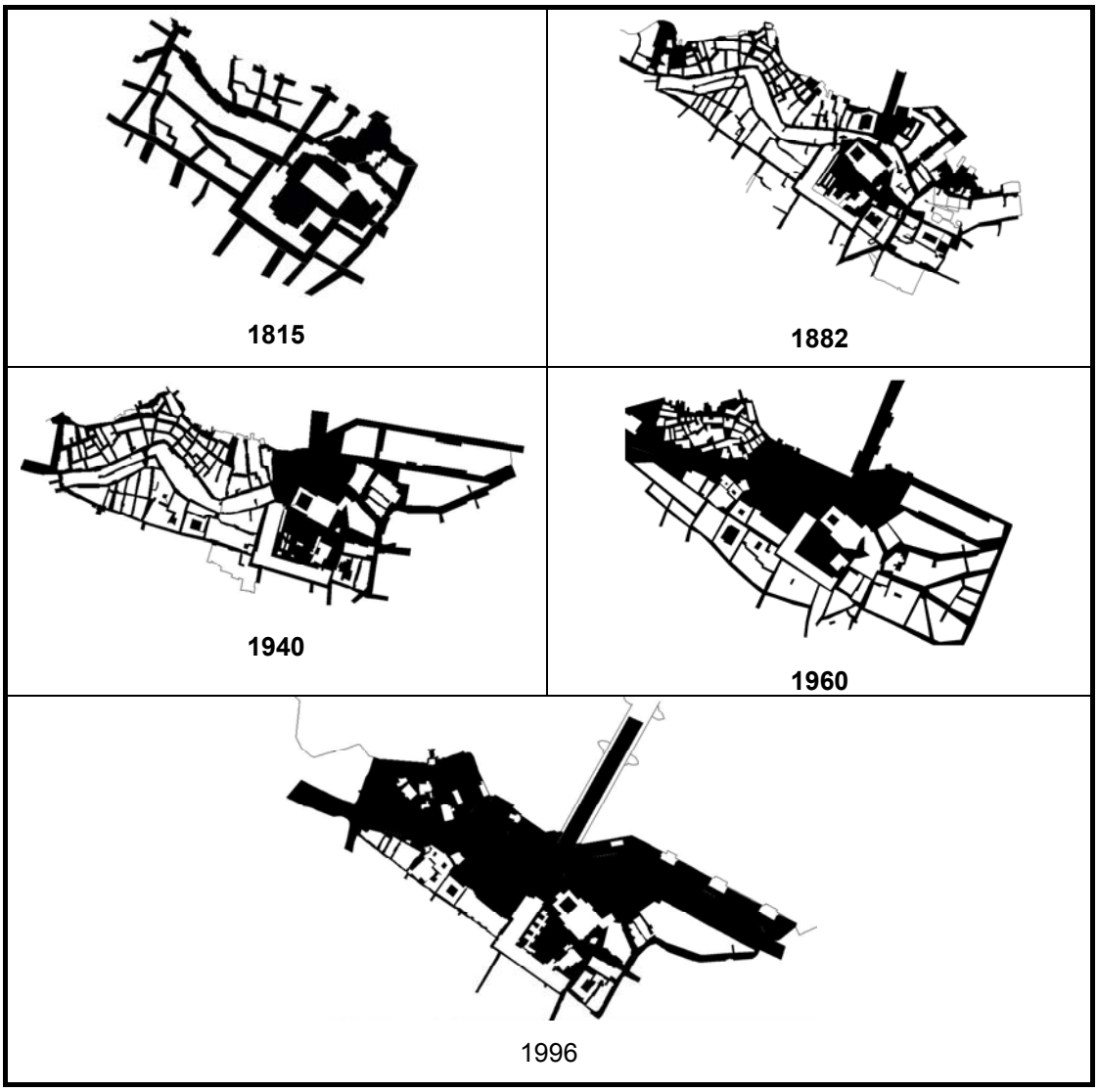

Figure 5.20: The urban voids in the 1815, 1882, 1940, 1960 and 1996. The gradually domination of urban voids on the area can be observed from the maps.

- **The boundaries of the Eminönü Square**

The mutual relations between the form of urban blocks and the form of open spaces have already been. In order to figure out the relation between these, *the street and the square* are used as *the basic urban types (Krier, 1979: 170).*

In the map of 1815, there are three streets intersecting at the square (Figure 5.21). The main street along the city walls defines the southern boundary of the square. The customhouse, the commercial buildings on the western side

of the square and especially the shops adjacent to the city walls with their longer facades define the edges of the square. The eastern side of the square is not as well defined as the western and southern sides due to the short edges of urban blocks. However, it can be argued that the square has well-defined boundaries by the surrounding urban blocks and the streets.

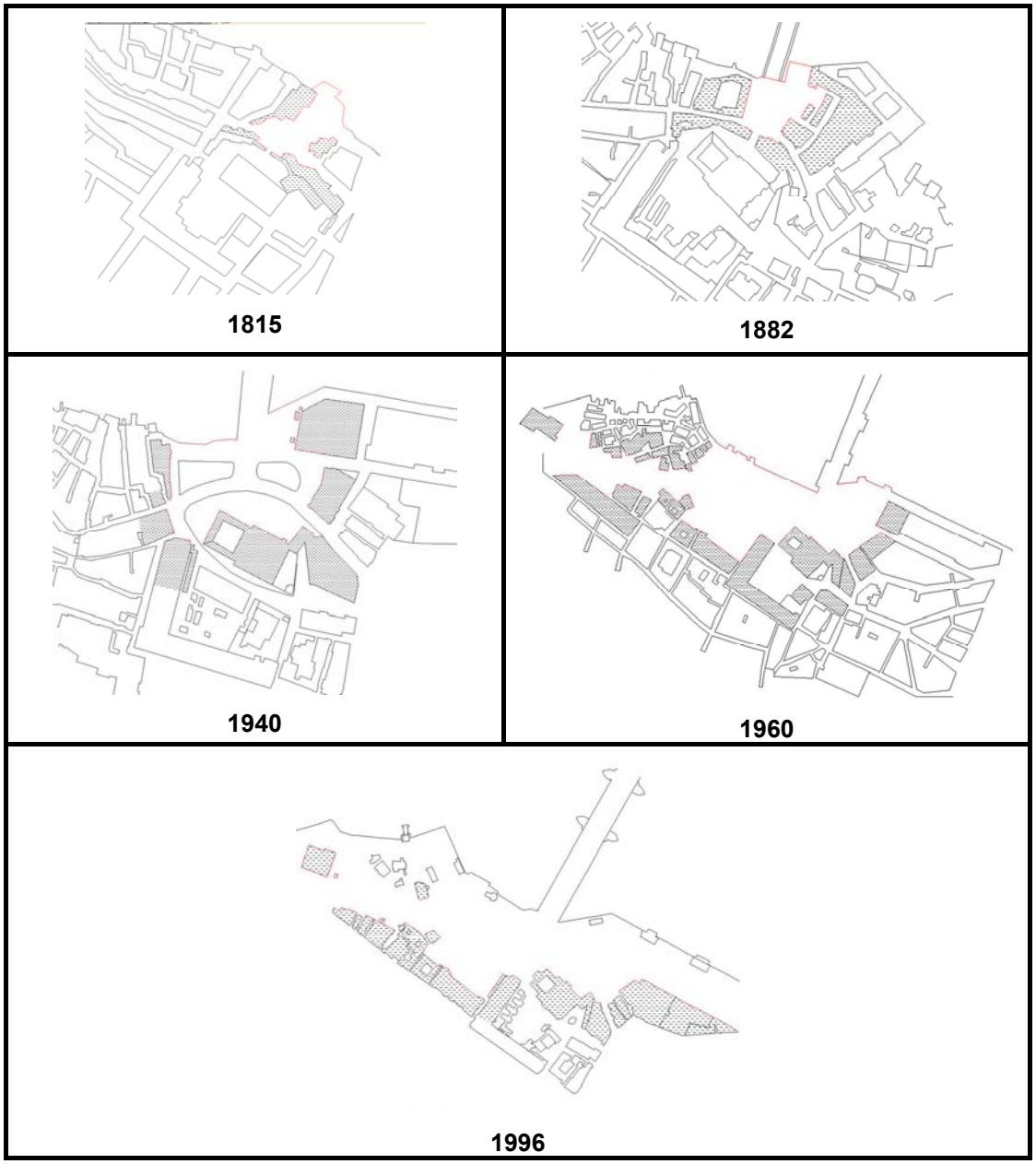

Figure 5.21: The form of the Square: by the mutual relationship between the form of urban blocks and the form of open spaces.

The square in ***the map of 1882*** is defined almost by the same urban blocks and the streets (Figure 5.21). The short edges at the eastern side of the square define a perforated boundary and provide access to the square.

The place of the square on ***the map of 1940*****s** is completely different from the previous maps (Figure 5.21). It changed due to the Prost operations. New custom buildings and their warehouses were built. Six streets extend from the square: the Rıhtım Street, the Reşadiye Street, the Arpacılar Street, the Balıkpazarı Street, the Asmalı Street and the Yeni Cami Street. In spite of the demolition of the buildings in front of the mosque and the western side of the Bridge, the square has kept its well-defined boundaries with the new urban blocks as well as historical buildings: the warehouses, the mosque, the kiosk, Mısır Çarşısı and the khans on the western side.

On the contrary, it can be observed form the map of 1960 and 1996 that the boundaries of open spaces cannot be defined by the urban blocks any more because of the demolition in 1950s and 1980s (Figure 5.21). The urban blocks now determine the *flow of open spaces* in the area. Therefore, it can be said that the boundaries of the square has started to disappear by the beginning of the 1960s with the operations of Menderes and the operations or projects cannot provide the reciprocal relation between the urban solids and voids.

5.2.2. THREE-DIMENSIONAL URBAN FORM ANALYSIS

R.Curran's three visual components of urban space are used for the three-dimensional urban form analysis: *the built and spatial forms, the treatment of defining surfaces and ground treatment and furnishing.*

- **The built and spatial forms of the Eminönü Square and its surroundings**

The built and the spatial forms of the Eminönü Square is analyzed with their density, ratio of height to width, orientation of defining surfaces and horizontal and vertical organizations. These components enable the observation of

linear and cluster spaces that are related with the *access* and *linkage* relations on the Square (Curran, 1983: 71)

The buildings in the research area are generally two to four storey buildings except the mosques: the commercial, storage and religious buildings compose the building types of the area. The transportation systems and economic dynamics have not changed the activity pattern of the buildings so much. However, as mentioned before, it is the built fabric of the Eminönü Square which has changed to a great extent.

The buildings in the study area generally were two or three storey buildings in the 1800s. It can be observed form the many photographs dated to the 1800s that, the two or three storey commercial buildings and shops adjacent to the city walls surrounded the square. All the urban plots were constructed. The buildings provided almost the same height-width proportion with the open space and provided the human scale in the square.

The activity pattern shows similarity between the 1815 and 1882. The western shops like the Mayer, Stein, Zanni etc. change both the traditional economic pattern and building types but also styles in the beginning of 1900s. The height of the buildings were started to rise from two-three storey to five stories. The square is surrounded generally by three storey buildings on the eastern and southern side. The Valide Han, which was a two storey building was on the western side of it. The transformation was realized both in the third dimension and in architectural types of the buildings. The bridge brought western style of buildings from the Galata side.

The streets, which extended from Balıkpazarı to Sirkeci defined the southern boundary of the Square with the buildings along them which defined the southern surfaces of the square. The only opening which was the Yeni Cami gate let the eye move out of the Square towards the Mosque at the background. Generally, the surfaces of the buildings formed a *cluster space.* In this context, it can be argued that the horizontal elements of the foreground dominated the vertical ones like the Mosque (Figure 5.22 and 5.23).

The three dimensional relation of the buildings on the square radically changed by the 1940s. After the Prost operation, with the demolition of buildings on the foreground the height-width proportion changed, density of the urban blocks decreased in the square. Now the Mosque was dominating the Square and constituted the foreground on the Square that easily noticed from the Galata part (Figure 5.24 and 5.25).

Consequently, it can be argued that the accessibility is increased by the demolition of buildings but the *enclosure* that they defined was destroyed.

The operation of Menderes and Dalan also affected the foreground of the Square. The demolitions clear the whole building on the shore. The new foreground of the square shows different height of buildings like decreasing from Yeni Cami to the Kirazlı Han. They do not provide the harmony and serious height differentiation obstruct the *simplicity* and *continuity* of the surfaces (Figure 5.26 and 5. 27).

The more opening on the shoreline by the demolition of urban fabric and the widening of the streets let the eye move out of space. On the southern boundary of the Square, the vertical and horizontal elements are both defining the surfaces (Figure 5.28 and 5.29). Yeni Cami on the southeastern side of the Square is the principal vertical element with its impressive form. Yeni Cami and Mısır Çarşısı with their strategic location, which provide access to the other parts of the city, have an *orientational* effect. Although, the opening of wide streets and roads increase the accessibility of the Square, the surfaces cannot provide enclosure anymore on the eastern and western sides. The northern view of the Square show different attributes of defining surfaces. The buildings do not show *compositional* relationship with each other. They seem to be dispersed in the area; they cannot provide any directional effect either.

To conclude, it can be argued that there is a difference between the southern and northern views of the Eminönü Square. On the southern, surfaces define the spatial form of urban space, whereas on the northern fails in defining. The harmonious relationships cannot be maintained by the defining surfaces.

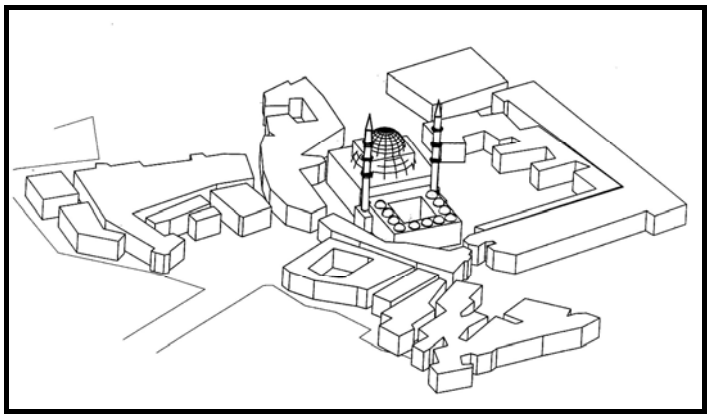

Figure 5.22: The axonometric drawing of the Eminönü Square in the beginning of 1900s. The well-defined boundary of the Square can easily be perceived.

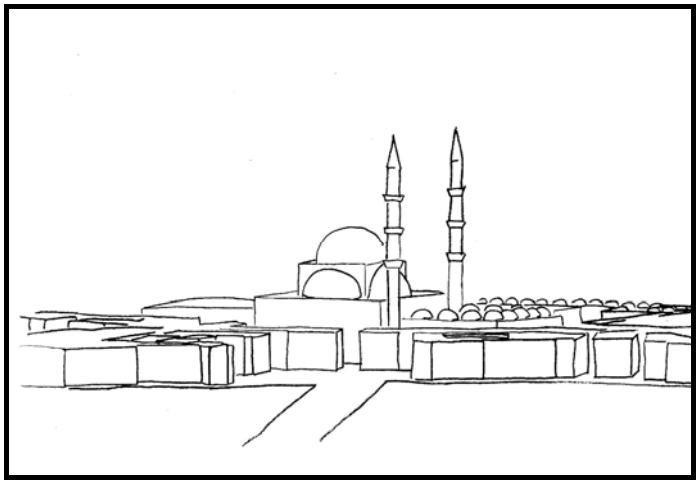

Figure 5.23: The foreground of the Eminönü Square in the beginning of 1900s. The only opening which was the Yeni Cami gate let the eye move out of the Square towards the Mosque at the background. Generally, the surfaces of the buildings formed a *cluster space.* The horizontal elements of the foreground dominated the vertical ones like the Mosque.

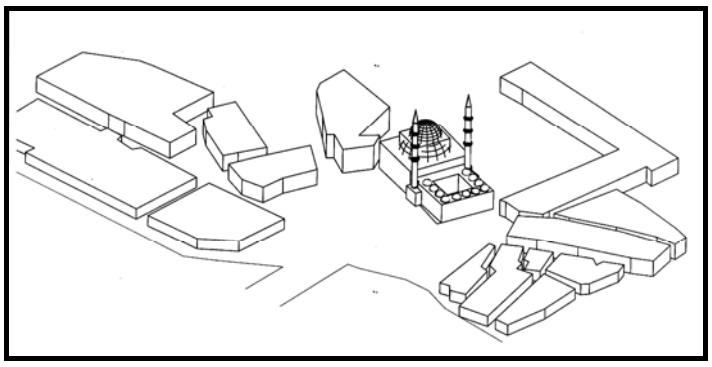

Figure 5.24: The axonometric drawing of the Eminönü Square in the 1940s. The well-defined boundary of the Square can easily be perceived. With the demolition of buildings on the foreground, the height-width proportion changed, density of the urban blocks decreased in the square. The *enclosure* that the buildings defined was destroyed.

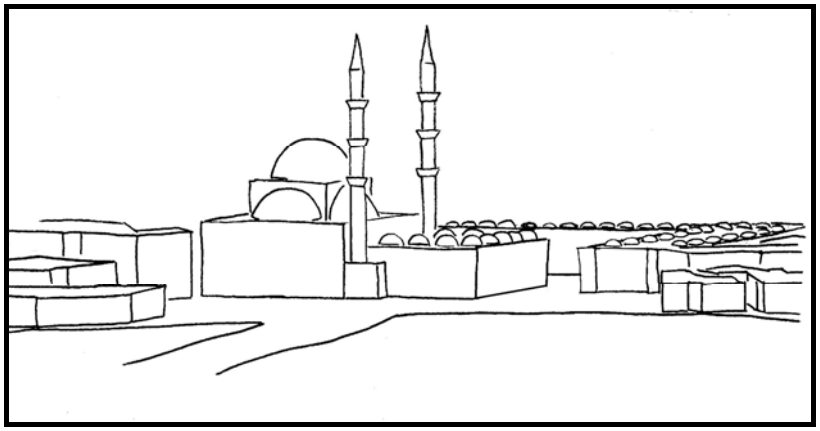

Figure 5.25: The foreground of the Eminönü Square in the 1940s. Now the Mosque was dominating the Square and constituted the foreground on the Square that easily noticed from the Galata part.

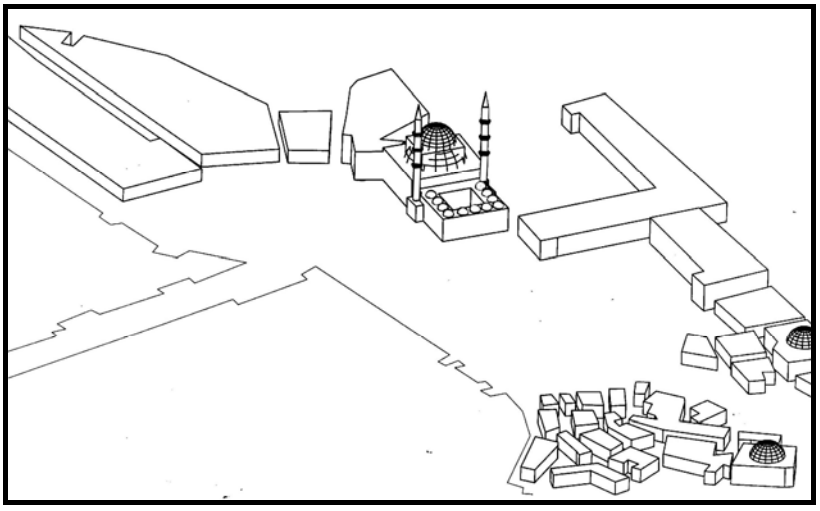

Figure 5.26: The axonometric drawing of the Eminönü Square in the 1960s. The well-defined boundaries of the Square started disappearing on the north-western side of the square.

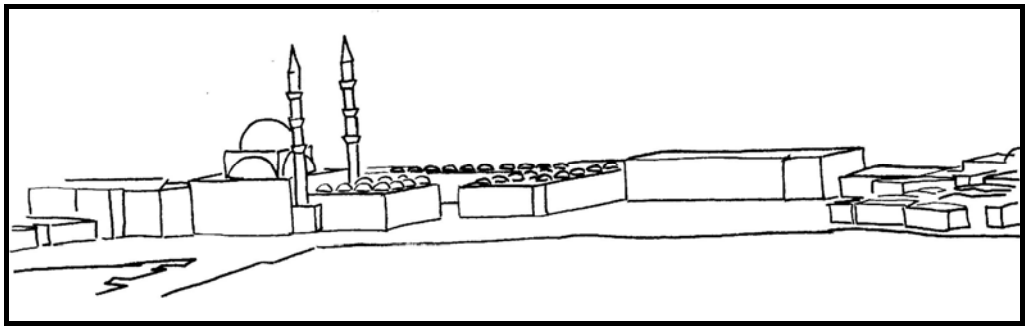

Figure 5.27: The foreground of the Eminönü Square in the 1960s. The height of buildings do not provide the harmony and serious height differentiation obstruct the *simplicity* and *continuity* of the surfaces.

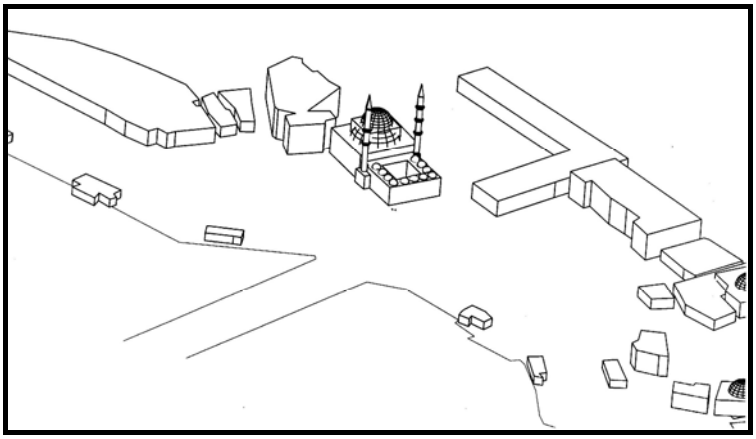

Figure 5.28: The axonometric drawing of the Eminönü Square in the 2000s. The well-defined boundaries of the Square started disappearing on the northern and western side of the square.

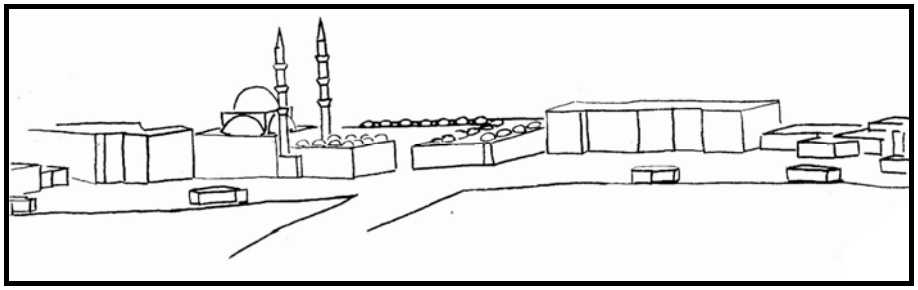

Figure 5.29: The foreground of the Eminönü Square in the 2000s. The surfaces cannot provide enclosure anymore on the eastern and western sides. The northern view of the Square show different attributes of defining surfaces. The buildings do not show *compositional* relationship with each other. They seem to be dispersed in the area; they cannot provide any directional effect either.

● The treatment of defining surfaces on the Eminönü Square

The second visual component of three-dimensional analysis is *the treatment of defining surfaces*. When the photographs dated to 1800s and the beginnings of 1900s are examined (Figure 5.30 and 5.31), it can be observed that mostly small shops are located at the ground level of the buildings surrounding the Square. The doors and the windows provide the interrelation between *the exterior public domain and the interior domain*. [8]

[8] Due to the lack of data, it can not be comment for the upper parts of the buildings. It can be guessed from the picture that, the upper parts have generally semiprivate funtions when the density of commercial activity is considered.

In the 1940s, with the demolition of the buildings around Yeni Cami and Mısır Çarşısı, the ground level pattern was completely changed. Whereas, on the western side of the Square, the khans and small shops still provide the ground level commercial activities with their magazines, the Eminönü warehouses, Mısır Çarşısı and the mosque define religious and different size commercial activities. The mosque and the warehouses with its closed façade do not provide *interrelation of inside and outside domains* (Figure 5.32). Mısır Çarşısı with its introverted organization also cannot satisfy the direct relations of inside and outside.

When the surface of year of 2006 is examined, it can be observed that the shops in front of the Mısır Çarşısı provide a relation of inside and outside. Some of the shops give access to the public use inside the Bazaar (Figure 5.33). The ground levels of the buildings on the western side of Mısır Çarşısı keep the exterior public domain and interior public domain relation (Figure 5.34). However, it can be argued that the level changes in this part of the square, create a wall effect that interrupt the relation between the direct usage of the square and surrounding buildings (Figure 5.35).

Besides, different building types in the area have different openings. The streets of Mısır Çarşısı and the courtyards of the Khans give access to flow of people and create permeability within the different node of activities in the area or the inner part of the city.

- **The ground treatment and furnishing on the Eminönü Square**

As the third component of three-dimensional analysis, the ground treatment and furnishing is analyzed. Due to the lack of data, this analyze is used only for today. The pedestrian and vehicle movements are separated from each other by small level changes and the bollards (Figure 5.36). In addition, the pedestrian area of the Square is composed of hard pavement with grey color stones. The pavement on the Square constitutes a grid pattern, which provides visual and spatial organization of the open space (Figure 5.37).

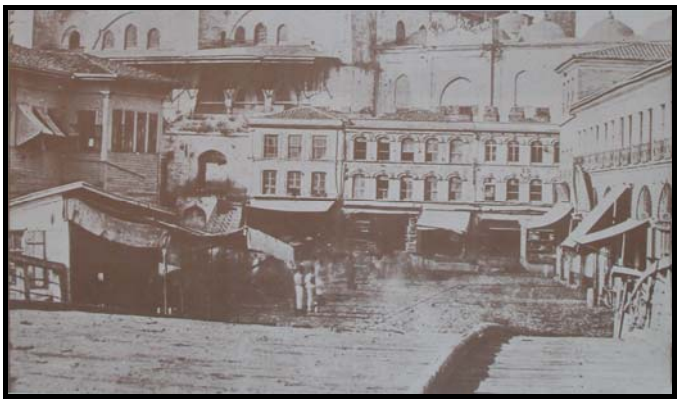

Figure 5.30: The photograph by *Lorando, 1800s* (Eldem, 1979: 46). Two-three storey buildings with their horizontal facades determine the boundaries of the Square. They provide human scale relation in the Square. Mostly small shops are located at the ground level of the buildings surrounding the Square. The doors and the windows provide the interrelation between *the exterior public domain and the interior domain.*

Figure 5.31: The photograph of 1900s (Eski İstanbul Resimleri, www.34tr.com). The masonry western shops like Mayer, Stein Zanni etc. with their doors and windows provide the interrelation between *the exterior public domain and the interior domain* in the beginning of 1900s.

Figure 5.32: The treatment of defining surfaces by Yeni Cami in the Eminönü Square. The mosque with its closed façade does not provide *interrelation of inside and outside domains*.

Figure 5.33: The treatment of defining surfaces in front of Mısır Çarşısı in the Eminönü Square. Mısır Çarşısı with its introverted organization cannot satisfy the direct relations of inside and outside. However, the shops in front of the Bazaar provide the relation between public and private domain.

Figure 5.34: The treatment of defining surfaces on the western side of Mısır Çarşısı in the Eminönü Square. The shops on the western side of the Bazaar provide the relation between public and private domain.

Figure 5.35: The treatment of defining surfaces on the southern side of the Eminönü Square. The level differentiation on the Square interrupts the direct relation between the public and private domain in the Square.

The trees, the kiosks, the underground passages, the ATM of the banks, the open exhibition stands and the phone boxes act as the space dividing elements of the square (Figure 5.37). It can be observed from the photographs that; these elements orient the movement of people in between eastern side of Yeni Cami and the western side of Mısır Çarşı. In addition, these elements act as dividing elements not only with their physical locations but also with the public facilities that they provide in the Square.

The seating elements can also act as dividing elements, which are situated on the northern side of Yeni Cami mostly. The level differentiations on the northern side of Yeni Cami, western side of Mısır Çarşısı and the steps in front of Yeni Cami also provide seating without seating benches (Figure 5.38).

The density of the furnishing elements on the northern side of Yeni Cami and the western side of Mısır Çarşısı affects the usage area of the Square. The rest of the Square is used as a passageway due to the lack of furnishing elements, inadequate green areas and activities (Figure 5.39 and 5.40)).

As a conclusion, when the three components of three-dimensional analysis are evaluated together, the differences between the periods can be observed. The sense of enclosure on the Square has weakened with the demolition of the buildings. The vertical and horizontal relations are also changed. Today it is highly horizontal dominant pattern is seen because of the huge open spaces. Besides, Yeni Cami dominates the square with its monumental and vertical structure. The harmony between the buildings and architectural elements is also changed by the demolition. The demolition of the building pattern affected the Square not only physically but also changed the activity pattern. The visual features and well-defined relations between the three components have weakened gradually and decreased the *imageability* of the Square.

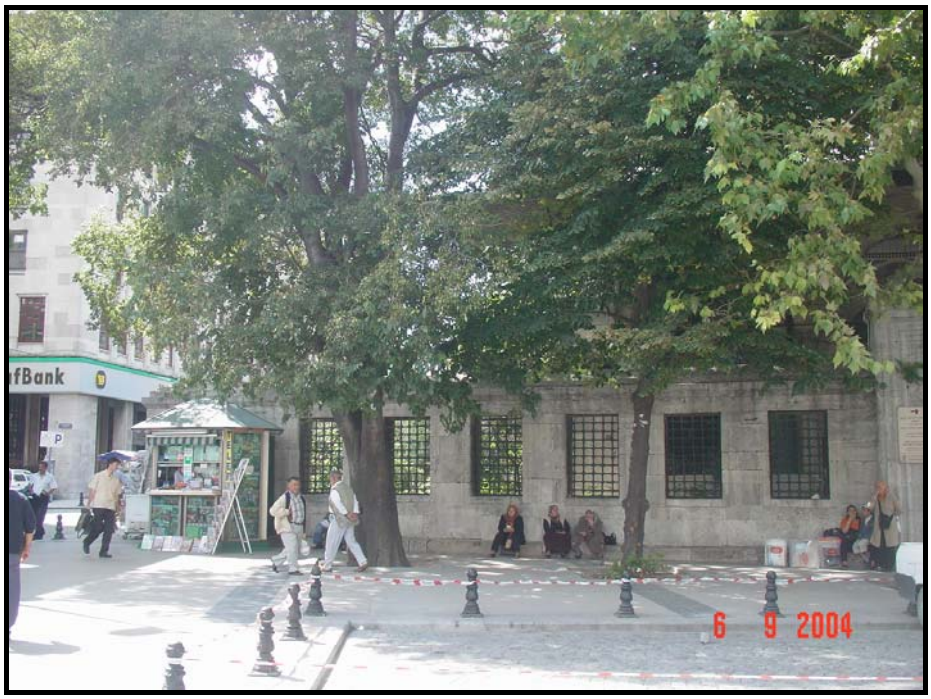

Figure 5.36: Furnishing and ground treatment in the Square. The pedestrian and vehicle movement are separated from each other by small level changes and the bollards.

Figure 5.37: The ground treatment and landscape elements in the Square. The pavement materials on the Square are composed of hard pavement with grey color stones to satisfy the difference. In addition it constitutes a grid pattern, which can provide visual and spatial organization of the open space. The hard and soft landscape elements act as the space dividing elements on the Square. The Mosque, the Bazaar and the landscape elements have an orientation effect by strategic locations and their activities.

Figure 5.38: The furnishing elements on the Square. People are sitting, standing and talking each other on the staircase of Yeni Cami. The level differentiations and the trees provide seating.

Figure 5.39: The western part of the Square. It is used as a passageway due to the lack of furnishing elements, inadequate green areas and activities.

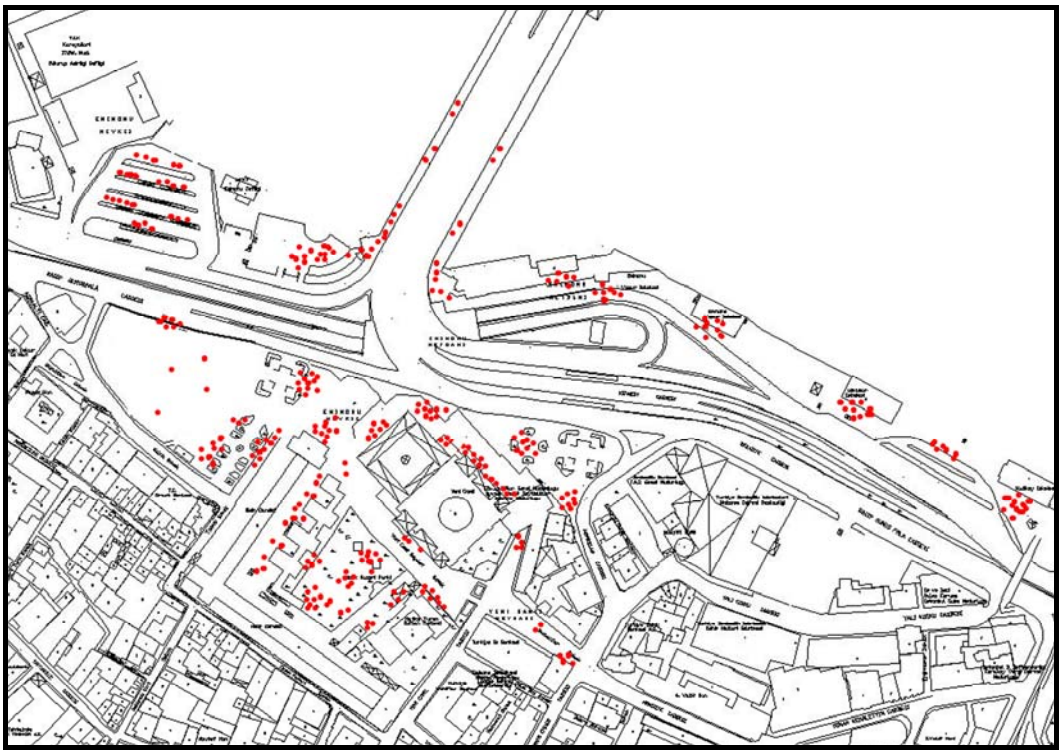

Figure 5.40: The people standing and sitting within the Square and surroundings by the observation of the author.

5.3. ACTIVITY ANALYSIS

As mentioned before, diversity of activities creates successful urban places. In this part, activity analyses for the Eminönü Square are made according to the *activity pattern, everyday or social practices pattern, rhythm of urban activities and landownership pattern*. In other terms, activity patterns are examined *inside the buildings and in-between the buildings.*

- **The activity pattern (necessary activities)**

The primary uses of the area are constituted from the commercial and transportation activity and the secondary use of the area is the religious activity. A dense commercial activity related with port activities has always been the primary use of the district since Byzantine period.

The activity pattern was composed of the retail and wholesale trade, religious activity, sea transportation activity, storing and customs activity in the

beginning of 1800s. The variety and density of retail and wholesale commercial activities brought vitality to the area as the primary activity pattern. The trade activity was supported by the religious activity and the transportation activities as secondary activities in that period. In addition, the Haseki bath and the türbe of Turhan Sultan were important nodes within the activity pattern of this period. Fish boats, maritime transportation boats, jetties and specialized commercial activities completed the everyday or social practices in the district.

The technological changes in the transportation systems like steamships, the bridge, tramway etc. added new congestion to the square. When the maps of 1815 and 1882 are compared, it can be argued that the changes in the transportation systems did not transform yet the morphological pattern generally but it transformed the built fabric around the bridgehead. The western shops like *the Mayer, Stein, Zanni* etc. were introduced the traditional economic pattern on the square. However, the traditional characteristics of the *kapans district* like Balıkpazarı, Yemiş, Limon, Çardak, etc. still remained the same as related wholesale activity did not change. Especially, the Balıkpazarı district housed various activities like fish markets, *tavernas*, bakeries, restaurants, ice storages, chocolate factories, *mescids, loncas* (guilds) etc.

Fish boats, maritime transportation boats, jetties, cafés, western style commercial stores, Turkish coffee shop (Kurukahveci Mehmet Efendi), specialized commercial shops and also The Galata Bridge's shops, restaurants and coffeehouses were certainly attracting a variety of people, occupying an important place in the everyday life.

The Pervititich maps show the significant urban fabric changes that took place from the late 19th century to the early republican period around the square. The activity pattern did not change so much except from the Square area that was not surrounded by the small shops anymore. The dense small-scale business activity continued to keep its pattern on the Balıkpazarı district, at the back of the Balıkpazarı Street and inside Mısır Çarşısı. The

commercial, religious and transportation activities continued to dominate the activity pattern of the Eminönü Square. The activity pattern was composed of the retail and wholesale trade, banks, religious activity, sea transportation activity and storing.

The demolition at the time of Menderes in 1950s and Dalan in 1980s, the new economic relations and the transportation systems cannot be ignored for the evaluations of activity pattern in the area. With the demolition of the Balıkpazarı and surroundings in particular, all the activities, which were condensate in the area, were also removed.

Today, the wholesale and retail commercial activities inside Mısır Çarşısı and its surroundings are still dominating the activity pattern of the Eminönü Square. While the small shops inside the khans and Mısır Çarşısı, restaurants, offices, banks constitute the retail pattern of the area, the wholesale activity continue dominate the surrounding districts. One more addition, the activity pattern on the southern side of the mosque courtyard kept its activity from 1800s until today. The adjacent shops of the 'L' shaped courtyard of Mısır Çarşısı can be observed from many photographs and maps. These adjacent shops are constituted of small shops like flower shops, small pet shops and cafes.

As mentioned in the formal analysis, the accessibility of the area has kept its features in different periods in various ways. The bus stops, the metro stops, the steamship jetties and the Galata Bridge define a very dense transportation activity in both vehicle and pedestrian scale. While the steamships, the buses and the Galata Bridge generally provide the keep relation between the Eminönü district and the other parts of the city, the metro system link the Eminönü wit the inner part of the Historical Peninsula and West Marmara. The steamer ships provide access between Eminönü and the European and Asian side of Istanbul by Eminönü-Beşiktaş, Eminönü-Üsküdar and Kadıköy voyages (Figure 5.41).

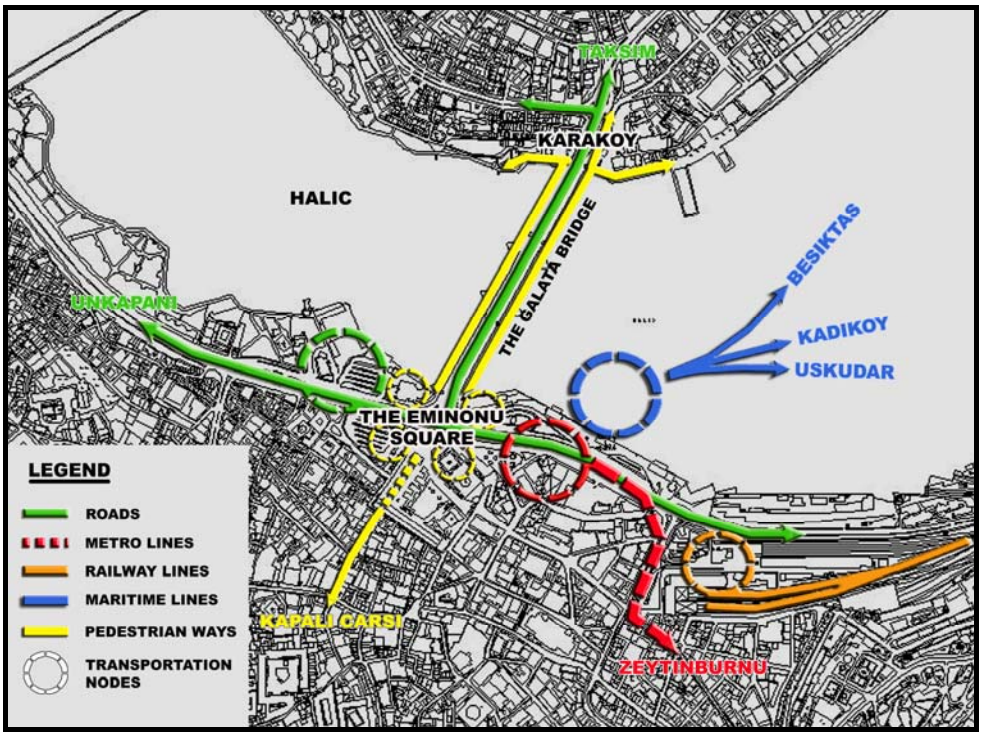

Figure 5.41: The transportation systems and nodes in the Eminönü Square. The figure shows the characteristics of transportation hub of the Eminönü Square.

However, as the sizes of urban blocks and the streets surrounding the square were changed by a series of demolition, the permeability of the streets and the urban blocks cannot be observed anymore on the Square. The dense building pattern and the narrow and short streets of 1800s or of the 1940s completely disappeared after the 1960s. They acted as the secondary activity nodes and supported the Square activity before the 1960s. The demolition removed both the physical structure and a complex activity structure from the area that caused a considerable degradation in the vitality of the Eminönü Square, which was gradually transformed into nothing more than a transportation hub.

- **Social and optional activity pattern in the Eminönü Square**

The ground treatment and furnishing analysis of the area also give clues about the behavior of people standing, sitting or moving in the Square. It can be observed that people stand and sit mostly on the northern side of Yeni Cami and Mısır Çarşısı. The landmark features of the mosque and Mısır

Çarşısı and the shops opening up to the square from the inside the Bazaar attracts people here. Besides, the street sellers- especially during holidays or *Bayrams*- stimulate *vitality and viability* within the public realm.

The optional activities like seating, standing watching surrounding and lingering come into existence generally when there is a mutual relation of activity and the landscape elements. As mentioned before, the sitting places, the trees, the buffets, the underground passages, the ATM of the banks, the open exhibition stands and the phone boxes are concentrated on the eastern side of the Square. Thus, people mostly use these areas. The commercial and religious activities are mixed with each other. Many people can be observed in the prayer time on the northern and southern parts of the square preparing them for the prayer (Figure 5.42). The painters or artists, the people in front of the lottery office of Nimet Abla, handmade sellers or other street sellers, people waiting for bus, metro etc. shows the diversity of groups of people that maintain the *vitality* of social public life (Figure 5.43).

However, the density of activities on the Square and its surroundings continues during the day with relation to the commercial activities and transportation activities. Due to the lack of residential activities, closing hours of the shops and the voyage time of the steamships, buses, metro etc., the urban life does not continue at nights at the same rhythm.

As a conclusion, it can be argued that the Eminönü Square has a vitality of urban activity generally on the northern side of Yeni Cami and Mısır Çarşısı with relation to the activities and the landscape elements of the area. Towards the Rüstempaşa Cami at the western side the square is used only for transit movement of people due to the lack of activities and necessary landscape elements. In addition, it also lacks activities at night hours. To increase social, cultural and economic activities in the Square, node of activities that will support daily activities and appropriate facilities and landscape elements should be dispersed at all parts of the square and special events has to be organized to stimulate the vitality of the Square both during day and night.

- **Landownership pattern in the Eminönü Square and its surroundings**

Landownership pattern is also one of the determinants of the activity quality in the urban spaces. The demolitions of buildings, which form the private property in the area, affect the public and private domain in the area. The gradually disappearing of private property and replace by the public property causes to loss of the mutual relation between public and private. The amounts of private properties, which provide diversity of activities between the inside of the building and in-between the buildings, have been decreased in the area. As a conclusion, it can be argued that neither the public property nor the private properties alone provide diversity of activity for the urban structure.

To sum up, it can be argued that despite the fact that new economic and transportation activities have been introduced in the area the complexity of activities, in other terms, urban vitality with the *necessary activities* could be kept in the area. However, *the optional and social activities* are not enough for the *break of bulk* characteristic of the Square. The insufficient social activities and the several transportation systems constitute many breaks on the Square. Especially, the nodes of transportation activities obstruct the wholeness of the Square.

Figure 5.42: The commercial and religious activities within the Square. The northern and southern sides of the Mosque provide vitality by the mixed of the commercial, religious and other optional activities.

Figure 5.43: The optional and social activities on the Square. The painters, the street sellers, the people standing in front of the lottery office of Nimet Abla etc. maintain the vitality of social public life.

5.4. IMAGE ANALYSIS

The form of the space and the activities in the space collectively constitute the image of urban space. It depends on user's experience. It is related with the perception of users. Yet, the perceptual experience of people in the past can hardly be studied today. However, an analysis of the image of urban space might be made by comparing the map of 1940, which provides detailed information about both the physical structure and the activity pattern of the area, and the present condition of the Eminönü Square by the author with reference to Lynch (1960; 1981).

The five perceptual elements of urban space; *districts, edges, paths, nodes* and *landmarks* will be figured out for the Eminönü Square and surroundings.

- **A hypothetical image analysis of the 1940s**

The ***districts*** are defined as the sections of city which are recognizable as having some *common, identifying character* by Lynch (1960: 47).

The districts can be defined in the 1940s according to the spatial, functional and visual features of the area with reference to the analyses.

- First district: Yeni Cami and the buildings of the complex-*külliye* and the Eminönü Square (Yeni Cami, Mısır Çarşısı, the Sultan's kiosk, the türbe of Turhan Sultan, the İş Bankası-previous sibyan mektebi-, the public fountain-sebil). Each of the buildings constitute the district of Eminönü Square.
- Second district: The Eminönü Quay and its annex buildings.
- Third district: the *Balıkpazarı*- fish market district (from the western side of the Galata Bridge to fruit market area).
- Fourth district: the curvilinear urban plots on the southern side of the Zindankapı Street, Taşçılar Street and Balıkpazarı Street.
- Fifth district: the urban plots from the western side of the Mısır Çarşısı to Odunkapı Street.

These districts are separated from each other according to their spatial, visual and activity characteristics. Furthermore, the edges and the nodes, which will be mentioned below, also act as a reference to separate the districts.

Lynch (1960: 47) defines ***the edges*** as the *boundaries between two phases*, which are *linear breaks in continuity.* They have a role of *holding together* the separated areas. In this study, the edges are taken as the boundary of the Square. In other terms, the edges of buildings that form the square are analyzed.

As mentioned in the form analysis, the edges of the buildings show horizontal pattern in the Square. The Esseyhan, Osman Efendi Han on the western side, the Yeni Cami and the Sultan's kiosk on the southern side and the Customs and the warehouses on the eastern side define the edge of the Square in 1940s. The Balıkpazarı Street, the Yeni Cami Street, the Reşadiye Street and the Arpacılar Street constitute the *linear breaks in continuity of the edges* of the Square.

Lynch defines ***paths*** as *the dominant elements* of city images, which are *channels* along with the observer move around them. It is about the reciprocal relation between the urban plots and the street network. The paths of the study area as marked on the map form the urban plots. The paths can be categorized according to their importance in the circulation system. In this context, it can be argued that, first degree of path is the Galata Bridge by flowing the whole pedestrian and vehicle movement from the Galata part. The Zindankapı-Taşçılar-Balıkpazarı Street, Arpacılar Street, Reşadiye Street, the Yeni Cami Street, the Asmaaltı Street, the Balıkpazarı Kapısı Street, Ketenciler Street are the secondary paths which flows through the Sqaure. The third degrees of path are illustrated according to the gates and jetties that create *entrance* from the seaside and the inner side of the city. These are *the important channels* along with the observer moves around with relation to the activities.

Lynch (1960: 47) defines **the nodes** as the *strategic spots* in a city. They are the *focus point, junctions*, and *places of break* in transportation or movement. The nodes are also having a mutual relation with the path and districts as the *convergence of paths* and *the polarizing center of districts* (Lynch, 1960: 47).

Yeni Cami and the Eminönü Square on the northern side of it create an important node both for the Eminönü district and for Istanbul. The square is a break point as a transportation changes. The tramway, the bridge and the roads create various transportation opportunities. The junctions of the roads and the bridge on the Square satisfy the Karaköy-Eminönü relation and other relations with the inner part of the Historical Peninsula. Yeni cami and its

annex buildings also create secondary node in the area by both the special commercial activities that are concentrated there and breaking the continuity of commercial activities by the religious activities.

The jetties and its squares in the Balıkpazarı district composed the third degree nodes by its commercial activities.

Landmarks are *the point-references*, which are *simply defined physical objects* building, sign, storefronts, trees etc. They give *clues of identity, or structure* (Lynch, 1960: 47).

Yeni Cami is the primary landmark of the area by giving an identity the Square. Mısır Çarşısı is the secondary landmark with its enormous activity node features. The Sultan's kiosk, the türbe of Turhan Sultan, the remaining parts of the city walls (on the Kiosk and Zindan Han), the *sebil*, İş Bankası and the Balıkpazarı are the other landmarks of the study area in the 1940s.

Beside the buildings, the jetties, the fish-boats, the steamships are also counted as landmarks with their *identifiable* character from the outside especially from the sea. They symbolize the waterfront character and activities with relation to this.

As a conclusion, it can be argued that these identifiable districts, edges, paths, nodes and landmarks provide *a legible environment* in the shaping of urban image. The area has a particular character of its own that makes its *identity*. The urban blocks pattern and the street network, the edges of the districts give sense of orientation and create a well-defined *structure*. Lastly, the area with its commercial, religious, transportation activities has its own *meaning*. These three components composed the *legibility* of the area.

- **The image analysis of Eminönü Square at the present time**

The districts can be defined according to the spatial, functional and visual features of the area with reference to the spatial and visual analyses. Furthermore, the edges and the nodes also create these separations as a reference.

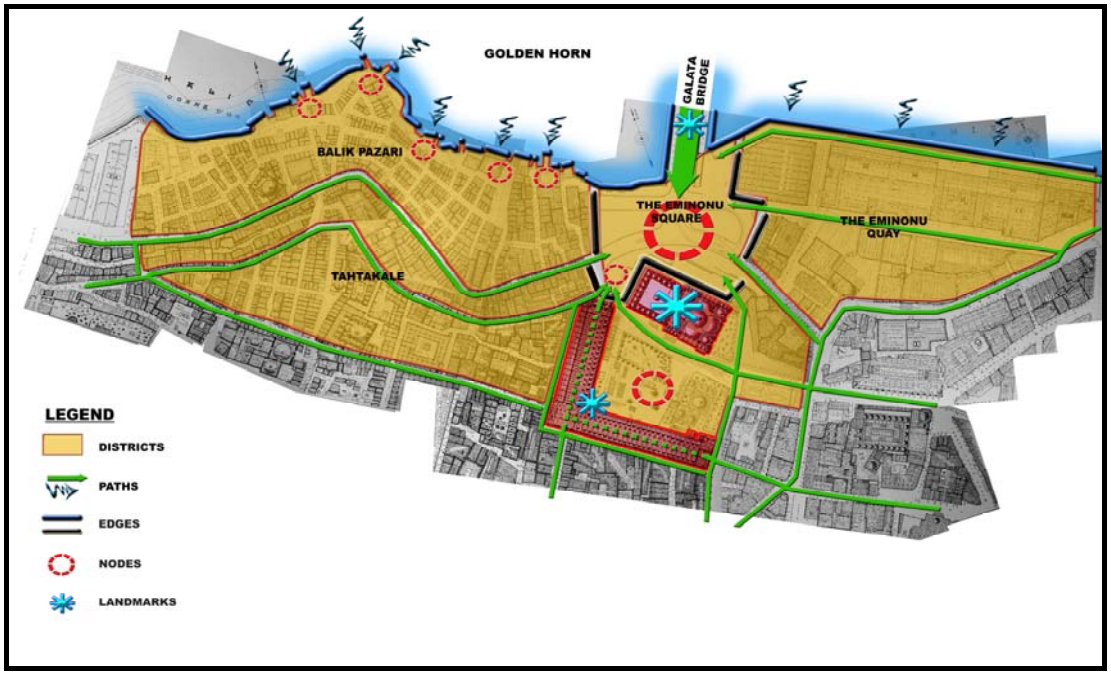

Figure 5.44: The hypothetical image analysis of the 1940s according to the Lynch's categorization by the author.

Figure 5.45: The Image analysis of the 2006 according to the Lynch's categorization by the author.

- First district: Yeni Cami and buildings of the complex - *külliye* (Yeni Cami, Mısır Çarşısı, the Sultan's kiosk, the türbe of Turhan Sultan, the İş Bankası, the Ottoman Bank, the public fountain-sebil) and the square on the northern side of the Mosque and western side of Mısır Çarşısı until the previous trace of the bus stops.

- Second district: the previous area of the bus stops on the southern side of the Ragıp Gümüş Pala Avenue. The district is determined according to the edges of the square with reference to the visual and spatial analysis that is mentioned before. This part of the square is surrounded by the Kirazlı Han, Çukur Han, Papaz Han, commercial single buildings, trees, pedestrian under passages, phone boxes etc.

- Third district: The Eminönü Quay and its annex buildings (Eminönü, Üsküdar, Kadıköy steamer ship jetty).

- Fourth district: the square and the bus stops area on the western side of the Galata Bridge on the shore. It is the first accession point of Eminönü from the Galata side by pedestrian movement.

- Fifth district: The area from the bus stops to the ITO building. It includes historical buildings (the Ahi Ahmet Çelebi Mosque, the Zindan Han, some parts of the city walls, and the türbe of Baba Cafer). The voids of the area are using as a car park.

When the districts of 1940s and today are compared significant differences strike. All districts that give identity to the area on the shoreline have disappeared. The identifying characters of the area have completely changed. New features of identity have come into existence. Only the district that is formed by Yeni cami and its annex buildings keeps its identity until today. This shows the permanence of public monuments in urban space.

In this study, the ***edges*** are taken as the boundary of today's Eminönü Square. In other terms, the edges of buildings that form the square are analyzed.

As mentioned in the form analysis, the lack of defining boundaries due to the opening of the shoreline by the demolition of the preexisting urban fabric and the widening of the streets let the eye move out of space. The remaining buildings on the northern part of the avenue lost their compositional characters, thus they do not provide edges at the northern part of the area. They cannot provide any directional effect either. The southern part of the square is still defined by the edges of buildings. The widening of roads, the demolition of urban block pattern and opening of areas obstruct to keep continuity between the edges.

The ***paths*** of the study area are marked on the map. The paths can be categorized according to their importance in the circulation system. In this context, The Ragıp Gümüş Pala Avenue, the Kennedy Avenue and the Galata Bridge can be evaluated as the first degree paths as they form the main circulation axis related with the other parts of the city. Today, not only the Galata Bridge can be counted as primary path but also the Ragıp Gümüş Pala Avenue and Kennedy Avenue act as a highway. The second-degree paths are illustrated according to the pedestrian movement. The Galata Bridge brings two parts of pedestrian flow on both side of the bridgehead. The bus stops and the under passage on the western side of the Bridge bring flow of people to the front of Mısır Çarşısı. The quays on the eastern side of the bridge also bring flow of people from the other parts of the city. These flows are gathered on the pedestrian under passage then flow through the eastern side of the Mosque. The streets inside Mısır Çarşısı, arched passageway between the mosque and kiosk can be evaluated the third paths of the district. These are *important channels* along with the observer moves around with relation to the activities. The paths and its hierarchy are completely different from the 1940s except from the Galata Bridge.

The ***nodes*** having a mutual relation with the paths and districts are also different today from those of the 1940s.

Yeni Cami and the Eminönü Square on the northern side of it still create an important node both for the Eminönü district and for Istanbul. The square is both a break point in transportation and a shifting point as a transportation changes. The buses, the metro, the bridge and the roads create various transportation opportunities. The junctions of the roads and the bridge on the Square satisfy the Karaköy-Eminönü relation and other relations with the inner part of the Historical Peninsula. In this context, the bus stops, the square on the western side of the Bridge and the pedestrian passage on the eastern side of the bridge, the pedestrian passages on the northern side of Mısır Çarşı and Yeni Cami are the primary nodes in the area. Yeni Cami and the southern courtyard also create secondary node in the area by keeping the commercial and religious activities together. The quays can also be counted as the other nodes on the eastern side of the Bridge.

Landmarks that give *clues of identity, or structure* are also changed in the area by the demolition.

Yeni Cami is still the primary landmark of the area by giving an identity the Square. Mısır Çarşısı is the secondary landmark with its enormous activity node features.

The türbe of Turhan Sultan, the *sebil*, İş Bankası, Osmanlı Bankası, the Ahi Ahmet Çelebi Mosque, the Zindan Han, ITO Building and the bus stops are the secondary landmarks of the study area. Ahi Ahmet Çelebi Mosque and the Zindan Han becomes a landmark by the demolition of surroundings.

Beside the buildings, the fish-boats, the steamships, the metro stops, the pedestrian under passages, can also be counted as landmarks with their *identifiable* character from external especially from the sea. They symbolize the waterfront character and activities with relation to this.

As a conclusion, the area still has a particular character of its own that satisfies the *identity*. The area with their commercial, religious, transportation

activities also exist its own *meaning*. The edges of the Square cannot provide the definite boundaries that cause losing human scale in the Square by the huge voids. The different uses of the Square, the activities and the nodes cannot constitute the harmony and compositional relation in the area, which affects the structure of it negatively. It creates breaks in the bulk of the Square.

It is not possible to drive a universal set of rules for a good urban image. It related with the human's background and the historical, cultural and social characteristics of a place. In addition, it is obvious that perceptional theories can be a helpful tool for understanding the individual's relation with spatial qualities of space.

Table 5.1: The method of analysis of urban form.

URBAN FORM			
	The type of analysis	**The determinants**	**The keywords**
Two dimensional urban form analysis	Urban blocks and network of open spaces	• Density of urban solids and voids (The figure-ground analysis)	Well-defined structure, Human Scale
		• Size of urban blocks	Variety, Permeability, Accessibility, Vitality
		• Types of urban blocks	Variety, Simplicity
		• The edge of buildings that define the boundary of the Square	Sense Of Enclosure, Human Scale, Orientation
	Landownership pattern	• Parcel division	Variety, Accessibility, Continuity, Permanency.
	The Public Monuments	• Public monuments	Continuity, Permanency, Meaning, Identity.
	The Linkage systems	• The types of open spaces	Human Scale, Pedestrian Scale, Vehicular Scale
		• The geometry of open spaces	Well-Defined Open Spaces, Vitality, Publicness.

Table 5.1 (contunied)

Three- dimensional urban form analysis	The built and spatial forms	• Density • Ratio of height to width • Orientation of defining surfaces • Horizontal and vertical organization	Linear and Cluster Spaces, Human Scale, Harmony, Continuity, Accessibility, Visibility, Enclosureness.
	The treatment of defining surfaces	• Windows, arcades, doors of the buildings on the ground floor	Publicness, Permeability, Accessibility.
	The ground treatment and furnishing	• The hard and soft landscape elements	Variety, Publicness, Orientation, Differentiation.

Table 5.2: The method of analysis of urban activity.

URBAN ACTIVITY		
The type of analysis	**The determinants**	**The keywords**
Activity Pattern (necessary activities)	• The primary and secondary activities	Variety, Vitality.
Landownership pattern	• The types of property	Publicness.
The social and optional activities	• The dispersion and variety of the landscape elements • The continuity of the activities during day and at night.	Vitality, Variety, Sociability, Publicness.

Table 5.3: The method of analysis of urban image.

URBAN IMAGE		
The type of analysis	**The elements**	**The keywords**
Perceptual image analysis	• Districts, nodes, paths, edges, landmarks	Legibility, Identity, Meaning, Imageability.

CHAPTER 6

CONCLUSION

The transformations of the city may cause decay in the spatial qualities and lead to a loss of values and identities of urban spaces, especially in public spaces, as they can also lead to their enhancement.

This thesis explores the qualities of a particular urban space in Istanbul: the Eminönü Square. In this context, the research seeks to achieve two major objectives. One of the objectives is to develop a method of analysis to evaluate the qualities of urban space. For this purpose, first, the urban design theories and their methodologies of analysis have been discussed. In this context, the Eminönü Square, which has always been subjected to the changing dynamics of the urban developments especially by the beginning of 19th century with the modernization of Istanbul, is chosen as the research area. In order to grasp the formation and transformation process of the Eminönü Square, a historical survey has been made.

To analyze the transformation of the Eminönü Square, three main components of quality of space have been discussed: urban form, urban activity and urban image. Through the thesis study, what is tried to be achieved is to obtain the urban design criteria to evaluate the spatial qualities of the Eminönü Square. Furthermore, the criteria of the quality of urban space are developed by the help of the morphological, visual and perceptual analyses.

'Piecemeal' urban operations of the 19th century and the urbanization process of Istanbul through the 20th century gradually affected the urban public space. In order to observe the formal changes in parallel to these

operations five base maps are used: the water addiction map of 1815, the map of 1882 by Ayverdi, the map of Pervititich of 1940s, the map of 1960 and the map of 1996. In addition, photographs dated to the end of 1800s, beginning of 1900s, 1940s, 1950s, 1960s, 1980s and today are used for observing the changes in the analysis.

The form of urban blocks and open spaces has a significant role in defining the spatial quality of the urban space. In this context, figure-ground and linkage analyses as two-dimensional types of analysis are used for the morphological analysis of the Eminönü Square. Until the 1940s a figure dominant relation is observed in the area. The hierarchical and geometrical compositions of urban voids provide a well-defined spatial structure in the study area and building façades provide well defined boundaries for the Square. In the map of 1940s, a significant morphological change is observed after the operation of French urbanist Henri Prost on the northern side of the Mosque. Both the position of the square and the buildings which define its edges are changed in that period. However, it is stated that the boundaries of the Square is still defined by the façades of buildings in the 1940s.

In the late 1950s, the operations undertaken at the time of the Prime Minister Adnan Menderes, radically transformed the urban fabric of the Eminönü Square by the demolition of Balıkpazarı district and the opening of the Unkapanı-Eminönü road. The mutual relation between the urban blocks and open spaces started to lose the well-defined characteristics of open public spaces especially after these operations. The area of the square is extended and it *lost its sense of enclosure*. The map of 1996 shows a further change in the urban fabric of the area. The demolition of the urban strip along the shore by the operations of the Mayor Bedrettin Dalan *turned the area into a huge void*. The boundaries of the square do not give sense of enclosure anymore especially on the northern side of the Square. The urban blocks now, form a background to a *flow of open spaces* in the area. In this sense, it is stated that the disappearance of the well-defined spatial boundaries of the Square also affect people who can not orient themselves within the urban open space easily due to the lack of well-defined boundaries. As a result, it can be

stated that today two dimensional boundaries of the roads draw the form of the Square rather than the three-dimensional urban blocks. Moreover, the permanency of urban blocks is not observed anymore because of the large scale demolition operations.

The landownership pattern is another significant determinant of urban structure as it provides the *permanency* of urban fabric through time. The analysis of parcel divisions on the map of 1940s and the map of 1996 shows the significant changes in the area by the demolition. Generally small adjacent parcel divisions and the frequency of the streets on the northern side of the Balıkpazarı Street provided spaces for a variety of activities and accessibility until the late 1950s. By the demolitions, these patterns turned into large vacant lots. In this context, it is stated that the disappearance of the urban blocks and the old pattern of urban plots decreased the diversity of activities in the Eminönü Square. As a result, the chance to stroll on a variety of streets which enhance the street life disappeared in the Square.

The public monuments ensure *continuity* and *permanency* in the city. The analysis of public monuments in relation with the surrounding urban fabric on the five base maps shows that the structural relationship between the public monuments and the urban form almost continued until the 1960s. The demolitions again caused the reversal of the relation between buildings and the surrounding urban fabric. The relation of the public monuments with the open public space changed after the 1940s; Yeni Cami, Mısır Çarşısı, the Sultan Kiosk and the other buildings remained as single buildings that hardly defined the Square.

The street network has radically changed with the demolition of urban blocks. The changing transportation systems and the new activities affect both the structure of urban blocks and the network of open spaces. In 1940s, the Reşadiye Street was opened as a *regular* street which is different form the general *irregular, angular* street pattern to provide the relation between the custom house and its entrepots. The increased motor vehicle transportation systems after the 1950s necessitated the construction of new arteries that

completely changed the traditional street network in the area. The *curvilinear* Balıkpazarı Street, which constituted the primary street before the demolition, was replaced by a *straight* and *wide* road. The pedestrian dominant relation in the area was replaced by the increasing motor vehicle traffic. Thus, the Ragıp Gümüş Pala Avenue was turned into a motorway with the Dalan operations. Today, the Eminönü Square is a highly accessible node with the variety of transportation systems and multiplicity of roads crossing the square carrying both pedestrian and vehicular traffic. Yet, the roads act as a physical border between the northern and southern part of the Square for the pedestrians.

The visual components of urban space are important elements of the three-dimensional urban form analysis. The vertical and horizontal relations of buildings and the square showed well-balanced proportions until the 1940s. The surfaces of the buildings formed a *cluster space*. The horizontal effects of the buildings formed a foreground balancing the vertical ones like the Mosque until the 1940s. With the demolition of the buildings on the northern side of the Mosque in the 1940s, the Mosque came to dominate the Square and constituting the foreground that is easily noticed from Karaköy and Galata. The foreground of the Square was further changed with the operations in the 1960s and 1980s. The harmony of the building surfaces were lost by the sudden changes in height differentiation that obstruct the *continuity* of the surfaces. While on the northern side of the Square, especially Yeni Cami and Mısır Çarşısı and other urban blocks with their strategic location still create an *orientational effect* and provide *enclosure*, the wide openings on the other sides of the Square fail in providing any directional effect and defining the spatial form of the urban space. Thus, this situation also affected the character of social and optional activities taking place in the area due to the lack of *human scale*.

The treatment of defining surfaces was radically changed with the demolition of buildings around the square. Until the 1940s, various commercial shops with their doors and showcases opening to the square provided the interrelation between the exterior public domain and the interior domain. The

opening of the surfaces of Yeni Cami and Mısır Çarşısı by the demolition of buildings in front of them obstructed the direct relation between the public and private domain. Today, only the shops in front and on the western side of Mısır Çarşısı provide the exterior and interior public domain relations.

Today, hard and soft landscape elements are generally concentrated on the northern side of Yeni Cami and the western side of Mısır Çarşısı. The rest of the Square is used as a passageway due to the lack of landscape elements and of any built structure that could support activities.

As a result, the visual features and well-defined relations between the three components of visual qualities, the built and spatial forms, the treatment of defining surfaces, ground treatment and furnishing, have weakened gradually and decreased the *imageability* of the Square.

The diversity of activities with relation to the well-defined formal structure of urban space used to support a vivid street life in Eminönü. The density of wholesale and retail sale commercial activities had always been the primary activity pattern of the area. Until the 1950s, the diversity of activities and the well defined formal structure of the Square and its surroundings provided social and optional activities. After the construction of the Galata Bridge, the changing transportation systems, the introduction of the tramway, new ferry stations in the 19 the century had increased the congestion and vitality of the Square already at the beginning of 20th century. After the 1950s, however, the demolitions destroyed both the physical structure and the complex activity structure from the area that caused a considerable degradation in the vitality of the Square as a public place. The square was gradually transformed into nothing more than *a transportation hub*.

As mentioned above, today the physical setting of the area is not appropriate to support social and optional activities in any part of the Square, although it is full of people passing by. Moreover, the activities generally occur during the day. The closing hours of the shops and the end time of transportation facilities at night obstruct the *continuity of activities during the day and at night*.

Lastly, another important quality determinant of the urban space is its image. A hypothetical image analysis is made in this study referring to the Pervititich maps of 1940s. According to this analysis, identifiable districts, edges, paths, nodes and landmarks provide a legible environment for the Eminönü Square of 1940s. The well defined formal structure, a particular character of its own and variety of activities provide *identity*, a *strong structure* and *meaning* to the Square. All of these components mutually *composed the legibility* of the area. The image analysis of the Eminönü Square at the present time shows a different definition of districts, edges, nodes and landmarks form the ones in 1940s. The demolitions affected the structure of the area. However, the area has still a particular character of its own that provides identity and meaning with the primary and secondary landmarks; Yeni Cami, Mısır Çarşısı and the Galata Bridge. The edges of the Square do not constitute well-defined boundaries any more which *obstruct the legibility* of the Square.

The urban design project of 2001 is also another urban operation for the Eminönü Square which aims at transforming the area. The project tries to provide uninterrupted pedestrian circulation in the area. It suggests keeping the vehicular traffic under ground. But, the bus stops and the metro stops on the ground also provide 'publicness' by becoming activity node in the area. The buildings as Ahi Ahmet Çelebi Mosque, Zindan Han etc. on the northern side of the area still look like dispersed individual buildings in the area. The project does not propose physical and functional arrangements for these buildings and their surroundings. The project also aims to protect the city silhouette and the foreground of the historical buildings in the area. Although the visibility of the monuments is increased, imageability of the area is decreased because of the huge undefined voids in the Square. The landscape elements which only consist of trees and flower beds cannot provide social and optional activities. The project did not propose any arrangement for new activities for any part of the Square to keep the vitality and also to provide continuity of activity all day and night. In this context, it can be argued that the urban design project of 2001 can not achieve to provide vitality of public life on the Square and its surroundings.

The complex relationship between the urban form, urban image and urban activity can provide the qualities for creating successful urban places. In this context, however, in this study it is observed that, the Eminönü Square lost its well-defined formal structure, which caused degradation in the activity qualities and the legible identity of the Square. The opening of large voids in the area affected the quality of the Square negatively both in formal, visual, social and perceptual aspects. However, in spite of the decreases in the spatial quality of the urban public space, the Eminönü Square is still used by a variety of people for different purposes. The most important reason of this is its strategic location between two important parts of the city; Galata and the traditional central business district of the Historical Peninsula. The Square has always been a transition point between these two important parts of the city. In other terms, the Eminönü Square has been a gate *par-excellence* of the historical city of Istanbul. If this relation is not changed, the density of uses in the Square will always be observed through time. What is important here is to maintain the spatial quality of the Square and the quality of the public life that it houses.

Urban design proposals can be made for the Eminönü Square, which is still transforming by the projects, to provide the Square as a meeting point of the citizens instead of being a transition area.

In this context, the roads that act as a physical border on the northern and southern part of the Square should be rearranged to provide pedestrian accessibility as well as a spatial continuity between the two parts which are cut by the motorways today. The social, cultural and economic activities should be increased in the Square. In order to turn the Square into a node of activities which support daily activities and appropriate facilities should be located evenly at all parts of the square. Special events have to be organized to stimulate public life and the vitality of the Square both during day and night. The design of hard and soft landscape elements may provide well defined surfaces for the spatial definition of the Square.

In conclusion, this thesis aims to understand the values, structure and the identity of historical public space, the Eminönü Square, by studying the historical evolution of the square in an urban design approach. It can be stated that, the Eminönü Square, which has been a primary public space for Istanbul throughout its history, lost its values, well-defined structure and identity today by the urban operations. It is believed that the findings of this research will be helpful for the future urban design projects to enhance the spatial and public qualities of the Eminönü Square.

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