REINTEGRATION OF AN INNER-CITY INDUSTRIAL HERITAGE TO THE WIDER URBAN CONTEXT: THE CASE OF CERMODERN

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

BY

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

MAY 2016

Approval of the thesis:

REINTEGRATION OF AN INNER-CITY INDUSTRIAL HERITAGE TO THE WIDER URBAN CONTEXT: THE CASE OF CERMODERN

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ABSTRACT

REINTEGRATION OF AN INNER-CITY INDUSTRIAL HERITAGE TO THE WIDER URBAN CONTEXT: THE CASE OF CERMODERN

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May 2016, 136 pages

With the globalization process, cities have to keep pace with the structural transformation in global economy. The changing industrial production types have resulted in changes in land uses of the cities. In these sense, abandoned inner-city industrial areas have become important urban design problems. These areas actually constitute the majority of "lost spaces" defined by Trancik (1986). In the last few decades, the architectural intervention and redevelopment of these abandoned innercity industrial areas has become an important subject within the field of urban design, and the integration of these industrial sites to the urban context has been brought into the spotlight. This study approaches to the integration discussion as perceptual integration through using the imageability concept of Lynch (1960) at the urban design scale. CerModern which was obtained through the transformation of an industrial heritage is one of the major venues of the cultural life in Ankara. As being subject to the transformation project from its former industrial use to cultural use, CerModern is a good exemplar to shed light on the integration of an industrial heritage to the wider urban context. This thesis examines the perceptual integration of CerModern within the urban context by using Lynch's methodology of imageability analysis.

Keywords: Industrial Heritage, Imageability, Reintegration, CerModern, Kevin Lynch

KENT İÇİ ENDÜSTRİ MİRASININ KENTSEL BAĞLAMLA YENİDEN BÜTÜNLEŞMESİ: CERMODERN ÖRNEĞİ

Şanlı, Hakan

Yüksek Lisans, Kentsel Tasarım, Şehir ve Bölge Planlama Bölümü Tez Yöneticisi: Doç. Dr. Bahar Gedikli

Mayıs 2016, 136 sayfa

Küresellesme ile birlikte, kentler küresel ekonominin sonucu yasanan yapısal değisimlere ayak uydurmak zorunda kaldılar. Endüstriyel üretim yöntemlerindeki değismeler sehirlerdeki alan kullanımlarının değismesine neden oldu. Bu anlamda, şehir içi terkedilmiş endüstri alanları önemli kentsel tasarım sorunları haline geldi. Bu alanlar Trancik (1986) tarafından ortaya atılan "Lost Spaces" (Kayıp mekân) kavramının şehirlerde önemli bir çoğunluğunu oluştururlar. Son yıllarda terkedilmiş şehir içi endüstri alanlarının mimari müdahalelerle ve yeniden geliştirme yaklaşımlarıyla içinde bulundukları kentsel bağlamla bütünleşmeleri, kentsel tasarım alanının önemli konularından olmuştur. Bu çalışma bütünleşme konusuna algısal bütünlesme olarak Lynch (1960) tarafından ileri sürülen "Imageability" (İmgelenebilirlik) kavramı üzerinden kentsel tasarım ölçeğinde yaklaşır. Endüstriyel miras yapılarının dönüşümü ile elde edilmiş olan CerModern Ankara'daki kültürel hayatının önemli merkezlerinden birisidir. Gerçekleştirilen bir dönüşüm projesi ile önceki endüstriyel işlevinden sıyrılıp kültürel yeni bir kullanım kazanan CerModern, bulunduğu endüstri mirasının içinde kentsel bağlamla bütünleşmesinin incelenebileceği iyi bir örnektir. Bu çalışma CerModern'in kentsel bağlamla algısal bütünleşmesini Lynch'in (1960) imgelenebilirlik analizi yöntemlerini kullanarak incelemektedir.

Anahtar Kelimeler: Endüstri Mirası, İmgelenebilirlik, Yeniden Bütünleşme, CerModern, Kevin Lynch

To Şule

ACKNOWLEDGEMENTS

First and foremost I would like to express my gratitude to my supervisor Assoc. Prof. Dr. Bahar Gedikli for her intellectual guidance and criticism, but especially for her patience and positive attitude during my studies. Her valuable comments and suggestions enlightened my mind. It would not have been possible to complete this thesis without her support.

I also would like to thank to my examining committee, Asst. Prof. Dr. Olgu Çalışkan, Assoc. Prof. Dr. Lale Özgenel, Asst. Prof. Dr. Yücel Can Severcan, and Assoc. Prof. Dr. Burcu Özüduru for their valuable comments and suggestions.

I am always grateful to my parents, Rabia and İsmail Şanlı, and my brother Emre Kaan Şanlı for supporting me in everything with their endless love, support, and understanding. I am indebted to them forever.

I am also indebted to my friends who supported me with their positive energies in rough times.

Finally, but most importantly, I would like to gratefully thank to Şule, who encouraged and inspired me throughout this study with her patience, joy, friendship, and love. I would not be able to complete this thesis without her support. She is the one who makes the tough times bearable with her existence during the entire process.

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CHAPTER 1

INTRODUCTION

1.1 Problem Definition and the Aim of the Study

Along with globalization, cities have witnessed spatial transformations as a result of changing industrial production types. This situation concomitantly has resulted in change of land uses in cities. Inner-city industrial areas lost their functions in the meantime and they were either moved to outskirts or demolished. Therefore, abandoned industrial areas in cities became dominant urban design problems in the past decades.

This urban design problem has a particular importance due to historical and cultural value of these industrial buildings. They help communities to define their character more clearly by providing a strong link between past, present, and future, and by strengthening the sense of belonging. Their regeneration helps promoting a more desirable place image, since historic buildings contribute immensely to the attractiveness, distinctiveness, and identity of places. In recent years, cities have started to emphasize their unique characteristics via bringing their historical values into the forefront. The transformation of industrial heritage with new functions has become widespread accordingly. There are various approaches to inner-city industrial areas currently. They are transformed and re-integrated, or transformed and still in the integration process to the urban setting. There are also examples of, such areas which are abandoned, derelict and waiting for demolishment.

This thesis focuses on the integration problematic of inner-city industrial areas rather than the transformation itself in today's cities. Therefore, this study aims to explore the value of inner-city industrial sites as a component of the urban setting and how their reintegration to the city impacts on the image of the city as an urban problematic.

1.2 Methodology of the Thesis

For the study, the methodology of qualitative research is employed and a case study is chosen as a research method. The old "Cer Ateliers" are used as a study area of the research. These ateliers are important industrial heritages which date back to 1920s. In this regard, qualitative methods will be used in order to examine the reintegration of this transformed old industrial facility to the city. As the study is based on qualitative research methods, interviews are conducted with the users of the area and also with one of the project architects. The mental maps of the interviewees are obtained via these interviews. Also personal observations are included. The methodology of Lynch for analyzing the imageability of the city is used. The major findings of the case study related to interviews are illustrated, and the mental maps overlapped in order to illustrate the common image map of the area.

1.3 Trajectory of the Thesis

The study consists of five chapters. Chapter 1 introduces the scope of the study, the aim of the study, and the methodology of the study.

Chapter 2 is based on a review of industrial heritage literature. The chapter begins with discussing the industrial facilities in the cities between the processes of industrial revolution and deindustrialization. These areas in the cities are defined and

¹ "Cer" is a Turkish word stemming from Arabic, which means pulling and dragging. Cer Ateliers are places for the maintenance and repair of motors and train cars.

explained with the concept of "Lost Space" by Roger Trancik. Later, the definition of industrial heritage and the historical development of the term are handled. Accordingly, industrial heritage examples around the world are given and their transformation processes are examined.

In Chapter 3, the imageability concept which is coined by Kevin Lynch is discussed in detail. The visual elements and qualities of the city form that affect the image of the city are elaborated. Later, Lynch's problem definitions about imageability are explained and the methodology for analyzing the imageability of the area is obtained.

Chapter 4 is the case study part. This chapter starts with explaining the methodology applied for the case study research. This thesis applied qualitative research methods as explained. The data collection for the field survey includes interviews with the users of the case area and the architect of the transformation project, and personal observation. Relatedly, the chapter, after the methodology section, explains the history of the area profoundly, and continues with the findings of the field survey based on the interviews, personal observation, photos, and illustrations.

Chapter 5 is composed of a summary of the study and conclusion. Also contributions and implications for further research are presented.



CHAPTER 2

INDUSTRIAL HERITAGE

2.1 From Industrial City to Abandoned Inner-city Industrial Areas

Due to economic, social, and technological changes, city centers have experienced a rapid growth around the world. During the industrialization and then globalization process, world political economy has gone through a period of structural changes. These changes mainly have affected the production functions in the cities. With the industrial revolution, a totally new period started for cities as industrial facilities located in urban areas. Traditional craft production transformed to industrialized and standardized form of mass production, in other words to Fordism, and industrial sites developed and changed accordingly. Gradually, in rapidly developing cities, large scale industries started to move to suburbs related to decentralization at the beginning of the 1980s. During this period, as different groups of consumers demanded different production goals and specialized goods rather than mass products, production type has undergone a second transformation. Specialized and flexible production has started with Post Fordism. In contrast to Fordism, wide ranges of small scale enterprises take part in the market instead of mass markets. Less homogenous, more diverse and differentiated production began. From the mid-20th century onwards, with flexible production industrial production in the city center has decreased and most of the existing industrial areas moved to outskirts. Because of difficulty in raw material procurement, restricted land for development, and negative environmental effects, the development of industrial areas in centers was seen unsustainable. Workforce started to be replaced with technology, while industrial activities slowed down. According to Harvey (1990), the flexible accumulation of capital resulted in the decentralization of production from developed to developing and underdeveloped countries. Hence, the built environment became idle for production. In other words, as industries and production functions were shifting to the developing countries, in almost all developed countries there remained abandoned inner-city industrial areas from industrial revolution period and afterwards. Hence they were seen as problematic areas after a while (Hall, 1998; Polanyi, 1944).

As mentioned above, once the economy and development model of a city changes, existing industrial areas lose their functions and become abandoned areas, in other words brownfield sites. Brownfield is defined as "a real property, the expansion, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant" by United States Environmental Protection Agency (EPA, 2015). On the other hand, according to Concerned Action on Brownfield and Economical Regeneration Network (CABERNET) brownfield areas "are derelict or underused, mainly in developed urban areas, have been affected by the former uses of the site and surrounding land, may have real or perceived contamination problems, and require intervention to bring them back to beneficial use" (EUGRIS, 2015). Brownfield sites may include "former military bases, closed petrol stations, disused warehouses, derelict office blocks, dilapidated housing, abandoned offices, disregarded monuments, discarded railway lands, and infilled landfills" (EUGRIS, 2015).

Brownfield redevelopment has an important part of land use policies for sustainable urban development. They offer both challenges and opportunities in terms of gaining those sites back into beneficial use. Brownfields mainly have historical and cultural values rather than their market value and these values make their transformation worth it (Thornton and Franz, 2006, cited in Alpan, 2012). Due to their values, both spatial and functional sustainable regeneration of brownfield sites have great importance. In fact, as well as their reintegration to the city, their maintenance and active use with urban design strategies are important. The lack of any of these may

result in decrease of their cultural values (English Heritage, 2004, cited in Alpan, 2012).

Old and idle industrial areas located in the inner-city isolate the city parts and cause danger for city users as they are desolated. There is a need for the transformation of these non-functional and idle depression areas. They have a valuable potential for functional transformation related to their location, cultural and historical values, and land size rather than continuation of their original functions. Furthermore, their transformation both increases the quality of life and provides the transformation of "lost spaces" into well-defined places. Discussing on the transformation of inner-city industrial areas has a significant role about how urban areas can be transformed in the manner of livability.

The functional re-evaluation of the idle industrial areas in the city and keeping the traces of the industrial era prevent them from losing their values, and provide a relationship with the city. In this regard, collaboration is needed with industrial archaeology discipline in order to give the full treatment to the industrial heritage and cultural values and to achieve sustainable results during brownfield-led regeneration process.

2.2 Inner-city Industrial Areas as Lost Spaces

2.2.1 Definition of Lost Space

In today's cities, many vacant and unused lands can be seen in their centers (Trancik, 1986). Designers have faced with the problem of defining and re-integrating these areas to the urban context. Creating outdoor environments that provide collective and unifying frameworks for new developments is the main goal for designers, because the prevalent urban development process treats buildings as isolated objects in the landscape. This situation leads to confusion for the relation of urban space as grounds and the objects as figures. In this process, urban space is rarely thought as an exterior volume with form and scale or connections with the other spaces. Therefore,

today most of the environmental settings have undefined and unshaped anti-spaces (Trancik, 1986).

Peterson (1980) defines two conception of space; space and anti-space. According to this definition traditional space is space and modern space is anti-space. He (1980, p. 89) states that "space is by definition neither 'ineffable' nor 'abstract'". Space can be perceived with its volume and identifiable with its form. It is discontinuous in principle, closed and static; on the other hand, anti-space is just the opposite; it is undifferentiated and formless, continuous in principle, open and flowing. Meanwhile he (1980, p. 91) indicates that "anti-space can be controlled, directed, or temporarily captured, but never composed".

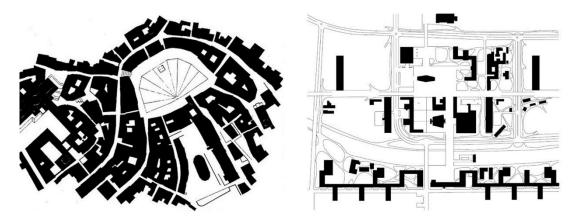


Figure 2. 1 Piazza del Campo, Siena, Italy (space) and St. Die, France (antispace) (Peterson, 1980, p. 95)

Trancik (1986, p. 1) mentions that "understanding the concept of anti-space as a predominant spatial typology is essential in contemporary urban design practice". Limited sensibility of anti-space or modern space leads to erosion and eventually loss of space. In addition to that, the economical and industrial movement to the periphery during the fifties and sixties accelerated the problem of lost space in the city centers. These spaces cause gaps which break the continuity of city form and pedestrian links between important destinations. Identification of these gaps and filling with a framework of figures and ground which enables these gaps to be re-

integrated to the city setting and open to new investments is significant (Trancik, 1986).

Lost space is anti-space, i.e. an undesirable urban area which does not make any positive contribution to the surrounding, and which is in need of redesign. Lost spaces provide important opportunities both to develop urban centers and counteract urban sprawl, despite being underused and deteriorating. They can be leftover unstructured landscapes or abandoned waterfronts, train yards, vacated military sites, and industrial complexes that moved from the center to the suburbs (Trancik, 1986).

2.2.2 The Causes of Lost Space

According to Trancik (1986), there are five major factors effecting the formation of lost spaces in cities. These are increasing dependence on the automobile; the attitude of architects and planners of the Modern Movement toward open space; zoning and land-use policies of the urban renewal period that divided the city; unwillingness on the part of contemporary institutions to assume responsibility for the public urban environment; and abandonment of inner-city industrial, military, or transportation sites.

- 1. The increasing dependence of automobile is the major reason for lost spaces. This transportation system has caused an urban environment which contains open spaces predominantly composed of highways, thoroughfares, and parking lots. In this urban environment, public space loses its cultural and social meaning and the transportation network causes isolation of some city parts, in other words, lost spaces (Trancik, 1986).
- 2. Modern Movement can be defined as a new approach to the architectural design from 1930s to about 1960. The designers of this movement aim to move away from traditional forms and construction techniques towards to new era in design (Benevolo, 1977). However they care about primarily buildings as freestanding objects and separated from their context, and ignore the importance of outdoor space. They barely pay attention to the design of areas between the buildings, thereby

public space lost both its physical qualities and those related to meaning. Therefore open space becomes lost spaces (Trancik, 1986).

- 3. Zoning policies and urban renewal projects of the 1950s and 1960s have resulted in the loss of traditional qualities of urban space in American cities. These policies and projects have caused the urban decay. Also the zoning legislations aim to separate the functions which are usually integrated in the city. Therefore, these legislations divide the cities into homogeneous districts via traffic arteries. In fact, the major lost spaces in the urban fabric are the areas between the districts (Trancik, 1986).
- 4. Privatization of city centers and emergence of central business districts seriously contributes the lost spaces in cities. While the verticality of buildings rise in importance because of the increasing demand for floor space in the center, the ground level or public and collective spaces of cities lose their significance and the city becomes a showplace for private icons. Trancik (1986, p. 17) states that "in the modern city, each element is the responsibility of a different public or private organization, and the unity of the total environment is lost". Also the public institution's lack of interest in maintaining public spaces and controlling the physical form and appearance of city is one of the main reasons for lost spaces (Trancik, 1986).
- 5. Changing land uses in the city centers is another reason for lost spaces. Relocations of industrial facilities to the suburb for strategic and environmental reasons, abandoned military properties, obsolete transportation facilities, or vacated commercial/residential areas create underused areas in the city centers. These areas become large lost spaces in city centers. According to Pozo and González (2012), it is an important task to prevent abandoned industrial areas from becoming "junkspace" or "nonplace". However, they have great potential for reintegration to the urban setting with regard to their central locations and interesting architectural qualities. For this purpose, well-conceived transformations projects in order to reuse these areas offer significant social advantages rather than economic gain (Trancik, 1986).

Trancik (1986, p. 18) states that "these five factors have, then, together created the dilemma of modern urban space". According to him, the most important factor is public institutions' unwillingness and inability for controlling the appearance and physical structure of cities. He mentions that a successful city can be possible, if the institutions have special regulations for spatial design and designers attach equal importance to outdoor spaces and buildings. Thus, identification of lost spaces and transforming them into both social and physical development opportunities can be at ease (Trancik, 1986).

2.3 Industrial Heritage

In the face of the advanced technologies, inner-city industrial facilities have become functionally obsolete and abandoned. The attitude towards these abandoned buildings has started to change during the 1960s and 1970s (Mengüşoğlu and Boyacıoğlu, 2013). The loss of these abandoned inner-city industrial areas both in physical and meaningful aspects has raised awareness. Also their cultural, social, and economic values have been recognized. Hence the term "industrial archaeology" has come to the fore.

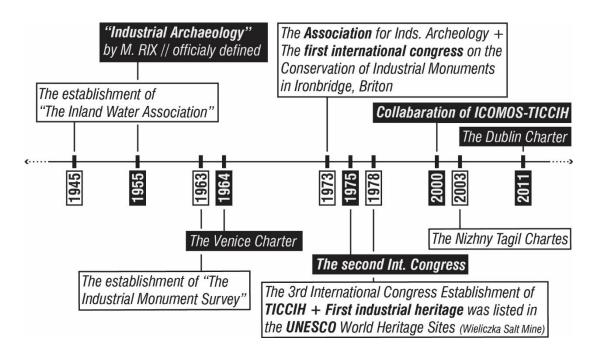


Figure 2. 2 Historical development of the concept of industrial heritage (Drawn by the author)

Industrial archaeology was first used by Michael Rix in 1955 in the Journal of The Amateur Historian (Kazas, 2008; Trinder, 1981). According to Rix, the study area of industrial archaeology comprises of examining extant industrial remains produced after the industrial revolution. Rix emphasizes the importance of industrial remains and conservation of past industry buildings and structures for aesthetic reasons (Trinder, 1981). Gedikli (2002) indicates that industrial archaeology deals with the conservation and reuse of idle industrial areas, buildings, machines, infrastructure systems, and workers' houses. The discipline of industrial archaeology is developed in order to protect the abandoned industrial areas reflecting industrial revolution of the city and utilize their social and cultural values (Kazas, 2008). Once Rix coined the term, first the Industrial Monument Survey was established in 1963 in order to record the industrial monuments and then the Journal of Industrial Archaeology was established in 1964 owing to increasing archaeological concerns (Trinder, 1981). Also in 1964, the International Restoration Charter, in other words, the Venice Charter was formed with the need of conservation and restoration of monuments and sites and later it was adopted by ICOMOS in 1965.

While industrial archaeology refers to the exploration and the documentation of abandoned industrial remains and also the methodology followed during these exploration and documentation, industrial heritages are certain industrial areas with historical importance and all other entities associated with those industrial areas (Saner, 2012). Industrial heritages consist of sites, structures, buildings, complexes, and landscapes besides the machinery, objects, or other documents related with industrial areas. Moreover, Cossons (1993) defines the content of industrial heritage as production units, additional units for post-production, and transportation structures associated with the production. Therefore, industrial heritages comprise of all elements in the site such as mines, mills, steam engines, production units, transportation units such as bridges and roads, material production facilities, and living units of workers and managers (Cossons, 1993, cited in Kevseroğlu, 2011). On the other hand, Kıraç (2001) embraces industrial heritages in two parts; industrial objects and industrial landscape. While industrial objects reflect the technology of their periods, industrial landscape represents the residential area of workers where they shelter and perform their socio-cultural activities.

According to Trinder (1981), the very first awareness towards the protection of industrial heritages came up in Britain by an individual attempt. A British writer L.T.C. Rolt who was interested in English canal system and struggled to protect and maintain it, established a voluntary organization, namely the Inland Waterways Association in 1945 (Trinder, 1981). He later worked for the preservation of the railroads and actually became a guide for the conservation with his career. Later on, the Association for Industrial Archaeology was established in 1973 under the presidency of Rolt. In fact, starting with individual attempts industrial heritage conservation has transformed into a wider concept with countless conservation councils and associations and the scope of industrial heritage has broadened and gained a new perspective at the beginning of the 1970s with a concern of reconstructing industrial monuments (Saner, 2012; Trinder, 1981).

The conservation of the industrial heritages first came up with the conservation of the Ironbridge Gorge in Britain. In fact, the English approach has played an essential role in conservation of old industrial buildings (Saner, 2012). In 1973, the first

International Congress on the Conservation of Industrial Monuments took place in Ironbridge, Britain. With the participation of representatives from different countries such as England, Ireland, Canada, East and West Germany, the Netherlands, Sweden, and the United States the congress actually prepared the way for discussing the subject in the international scale for the first time (Saner, 2012; Seely and Martin, 2006). Later, in 1975 the second International Congress on the Conservation of Industrial Monuments was held in Bochum, Germany. Then, in 1978 the third congress was organized in Stockholm, Sweden. In the third meeting, establishing a conservation organization was brought to the agenda and accordingly *The International Committee for the Conservation of Industrial Heritage* (TICCIH) was established in 1978. In fact, it was also decided to use the term "industrial heritage" instead of industrial monument in the third congress (Çanakkale, 2012).

TICCIH is the first world organization focused on industrial heritage and the main aim of the organization is to develop an understanding on the conservation of industrial heritages and provide cooperation at an international level in preserving, conserving, investigating, documenting, and researching of the industrial heritage (TICCIH, n.d.). The organization has contributed to a lot for industrial heritage and provided to increase collaboration. In 2000, TICCIH associated with ICOMOS and became the special advisor on industrial heritage to UNESCO's International Council on Monuments and Sites (Seely and Martin, 2006). This actually is the universalization of the term "industrial heritage" via TICCIH and the collaboration of TICCIH and ICOMOS has been an important benchmark. Nevertheless, before this collaboration, another important attempt occurred with the entrance of an industrial heritage site for the first time to UNESCO's World Heritage List in 1978. The first industrial heritage added to the list of UNESCO World Heritage Sites is the Wieliczka Salt Mine in Krakow, Poland. Currently, there are more than 40 industrial heritage sites included on the UNESCO World Heritage List (ICOMOS, 2006).



Figure 2. 3 Wieliczka Salt Mine, Krakow, Poland (Author's photo archive)

In 2003, TICCIH prepared a charter namely the Nizhny Tagil Charter for the Industrial Heritage in order to set international standards on industrial heritage. Later in 2011, Joint ICOMOS – TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes, also known as Dublin Charter, were adopted. According to the Nizhny Tagil Charter (2003), industrial archaeology means:

[A]n interdisciplinary method of studying all the evidence, material and immaterial, of documents, artefacts, stratigraphy and structures, human settlements and natural and urban landscapes, created for or by industrial processes. It makes use of those methods of investigation that are most suitable to increase understanding of the industrial past and present. (The Nizhny Tagil Charter, 2003, p. 1)

On the other hand, in the Nizhny Tagil Charter (2003) industrial heritage is defined as the remains of industrial culture which have historical, social, architectural, technological, or scientific value. As mentioned before, while industrial archaeology is the method of examining and documenting industrial heritages, industrial heritages correspond to:

[B]uildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouse and stores, places where energy is

generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship and education. (The Nizhny Tagil Charter, 2003, p. 1)

According to the Dublin Charter (2011), industrial heritage represents the connection between cultural and natural environment. Both material assets and intangible dimensions such as the workers' organizations, technical knowledge, and the complex social and cultural legacy are embraced within the industrial heritage. Industrial heritage sites can be examined with regards to their design, the history and the technology of their periods, their purpose, and their evolution in time (Dublin Charter, 2011). The value of an industrial heritage is formed with the structure or site, the landscape, the fabric, components, the setting, and the machinery besides the intangible records such as memories, arts, and customs (Dublin Charter, 2011). According to Overmann and Mieg (2015), industrial heritage is not only simply related to identity and memory, traditions, and labor movements, but it also belongs to cities, sites, and their transformations.

As well as the collaboration of TICCIH and ICOMOS, the term industrial heritage has been put on the agenda by other international organizations. For instance, the Council of Europe is concerned about various types of architectural heritages and the Parliamentary Assembly of the Council of Europe has numerous architectural heritages' recommendations, two of which them are on industrial heritage. Besides the Council of Europe, the European Union has implicitly embraced the industrial heritage with the Culture 2000 Programme (Saner, 2012).

In a nutshell, in accordance with all these developments it can be said that industrial heritages are areas that need to be protected and their values need to be conveyed. Industrial areas have an important place in our minds as they reflect the life of time and architecture. Functionless industrial areas that have significant historical traces for historical continuity of the city need new functions in order to have a connection with the city and to become living places again. As well as their values and potentials, their reintegration to the city is important as they may face difficulties in the city as long as they are not interfered. In fact, Kıraç (2001) draws attention to the negative situations that the industrial heritages are exposed in the city. First of all, as

they have wide and valuable landscape, their rent value is high which actually creates pressure on them. Secondly, industrial areas become brownfields when they are abandoned. Furthermore, environmental pollution caused by industrial activities and visual pollution caused by neglected and unqualified urbanization make conservation of the industrial heritage structures harder. Moreover, high vehicle density and shortage of parking areas are the problems faced during the protection of industrial areas stuck in the city center. The lack of these infrastructures poses a problem and industrial heritages become accessible usually through narrow streets (Kıraç, 2001). In fact, these reveal the importance of conserving industrial heritages. Therefore, first conservation of the industrial heritages and then their transformation and reintegration to the city are vital.

Severcan and Barlas (2007) indicate that there are six major advantages why industrial heritages should be conserved and re-functioned. First of all, their location in the urban context is very important, as they are located in the hearth of the cities, in the city centers, and waterfront areas. Hence, their conservation and transformation become inevitable. Secondly, they occupy a huge amount of land. These areas have a potential for creating public open areas such as industrial archaeological parks, theme parks, and open-air museums including museums, galleries, theatres, gardens, and playgrounds. Thirdly, industrial heritage areas have a usable vacant building stock. According to Severcan (2012), using these buildings with new functions not only contribute to cities' economies but also have an effect on urban culture. Fourthly, industrial heritages have symbolic and monumental values. Their conservation provides the regeneration of a collective memory and a public realm, strengthens the feelings towards those place and the sense of belonging (Severcan and Barlas, 2007; Severcan, 2012). Fifthly, industrial heritages have unique architectural values. With their special construction techniques and materials, they not only make cities legible but also provide individuals to discover the "self". Lastly, a responsibility towards public comes into question. Industrial heritages are mostly in public ownership; therefore, this prepares the way for gaining public benefits from the conservation of abandoned industrial heritage areas (Severcan and Barlas, 2007).

On the other hand, Canakkale (2012) indicates that conservation is based on social, cultural, and economic reasons. First of all, buildings and areas with historical and cultural values are real documents of the cultural life, the technical level, and the social structure of a distinct period. The benefits obtained with their conservation have an effect on society rather than individuals. They are reference points to collective memory and urban memory; therefore, lack of them may weaken the communication and solidarity of communities and result in a lack of a sense of belonging. Conversely, easily perceivable and identifiable urban environment give the feeling of sense of belonging (Tütengil, 1995, cited in Çanakkale, 2012). Besides social and cultural reasons, also an economical aspect of conservation is important. Conservation or refunctioning brings vitality to the economy of the city. Rather than demolishing and reconstructing a building, using the existing building stock provide efficiency of labor force and energy. As well as their economic importance, regaining of these areas or buildings with their environment is also important in terms of sustainability (Kevseroğlu, 2011). While regaining these industrial areas with new functions, their aesthetic value and historical value should be considered. As industrial heritage sites are wide in terms of spatial characteristics and attractive in terms of architectural aspects, they are suitable for regaining a new function. Therefore, they are mostly re-used as cultural facilities (Severcan, 2006, cited in Cihanger, 2012).

While refunctioning industrial heritage areas, the intended function becomes more significant when these areas' important locations are considered in the city. It must ease the integration process of the area as a whole with its not only buildings, but also landscape which can act as a recreational area for the city. There are two methods while evaluating these types of areas. First of all, depending on the qualities of an industrial heritage it can be evaluated by maintaining the conservation of physical characteristics. Secondly, it can be aimed to add a new function to these areas by taking into consideration their environment and their industrial landscape and to regain as a public area in order to increase the quality of urban life (Kevseroğlu, 2011). Also, Kuban (2000) mentions about two different transformation approaches for evaluation of industrial heritage areas which are refunctioning and re-

architecture. Re-functioning refers to the re-use of existing buildings and places with rearrangements and do not require a formal intervention actually. On the other hand, re-architecture refers to bringing a new dimension to the existing aura with a set of interventions (Kuban, 2000).

In the last decades, related to all these values, industrial heritage areas have been subjected to urban design literature. As well as their own transformation, they have an important role in transforming their environment and even the city. These areas which are integrating to the city with new various functions may revive the memories of the society besides they may give new meanings to the urban environment. Also in some examples from a neighborhood scale to urban scale, these areas have enriched the quality of the cities due to their comprehensive design strategies.

2.4 Examples across the World

In order to understand the value of integration of inner-city industrial heritages better and prepare the roadmap for the case study, two successful examples of industrial heritage transformation projects are selected to be analyzed. The Bicocca is selected due to its rare scale, and the Gasometers are selected due to their rare functions that they were regained. Yet both of them are regained and integrated to their urban context as inner-city industrial heritages with new functions. This analysis intends to reveal the similarities and peculiarities of their transformation processes with the case study of the thesis.

2.4.1 The Transformation of Milan's Bicocca by Pirelli

Bicocca is a significant industrial district that was set up on the north of Milan in the early twentieth century. It has been the symbol of industrialization of Italy and its economic power for decades. The area has been the main site for industrial activities of Italy's oldest and symbolic firm known as Pirelli. As more industries were located

around Bicocca, the district was started to be called "The City of Factories" (Irace, 1997, cited in Kaika and Ruggiero, 2013).

The area has witnessed economic and political changes during its industrial production period. As a result of de-industrialization, industrial companies started to move from urban areas to the suburbs at the end of 1970s, and Bicocca was particularly affected by this phenomenon (Cirnigliaro, 2012). In the 1980s, the city of Milan was growing into an international finance and service center. Therefore, Bicocca became an integrated part of the city both physically and cognitively (Bolchini, 1967, cited in Kaika and Ruggiero, 2013).

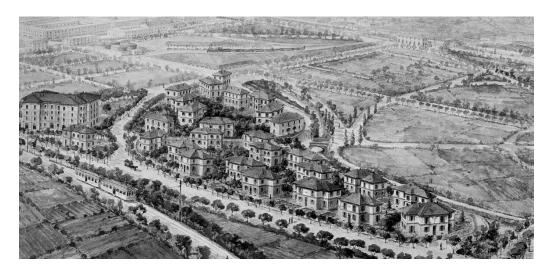


Figure 2. 4 Pirelli's workers' village at the beginning of 20th century (Kaika and Ruggiero, 2013, p. 4)

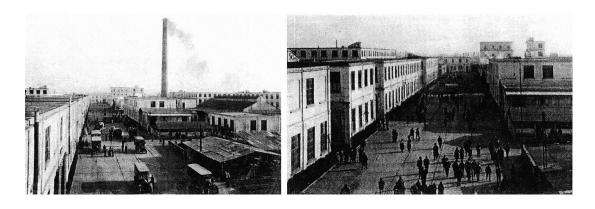


Figure 2. 5 Bicocca district in 1922 (Galea, 1992, p. 21)

The Pirelli Group understood that the Bicocca could not maintain its industrial function any longer. Therefore, they decided to redevelop this area with new functions, which are more feasible to the urban development around the area. In the beginnings, the firm's vision was sustaining Milan's industrial competitiveness by stimulating and diffusing new trends in technology and production and matching job needs within the scope of "TechnoCity" concept. This concept included research center, universities and businesses, and development laboratories in order to "integrate multi-functional and technological pole" to the city (Kaika and Ruggiero, 2013).

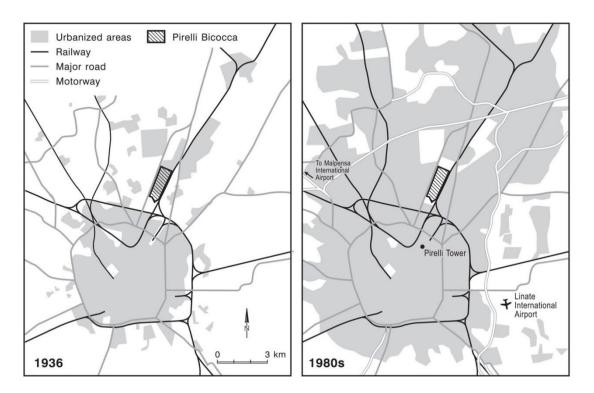


Figure 2. 6 Milan's urban growth and Bicocca's location (Kaika and Ruggiero, 2013, p. 7)

The company's TecnoCity vision was not shared with the company's workers. The labor union was not convinced that the project and the development of the area would be for the benefit of city, company, and workers. Due to this reason, project started after an agreement between local authorities, labor union, and the company. According to this agreement, the company guaranteed employment for 85% of the

Bicocca workers, and some part of industrial production (cable production) would remain at Bicocca, the rest had to be located in maximum 25 km distance. Although some production functions had been running, Pirelli aimed to give new meanings to area both imaginary and reality except the workers' area.

Pirelli's proposal for the area drew interest to region and guided to City Council's vision in 1985 because of two important reasons. First, this proposal could be an example for mitigating the consequences of de-industrialization, and second, it is the first comprehensive and collective redevelopment proposal for a declining industrial area.

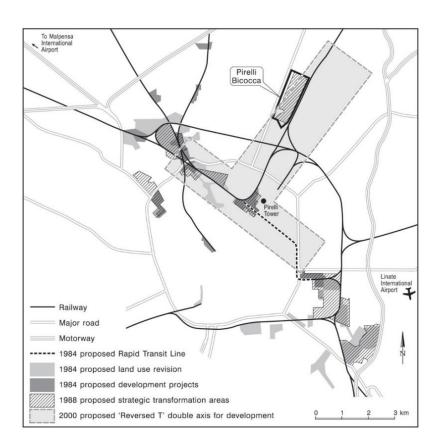


Figure 2. 7 Pirelli's influence on the changing geographies of Milan's post-Fordist development (Kaika and Ruggiero, 2013, p. 9)

In the beginning of 1980s, Milan's development was projected in the direction of the north-west/south-east axis around a new rapid transit line. After the proposal of Pirelli, the Bicocca was identified as a Strategic Transformation Area in 1988. Then

because of Bicocca's location, the north-east axis connected to the main development axis, and the Bicocca was assigned primary development status in the "Reversed T" development axis of Milan (Kaika and Ruggiero, 2013).

Pirelli's proposal was finalized after an international invitation-only design competition for the Bicocca. In 1986, Vittorio Gregotti's proposal was selected among eighteen other projects including the projects of Frank O. Gehry, Renzo Piano, Richard Meier, Mario Botta, and Aldo Rossi. His proposal provided the intended flexibility more than the other projects. According to Gregotti, his proposal is the most realistic one in the competition due to its flexibility of grid system in order to deal with the unsteady program.



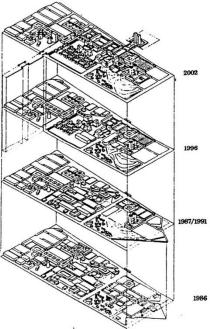
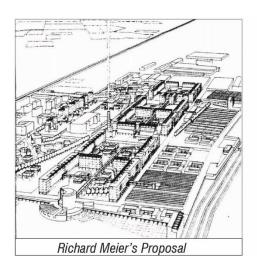


Figure 2. 8 Gregotti's proposal site plan and project phases (Galea, 1992, p. 102, 104)



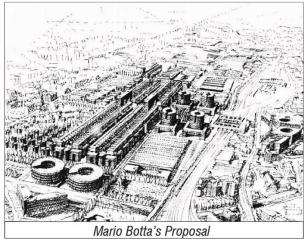


Figure 2. 9 Other important project proposals (Galea, 1992, p. 79)

The original vision was for a development constituting mainly new technological and innovative industry as well as research facilities. Also there was some scope for mixed use developments including residential and commercial. However, in the second phase of the Gregotti's proposal, the density of residential areas was much higher than the first proposal. The Bicocca Projects, which affected an area of 960,000 m², is the second largest urban transformation project in Europe after that of Berlin (Cirnigliaro, 2012). One of the main values of the design was the separation of pedestrian and car traffic. The pedestrian circulation flows in a linear pattern from all directions with connections to squares. Also one of the important aims of the projects was connecting the area as a corridor between the surrounding green areas via a system of bridges and pathways (Galea, 1992). The project area has been connected to the city center with motorway, rail system, and tram system; this also has a significant role to reintegration of the projects to the city effectively.

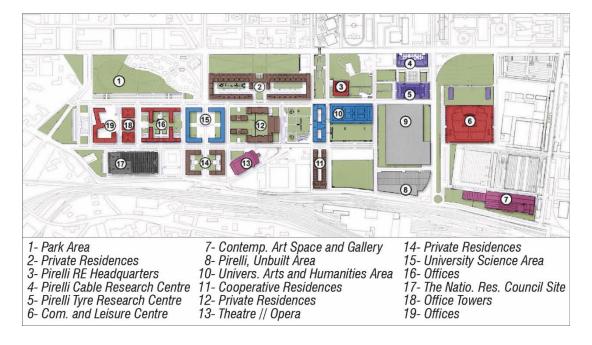


Figure 2. 10 The new land use plan of Bicocca (Adapted from Kaika and Ruggiero, 2015, p. 720)

Even the criticism about the some contrasts between the intention of the first project and current situation such as some parts of the area represent rapture in physical and social space due to private companies' safety measures, the Bicocca Project is still an inspirational example of re-development and reintegration project due to its process and correlation between private and public institutions to regain an inner-city industrial district to the urban context.

2.4.2 The Transformation of Simmering Gasometers, Vienna

The historical background of Vienna can be easily seen in the urban texture under favor of the awareness about preserving historical and cultural values. The same awareness is also valid for industrial heritages, too. A revitalization project was implemented in Simmering, the 11th district of Vienna, which is also known with its industrial background through the history. They decided to revitalize the four Gasometers in 1995 which were abandoned for about ten years. In pursuit of this decision, these unique buildings were reintegrated to the city with multiple new

functions such as apartments, a student dormitory, offices, a day care center, shops, restaurants, cafes, and an event hall with the capacity for 2,000 to 3,000 people.



Figure 2. 11 The Gasometers at the beginning of 20th century (Central European Travel Blog, 2014)

During the late 19th century, passing through certain changes, Vienna expanded its borders and relatedly started to become a center of culture and modernism. In order to provide the needs of rapid population growth, Viennese authorities started to develop the city's infrastructure by building roads, railways, and gas and electric facilities.

In 1892, an international competition was announced for construction of gasworks in Vienna. Schimming, a German engineer, won the competition. Then the construction started in 1896 as a part of the city's investment in a large scale plan and it took three years to complete the construction of the four gasometers. At the time of their construction, the gasometers were intended to be the largest gasholders in Europe.

By staying as an iconic part of the city's silhouette, the four gasometers were cylindrical shaped, each with 67 meters height, 65 meters in diameter and about 90,000 m³ volumes. Structural material of the gasometer was steel and each was

enclosed with red brick façade. In the 1970s, Vienna started to use natural gas instead of town gas. Thus with the new technologies such large scale structures were no longer needed to store the gas. For this reason the gasometers were closed in 1984. The technical equipment inside were removed and the buildings became obsolete in time (Enichlmair and Borsdorf, 2008).

The gasometers served for almost eighty years. They witnessed a century in the Vienna's development process. They have become an important symbol for Simmering where the industrial facilities of Vienna were located. They were symbolizing the 19th century's industrial practice and architecture. Both architecturally and functionally the gasometers were unique at their time. Also the Simmering Gasometers were one of few gasometers, which still remain in Europe. In terms of their size, the Gasometers have the feature of being a monument and a landmark in urban fabric. These buildings left a mark on Viennese people's collective memory. Besides, they were the first conspicuous large scale buildings for visitors of the city. Once industrial heritages were recognized as cultural values, in 1981 they had been listed by the country's Heritage Ministry as outstanding examples of industrial architecture.

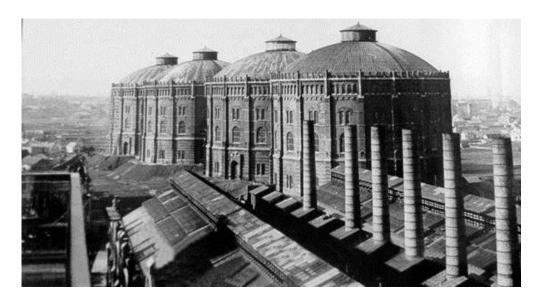


Figure 2. 12 The Gasometers in old times (Wien-vienna.at, 2016)

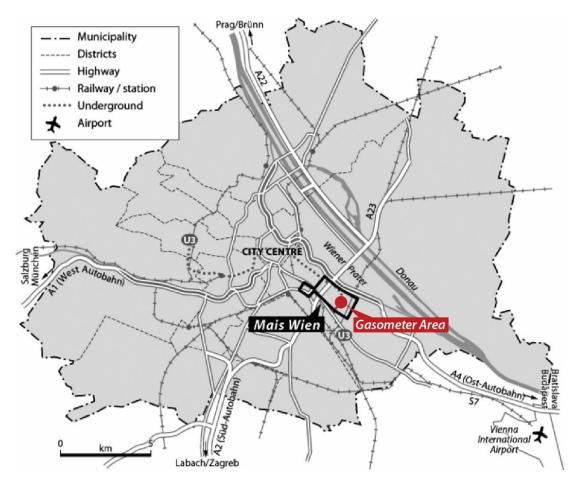


Figure 2. 13 The location of Gasometers and the Erdberger Mais Project in Vienna (Einchlmair and Borsdorf, 2008, p. 227)

In 1995, the Vienna City Hall decided the revitalization of these 'monuments' and organized an international project competition. Four different projects were selected for each gasometer. The selected projects were proposed by Jean Nouvel, Manfred Wehdorn, Wilheim Holzbauer and Coop Himmelb(l)au. The selected projects were implemented three years later. These buildings have been regained to the city and to the urban setting with various new functions.

When the lack of housing came to the fore in the middle of the 1990s, a lot of housing projects were implemented in peripheral areas that were easily available. But later, this strategy gave place to another strategy which gave importance to the historical built environment rather than the new. The Gasometer project was also a good example of this new strategy. The revitalization project's main objective was

constructing affordable flats for the average citizens in these fine samples of protected industrial architecture while providing high quality standards.

The challenge of this project was not only about creating suitable spaces for housing inside cylindrical brick structures, while the external appearance of this brick structures was to be preserved. Yet another challenge was supplying a full range of services for the new residents according to the needs of contemporary forms of housing and employment. Meanwhile, the architects had to keep the changes on historic buildings at a minimum as far as possible because of their architectural and historical value.

For these reasons, firstly existing windows were widened by additional slits on façade in order to provide sufficient natural light to inside. Moreover, the cover coats of the gasometers were removed so that the inner courtyards became much brighter. But the historic metal dome structures were renovated. Also, the housing units were located above the 30 meters height and the infrastructure facilities were situated below including two storey shopping mall extending across all four Gasometers with 70 stores, retail spaces, shops, restaurants, a supermarket, and a bank.

The Gasometers Project is a good example of housing and workplace combination. The buildings host 11,000 m² office spaces. Also the Vienna Municipal and Provincial Archives found its place in these industrial heritage buildings. 600 m² day-care nursery and parking spaces are the other components of the project.

With respect to its external appearance, the solutions for interiors had to be modern and enable to the new functions. In this sense, each of the four architects assumed different approaches to the design problems.

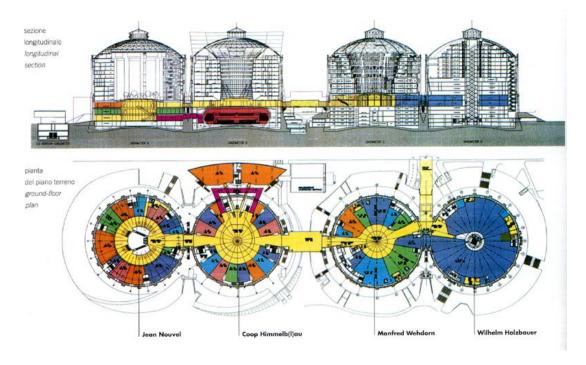


Figure 2. 14 The plan and the section of Gasometers (msaudcolumbia.org, 2014)

The Gasometer A was designed by the French architect Jean Novel. He used 'light' as a design instrument inside, created a large indoor plaza by combining old and new materials in a harmony and used the materials with their reflective and transparent characteristics.

The Gasometer B was designed by the Austrian team Coop Himmelb(l)au. They added three new volumes to the existing façade. In the base of the Gasometer B a multifunctional event hall was designed. Inside the main and additional building are apartments, student hostel, and offices. A buffer zone was created between the event hall and the apartment/office floors. Thereby internal communication was increased. Besides 'Sky-Lobby' on the 6th floor gathered the students and the habitants as a social mediator. Also this gasometer contains a multifunctional hall with a capacity of more than 4.000 people. Thus it is suitable for concerts, balls, raves not just for conferences, fairs or exhibitions.

The Gasometer C was designed by Austrian architect and expert on restoration of Viennese residential and industrial architecture, Manfred Wehdorn. He wanted to

sustain the original feel of the gasholder as possible. Thus, external brick shell was left as original. He built six residential towers shaped according to cylindrical shape of the gasometer. The towers taper towards to the top and forms terraces in the inner courtyard. Also the three floors above the shopping mall on the ground floor are office floors.

The Gasometer D was designed by another Austrian architect Wilhelm Holzbauer. Rather than the inner-ring model used in the other three gasometer, Holzbauer designed three residential tower shaped like a star and connect them in the center with a core. The spaces between the residential blocks shaped inner courtyards enclosure by the brick shell. The apartments' balconies were directed to the interior courtyard gardens and the residents can watch the townscape through the window of the original brick shell.



Figure 2. 15 The Gasometers after the transformation (twistedsifter.com, 2009)

When the details of the revitalization project were presented, some criticism came in about whether this strategy would actually work. But public and economic sector were definitely supporting this project. Even so all the negative criticism, all the retail spaces were leased before the completion of project. Also all the residential units were leased in a short time after.



Figure 2. 16 The location of the Gasometers in the Erdberger Mais Project area (Adapted from Einchlmair and Borsdorf, 2008, p. 226)

The underlying reason behind this success is that the designers did not approach to the Gasometers regardless of their environment. All design approaches for the Gasometers were aiming to accelerate the development of the area via the project. Also, the revitalization project of Gasometers is a flagship project for broader development project of the Erdberger Mais area which is aimed to create a concentrated location that offer potential investor security and flexibility (Enichlmair and Borsdorf, 2008). By virtue of extending the U3 metro line to Simmering with a new station next to the Gasometers and easing the accessibility of area, as it was expected, this aim came true. Even while gasometer constructions, there appeared new investments around the project area. This area became the Europe's biggest construction side at that time. It was estimated that there would be about 10.000 new work place and relatedly 50,000 jobs around. In 2004, 1,600 inhabitants and around 600 employees were living and working in these revitalized buildings (Pöschek, 2004, cited in Enichlmair and Borsdorf, 2008).

2.5 Concluding Remarks: Reintegration of Industrial Areas to Urban Settings

All inner-city industrial areas have a recent past of loss of function, obsoleteness, being abandoned, decadence, and transformation with new functions in order to be re-integrated physically, mentally, and functionally to the urban settings. These areas, for decades, have been lost spaces, voids in the city perception, or mostly ruins behind the boundary walls for citizens (Trancik, 1986). Nevertheless, these industrial areas have left a significant mark on both development process of the city itself and citizens' minds due to their sizes, functions, and meanings. Transformation of an old industrial area which has been idle for a long time and which is contrasting with its surrounding is an important urban design problematic in the city.

This problematic has a multi-disciplinary content from conservation of a single structure to a macroscale planning strategies. This study limits this urban design problematic's scope to the concept developed by Kevin Lynch, namely "imageability". This concept is important because it is not only about physical qualities but also about mental qualities which are important for transformation's post-effects besides the process itself. Also, an imageable environment is more inviting and heightens the depth of human experience (Lynch, 1960). Therefore, "imageability" can play a crucial role for reintegration of these areas. The image of a city is an output of past experiences' effect on memory (Lynch, 1960). Hence, industrial areas have significant influence on image due to their dominant role in the past experiences of city. For this reason, derelict industrial areas are appropriate for being re-integrated to the image while passing through a transformation process.

CHAPTER 3

IMAGEABILITY OF AN URBAN AREA

People create mental images about their environment via their perceptions of physical surrounding. A mental image is identified as the picture-like representation of the phenomena in the human mind (MacInnis and Price, 1987). The images and mental maps constituted by these images play a significant role for the individual while going into action in that environment. These images are the abstractions of reality and they are not precise. They contain reductions, eliminations, and sometimes additions of elements to reality by relating and structuring the parts (Lynch, 1960).

According to Bell and Dourish (2004), an urban environment consists of various layers. The main layers are as follows:

- physical layer which contains the relation of city elements (buildings, roads, and squares),
- historical layer which can be perceived through the traces of historic evolution in the environment.
- cultural experiential layer which varies according to cultural values.

People always experience and perceive the things or events in the city with their relations to surrounding and series of events leading them to occur. The memory of past experiences have essential role while doing this because people develop associations with the environment in time. These associations make impressions on

people's images in the form of memories and meanings. As these memories and meaning can change in time, the city itself is in a continuous transformation process. For this reason, it is not possible to speak of a rigid or final result about the image, but only a continuous succession of phases (Lynch, 1960).

Lynch (1960) explains the visual quality of cities with regard to their mental images in his book The Image of The City. The relationship between the observer and the perceptual form of urban environment is the focal point in his book and Lynch tries to answer the following questions in his studies: "What is the meaning of the city form for the people who live in it?" and "What can the city planner do to make the city's image more vivid and memorable to the city dweller?". In this respect, he analyzes the imageability of three American cities, namely Boston, New Jersey and Los Angeles, via field reconnaissance and comparisons with each other.

3.1 Legibility and Imageability

Lynch (1960) focuses especially on a particular visual quality of city environment: the apparent clarity or "legibility" of the city. Legibility means the ease with an environment's parts which can be recognized and organized into a coherent pattern. A legible city is comprised of clearly identifiable parts which are easily grouped in the over-all pattern.



Figure 3. 1 Legibility

According to Lynch (1960), legibility is crucial in the city settings and attention should be paid while transforming or building our cities. Although legibility is influenced by spatial characteristics, it is not convenient to think this concept for

cities only physically because legibility or clarity is also about the perception of cities by inhabitants (Köseoğlu and Önder, 2011). The significance of legibility comes from the basic human need which is describing and identifying the environment. The ease during the process of way-finding is also important for the sense of belonging, and structuring a sufficient image about the environment is the key factor for this sense. On this subject, Lynch (1960, p. 4) asserts that "this image is the product of immediate sensations and memory of past experience, and it is used to interpret information and to guide the action".

Spatial legibility depends on spatial layout and its degree of complexity (2D knowledge) and on saliency of spatial elements (3D knowledge). Spatial legibility is related to spatial knowledge, as legibility is one of the factors affecting the acquisition of spatial knowledge. Legible environments are coherent, understandable, simple, and organizable. These features provide faster and easier acquisition of spatial knowledge. (Köseoğlu and Önder, 2011, p. 1194)

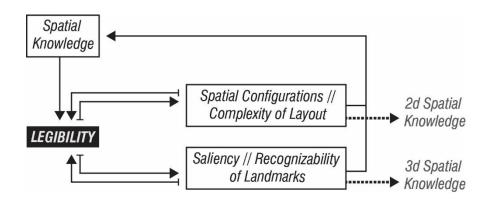


Table 3. 1 Components of the concept of legibility (Adapted from Köseoğlu and Önder, 2011, p. 1194)

Since the legibility is the clearness or sharpness in the perceived form and the constituent parts of city environment, it is the essential feature for shaping the image mentioned above. According to Herzog and Leverich (2003), legibility is the characteristics of a space which provide the information for ease of creating cognitive map and wayfinding. A clear, vivid and integrated physical setting which is possible in a legible environment enables a sharp image. In addition, if people have a clear image, they feel emotionally safe. The enjoyment and consequently the use of

city environment increases and they feel more comfortable to interact with their social and physical environments. Therefore it is possible to say that a legible environment has a social role, it is the basis for individual growth. Moreover, a legible environment enhances the depth and intensity of human experience in the city. An ordinary action can gain new meanings in a legible environment due to being purified from obstacles causing confusion (Lynch, 1960).

Meanwhile, Lynch (1960) describes imageability as the physical qualities related to identity and structure in the mental image. These qualities provide the observer with an opportunity to evoke a strong image. They help the observer to form vividly identified, powerfully structured, and highly useful mental image of the city. Objects are not only able to be seen, they can also be perceived sharply and intensely by senses in an imageable environment. Lynch (1960, p. 9) indicates that "it (imageability) might also be called legibility or perhaps visibility in a heightened sense...". An imageable city is well formed, distinct, and remarkable and has a pattern of high continuity with many distinctive parts clearly interconnected.

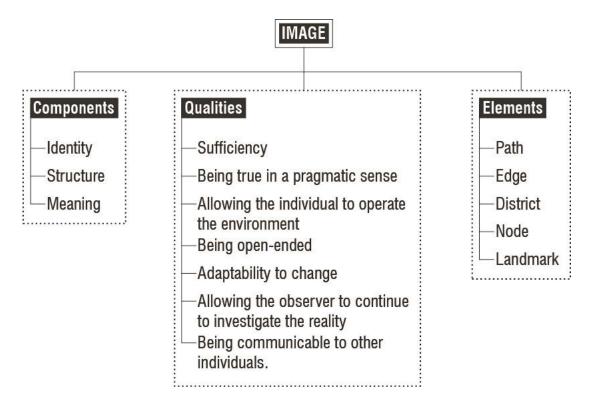


Table 3. 2 The properties of image (Drawn by the author)

3.2 The Components and the Qualities of Image

Formation of the environmental image is a two-way process between the observer and the environment. The environment presents information and relations then the observer selects, organizes, filters according to his/her perception, gives meaning to them and structures his/her environmental image. The image of a specific environment differs according to the observer. According to Lynch (1960), an environmental image has three components:

Identity

Identity is the distinction of one object from other things, its recognition as a separable entity. These components mean individuality or uniqueness of the object not equality or similarity with something else.

Structure

The constituent parts of an image must have spatial or pattern relations with the observer, the other objects, and each other.

Meaning

The object must have some meaning for the observer, whether practical or emotional. Meaning is also a relation, but quite a different one from spatial or pattern relation. It has a moral side and unlike identity and structure it is not easily influenced by physical manipulations (Lynch, 1960).

Besides these three components, Lynch (1960) also defines some qualities for the image in order to provide and ensure a strong relation between a person and environment. These qualities are:

- Sufficiency
- Being true in a pragmatic sense
- Allowing the individual to operate the environment
- Being open-ended
- Adaptability to change

- Allowing the observer to continue to investigate the reality
- Being communicable to other individuals.

Despite the fact that a person can develop his/her image of environment by an internal learning process, he/she mostly develops this image under the influence of external physical shape. The form of the environment plays an enormous role in the shaping of the image. A formless space can be significant and it can be influential for someone's image, but when a space has a definite form, its effect increases excessively.

For the image, the function of circulation is also quite significant. The image is directly affected by the circulation system. If it is complicated, one's image gets confused. There are several physical factors that affect the image and these factors should be examined with their settings in the whole. There are five elements that Lynch (1960) uses in order to describe the whole namely paths, edges, districts, nodes, and landmarks.

3.3 The Elements of the Image

Cities are formed by some elements which develop their characters and identities. These elements have a pioneer impact on individuals while forming their city image. As much as these elements are well-defined, it can also be mentioned from a public image which overlaps with individuals' images.

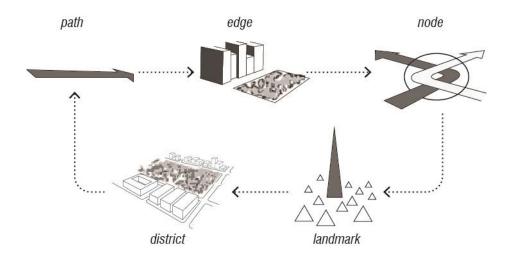


Figure 3. 2 The relation of the image elements (Adapted from Lynch, 1960)

Imageability and legibility of an area is influenced by some factors. These factors can be physical or moral such as meaning, function or history. The moral factors in the scope of industrial areas have been discussed in the previous chapter. Below, physical factors which directly have an effect on the image will be elaborated. Lynch (1960) limits his analysis to the effects of physical and perceptible factors, which are paths, edges, districts, nodes, and landmarks.

Paths

Lynch (1960) describes paths as the channels along which the observer customarily, occasionally, or potentially moves. They are habitual or potential lines of movement in the city. This movement can be walking, riding or driving. So from the tiny alley to the large highroad, all these lines which people use in order to go from somewhere to another are paths. We observe our environment mostly during this movement because in the urban settings, all other elements of the city are organized along paths. Thus paths have the predominant role on our image.

Some features of path can change its effect on image, such as continuity, density, concentration of special activity, spatial qualities, façade characteristic, visual exposure from other parts of city, or planting. Paths are important while experiencing the city with their directive characteristic. This directive characteristic comes from regular or irregular repetition of some qualities and it is important for wayfinding in

the city and consequently for a clear image. Besides, regular changings in some qualities are important for recognizability of path. One can estimate not only the direction but also the distance to the destination via this changings in the path Also good alignment, perception of the destination and connection of one to other paths are the qualities in order to make its imageability clearer (Lynch, 1960).

Edges

Edges are the linear elements which are the delimiter of a space or region or boundaries between phases. These are not perceived during user's movement and they do not have an impact on image as much as paths do. They mainly act as lateral references. However they have important features for people to organize their environment. Sometimes edges are separators between areas and hinder the movement from one to other. On the other hand, they can be the connector, interaction field between different areas. They have a disruptive power which must be taken into consideration. Edges can dismember the city and isolate a distinct part from the rest of other parts or they can be used as a restrictive tool for city growth by the authorities. In order to increase the effects of edges on the image, not only distinct visibility but also continuity in form is required. If edges enable some visual or motional penetrations, their perception can go beyond being just barriers. Lynch (1960, p. 100) states that "...increasing the visibility of an edge is by increasing its accessibility or use".

District

Cities can be divided to smaller parts and sections according to their common features. Lynch (1960) describes these parts as "districts". District is the area with a homogeneous character. People feel the change when they get in from the outside. They can be distinguished by the other parts of the city with their physical, functional, and social differences. They can be physically visible from the outside with their urban form and fabric, building types, streets, landscape, topography etc. Districts can be exterior references for the common image of the city by their visibilities. However, people can define districts mentally and reference them for their individual image even if they are physically similar to the whole. Feelings can

also help identifying districts such as familiarity or confusion. Also social structure is significant for identifying the districts. The boundaries of districts may vary while some of them are definite, others are uncertain. These boundaries are mostly edges and sometimes they can separate districts from the city. According to Lynch (1960), these districts are introverted. Nevertheless, district can express connections with other city elements, if the boundaries are penetrable instead of being barrier. Thus, they can join to other districts which have connections with the others and the image of the city can be constituted from part to whole.

Nodes

The definition of node is a point or area where two lines or parts intersect or branch off. In urban scale, Lynch (1960, p. 47) defines nodes as "the points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is traveling". Nodes can be intersection of paths, transfer area in a transportation network, the decision making or structure changing points in the city. Nodes can be condensation of some use or function. Distinct nodes can be cores or centers of the districts and they have an important effect on forming the image because the observer's environmental perception and senses open more in the nodes due to making decision or comprehension the changings (Lynch, 1960; Young, 1991). Therefore, stations are always important nodes in the city. Lynch (1960) indicates that the image cannot carry too many nodal centers. These nodal centers define reference points for environmental image of individual. For this reason, too many reference points in an image generate confusion and well-defined physical form is not essential for nodes for being recognized. However if the node has a defined form, it becomes more memorable because easily identifiable nodes can imaged sharply. The qualities which increase the identifiability of a node, such as intensity of use, unique buildings or clear connections to various paths, contribute to strengthen the impact of the node on image.

Landmarks

Landmarks are point references with their external existence in the city. They are unique and memorable in the context. They resemble to nodes as they are foci;

however, they are different with their easily defined physical aspects. They can be perceived instantly due to their size, shape, material, or even history. According to Raubal and Winter (2002), three factors ensure the noticeability for a landmark. These are visual factors (form, façade, or material), semantic factors (cultural and historical value), and structural factors (location). While some landmarks are seen from different locations in the city, others are seen in close-range. This visibility range determines the effect size of landmarks to the common image. Besides, if landmarks have a clear form or contrast with their background or their location has a particular importance, they become more identifiable and significant for image. Contrast is important for making landmark dissimilar and remarkable. Along with physical qualities, historical background is also important on emergence of landmarks (Lynch, 1960).

3.4 The Structure of the Image and the Relation of Its Elements

The elements described above are raw materials for the environmental image in the city scale. In order to constitute a clear image, joining them together and providing a satisfying form is essential. When this is achieved, the elements reinforce one another.

It is not possible to think these elements apart from the others. District is different from the other image elements in the city in respect to its size. Paths, edges, nodes, and landmarks are contained by district and they are not just components of district, but also consolidate its identity by enriching its content. In metropolitan scale, paths are the primal element on the images. Intersections of important paths create nodes and these nodes influence the occurrence of landmarks.

According to Lynch (1960), most observers organize their environment via grouping their image elements and these upper scale organizations are called "complexes". Complex is a whole for the observer and it can be more than one in the city. Complexes define localities for individuals. Outside of complex is like the dark areas in a map, the observer can establish only weak bond with the environment. Such

places are generally perceived while passing through one complex or locality to other.

The image of city is not single and comprehensive rather it is fragmented to sets of images in different scales. The observer constitutes his image from the street level to the neighborhood level and then to the city level. The image varies not only according to the scale but also according to the viewpoint, time of day or season. Most importantly, it varies from person to person according to their different experiences or localness for the area. For instance, a building can be perceived concretely with its form, façade or color and this perceiving is same for majority of observers, or sometimes it can be abstract. Observer perceives the building with its function or location which has references just for individual himself. Nevertheless main structure of images share dominant similarities which can be used as common references in the city (Lynch, 1960).

As much as the image's structural quality which refers to interrelated and wellarranged parts increases, the image becomes more identifiable. Lynch (1960) identifies a four stage process for increasing structural precision. In the first stage, the city elements are not related to each other. They are even free in the urban environment. There are disjointed images with huge gaps between districts. According to Trancik (1986), these areas are main lost spaces in the urban fabric. In the second stage, the elements are again not well-related but they are in a general direction and at a relative distance to each other. Although the connections are not definitely understood, the relation of few elements can be perceived. In the third stage, the elements are connected with flexible and elastic ties. As they are in sequence, it may result in distortion and disconnection of pairs habitually. It may also result in shifting to different moments. In the fourth stage, parts are connected in all dimensions and such a map make possible to correlate new points. The movement is possible in every direction and at any distance (Lynch, 1960). In short, enriching the connections between complexes can contribute to strengthen the structure of image as Lynch (1960) explains with the four stages.

People instinctively or consciously attempt to organize their surroundings. This attempt comes from fundamental human needs namely discovering and identifying the environment (Max-Neef, 1991). Lynch (1960) states that, urban form must be organized so as to ease this attempt. If the environment is well-defined and sharply identifiable, one can connect and give his own meaning to the city.

3.5 Form Qualities

According to Peterson (1980, p. 89), "the form in which space is presumed to exist is the framework of our perception of the world". Lynch (1960) describes urban design qualities about the characteristic of city form. These qualities can be used by designer in order to clarify the image of specific area in multiple scales.

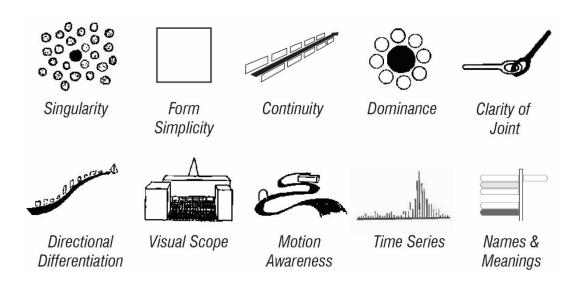


Figure 3. 3 The qualities of city form (Adapted from Lynch, 1960)

Singularity or Figure-Background Clarity

Lynch (1960) explains qualities of singularity which make an object or area more identifiable, noticeable, vivid and recognizable. These are sharpness of boundary, closure, contrast, form, intensity, complexity, size, use, and spatial location.

Human perception distinguishes what is seen in the environment as figure or ground (Schenk, 2013). Zerubavel (1991, p. 34) states that "of all shapes projected into the

eye, we can usually only really see those that give the impression of figures...". If the objects have well-delineated boundaries, they are perceived as figures; however, the background is perceived boundless and shapeless (Zerubavel, 2015). According to Arnheim (1977, p. 9), "Modern space is experienced as the given which precedes the objects in it. In the absence of such objects, space would still exist as an empty boundless container". It can be said that modern space is perceived as the background for the figure and the clarity in the figure-background relation clarifies the image of the space (Lynch, 1960).

Form Simplicity

Form simplicity means clarity and simplicity of visible form in the geometrical sense. Form of an object is directly associated with its image for observers. It is possible to say that complex forms in the environment are simplified by observer while structuring the image. Therefore simplicity in form has positive contribution to the environmental image by easing the perception of objects (Lynch, 1960).

Continuity

It means continuity in paths or edges which are mentioned above, nearness of parts, repetition of rhythmic characteristics and similarities, harmony in the surfaces, forms and uses. The continuity in edges is important as it provides closure. Trancik (1986, p. 18) states that "people's image of and reaction to a space is largely determined by the way it is enclosed". These continuities are the qualities that ease the perception of complex environment and contribute to the formation of a single identity (Lynch, 1960).

Dominance

It is the dominance of one part to the others by means of size, intensity, or interest. This dominance makes the part as a principal feature of the whole which it belongs to. This quality allows the necessary simplification of the image by omission and subsumption (Lynch, 1960).

Clarity of Joint

Clarity of joint means high visibility and clear connections of joints with each other. These joints are the important components while forming the image or associating the different images to the whole. Herewith they need to be highly perceptible (Lynch, 1960).

Directional Differentiation

It comprises asymmetries, gradients, and radial references which differentiate one end from another, one side from another, or one compass direction from another. Observer uses these qualities heavily for structuring the image on the larger scale (Lynch, 1960).

Visual Scope

Visibility is one of the predominant qualities which are needed while forming the image. Therefore the features which increase the range and penetration of vision are important. These include transparencies, overlaps, vistas and panoramas which increase the depth of vision, articulating elements which visually explain a space, concavity which exposes farther objects to view and clues which speak of an element otherwise invisible. All these features serve to image in order to enlarge its scale (Lynch, 1960).

Motion Awareness

People observe their urban environments mostly during movement and they associate the places or objects with the circulation routes in their images; therefore, being conscious of the environment while moving somewhere is important for the image of the city. It is possible to strengthen this consciousness with some qualities in the city which maintain the consistency of direction or direction changes or make visible the distance interval. These qualities reinforce and develop what an observer can do to interpret direction or distance, and to sense form in motion itself (Lynch, 1960).

Time Series

While observer perceives the urban environment in motion, he also perceive in time. Maybe it is not valid for instantaneous perceptions, but people observer the developing pattern of elements rather than elements themselves in a complex environment. This pattern can be simple linkages of elements or series which are structured in time. These series are melodic due to rhythm in their nature and this makes them an important quality for organizing in the large, dynamic, modern metropolis. Lynch (1960, p. 108) states that "we need fresh thought on the theory of forms which are perceived as a continuity over time, as well as on design archetypes which exhibit a melodic sequence of image element or a formed succession of space, texture, motion, light, or silhouette".

Names and Meanings

Image differs from person to person due to its non-physical characteristics. Meaning constitutes the background of the physical qualities on an element. This meaning can be social, historical, functional, economic or individual. Sometimes the name can give meaning to the place and give clues to the observer about it such as North Station. Also alphabetization of street names contributes effectively to the imageability. These non-physical characteristics can reinforce the identity or structure of an area in which case the physical characteristics are not enough (Lynch, 1960).

According to Lynch (1960), these qualities should not be thought separately and should not conflict with each other. Otherwise, they do not work properly and the total effect will be weak on quality of form. If a region embraces urban design qualities mentioned above, it will have a simple and identifiable, consequently imageable form.

To sum up, the image elements in the city and design qualities for the form have importance on the perception of observer and imageability of cities, if each of them is thought and designed an integral part of the whole. Lynch (1960, p. 108) states that "it is the total orchestration of these units which would knit together a dense and

vivid image, and sustain it over areas of metropolitan scale". Form should be manipulated despite the fact that it must be well-defined. Thus it can be compatible to various images in various conditions such as time of day, season, observer's movement, position or observer himself. This compatibility for variety of conditions allows contrast between the elements and this contrast enriches and sharpens the character of form. In order to enhance contrast in the form, sharply differentiated elements should be brought into close and perceivable relation. Lynch (1960, p. 110) states that:

The designer must therefore create a city which is as richly provided with paths, edges, landmarks, nodes, and districts as possible, a city which makes use of not just one or two form qualities, but of all of them. If so, different observers will all find perceptual material which is congenial to their own particular way of looking at the world. (Lynch, 1960, p. 110)

Today, urban areas have mostly man-made characteristics more than their natural ones. The existing natural settings are not an important factor for imageability as it was before except the dominant ones like a hill. The specific character of a site is defined as a result of human actions and desires. Accordingly, the urban environment is changing rapidly in formal and functional meaning. The observer's image has difficulties in order to keep pace with these changes. The image elements and their associations or form qualities which are mentioned in these chapter may be useful in maintaining a visible structure and a sense of continuity even while massive changes are occurring.

Also the problems of the urban areas are mostly man-made. If the scope is limited on the problems about imageability of an area, two types of problems show up according to the type of the area which are new developing area or already existing area. The imageability problems while reshaping an already existing environment will be focused in the scope of this study.

3.6 The Methodology of Lynch's Imageability Analysis

According to Lynch (1960), there are some objectives while reshaping an existing environment: discovering and preserving the image, solving the perceptual difficulties, and drawing out the structure and identity. He defines some recommendations and controls called "visual plan" for shaping or reshaping the image and states that preparation of such a plan might begin with an analysis of existing form and public image of the area. Diagrams or reports can be used for these analyses in order to illustrate the public image, basic visual problems, opportunities, and important image elements and their interrelations.

Lynch (1960) uses two principle methods in his imageability analysis of Boston, New Jersey, and Los Angeles. These are:

- Interviews with a small sample of citizens with regard to their image of environment,
- A systematic examination of the environment image evoked in trained observers in the field.

Interviews with a Small Sample of Citizens With Regard to Their Image of Environment

The essentials of these interviews are the sketch map of city, the detailed description of a number of trips through the city, and a listing and brief description of the parts that felt to be most distinctive and vivid in the subject's mind. Lynch (1960) describes three objectives for these interviews:

- Testing the hypothesis of imageability
- Gaining some rough approximation to the public image
- Developing a short-cut method for eliciting the public image

The sketches and questions in the interview (see Appendix A) constitute the first part. In the second part of interviews, interviewees are asked to describe and classify a stack of photographs which includes irrelevant ones with the photographs of focused city. Also, they are asked for telling the clues which help them to identify the

place in the photographs and placing them in proper positon on a large map of the city.

The interviewees and the interviewer make field trip in the next phase. The interviewees are asked to lead the way and discuss the reasons why they choose that particular route. The subject also asked to explain what he/she saw along the path and where he/she felt confident or lost. The interviewees ask three directional questions to the randomly selected people in the field. These questions are "How do I get to ____?", "How will I recognize it when I get there?" and "How long will it take me to walk there?".

A Systematic Examination of the Environment Image Evoked in Trained Observers in the Field

This method consists of simplified field analysis for the area by a trained observer who previously instructed in the concept of city imageability. The observer maps the area with regard to the presence, visibility, and the interrelation among the image elements and theirs strength and weakness. Also the observer divides these elements into categories according to significance, vividness, sharpness and explains the reasons why an element is important or what are the problems preventing this. Lynch (1960, p. 143) states that "what is being mapped here is an abstraction, not physical reality itself but the generalized impressions that real form makes on an observer indoctrinated in a certain way".

3.7 Problem Definition for the Image of an Area

The image quality of an area depends on some criteria which are mentioned before. Imageability can be inadequate for observer in some areas in the city and therefore the image of the city cannot be strong and clear, some areas are blank and the others are disconnected. Lynch (1960) mentions some mapping methods in his imageability analysis. One of them is a graphic compilation of difficulties in the area's image. These difficulties are confusions, floating points, weak boundaries, isolations, breaks in continuity, ambiguities, branchings, and lacks of characters or differentiation.

Problems for the Image Shape Ambiguity **Direction Ambiguity** Lack of Relation Characterless Path Isolation Discontinuity Lack of Differentiation Outside Path Lack of N-S Interrelation **Bottomless Tower** Elastic Intersection Ambiguous Branch Weak / Absent Boundaries Chaotic / Characterless Areas Disconnected Waterfront Point of Confusion Incomplete Broken Path

Table 3. 3 Problems for the image (Adapted from Lynch, 1960)

The problems of area can be determined via examination of area in the light of these criteria. This creates not a plan for area but can prepare a substructure for creative decisions or solutions.

CHAPTER 4

CASE STUDY

4.1 Methodology of the Study

The thesis employs a case study approach as a research strategy. CerModern is the first modern art museum in Ankara which was attained through an urban regeneration and restoration project of an old railway facility remained from the Early Republican Period. This area has been chosen as the case study area, since the project is a good example of industrial heritage transformation project. However, the area has an integration problem to the city despite its central location and important functions in its vicinity. This thesis addresses these problems with Kevin Lynch's imageability concept.

4.1.1 CerModern as the Case Study Area

Being one of the major venues of the cultural life in the city, CerModern is a valuable asset for Ankara. The history of the area dates back to the Early Republican Period. The area passed through certain changes in parallel with the development of the city. The awareness about the value of industrial heritages which rose during the 1960s resulted in conservation of abandoned industrial facilities. CerModern is an example of this approach. With the implementation of a transformation project it has been regained to the city and has been started to be used for social and cultural purposes. As being subject to the transformation project from its former industrial

use to cultural use, CerModern is a good exemplar to shed light on the integration of an industrial heritage to the wider urban context. There are four reasons why CerModern is chosen as the case study area, namely, the history of the area, type of the project, location of the project, and function of the project. They are explained in more detail below.

First reason is the historical significance of the area in the collective memory of Ankara. The buildings of CerModern were constructed in 1926-1927 as railway maintenance ateliers. They are among the rare examples of industrial heritage in the city. After decades of activity, the facility lost its function. The area and its surrounding were at the center of new decisions which were taken in regard to the new planning strategies about the development of Ankara. Some decisions about demolishing buildings in the area were made by authorities between 1950s and 1980s. The area was re-defined as a part of Atatürk Cultural Center Areas in the years following coup d'état (Saner, 2004). Even though important developments were occurred in this part of the city, the ateliers still remained derelict until the early 1990s. During the relocation of the maneuver lines of railway, these ateliers were damaged. Fortunately, a preservation and restoration decision about the ateliers was taken in 1995. After that, with the transformation project prepared by Uygur Architects these buildings were regained to the city with cultural functions. In a nutshell, these former railway maintenance ateliers witnessed the development process of the city. This historic ambience can still be felt by citizens thanks to this preservation and transformation. Therefore, the integration of this area to its wider context in the city has particular importance due to this ambience.

Second reason is the type of project. The project is an example of transformation of an old inner-city industrial facility and its integration to the urban context with new functions. The type of project is important because of its rareness in Ankara and even in Turkey. As abandoned industrial areas constitute a considerable majority of lost spaces in cities (Trancik, 1986), integration of these areas to the urban context can strengthen the image of the city. As far as integration of industrial heritages to the cities is concerned, CerModern is one of the pioneering examples in Turkey. As Severcan and Barlas (2007) indicate, industrial heritages are favorable areas to be

integrated to the cities due to their six characteristics. These are their important locations, sizes, usable vacant building stocks, symbolic and monumental values, unique architectural values, and responsibility towards public. Therefore, even just being an industrial heritage is one of the significant characteristics which makes CerModern's imageability important.

Thirdly, the location of the project has a particular importance for Ankara. It has a very central location in the city (see Figure 4.1). It is in the middle of the two important districts of Ankara, namely, Kızılay and Ulus, and actually right behind the Atatürk Boulevard which connects these two centers. Besides, it is very close to the railway station due to its former function. The attractive functions around also increase the importance of the area related to their active and dense uses.

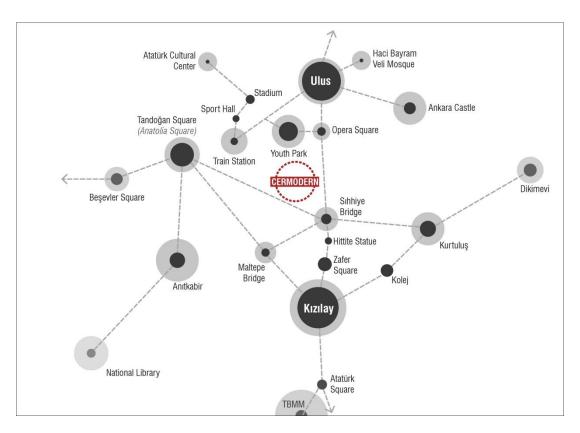


Figure 4. 1 The centers and attraction points around the study area (Drawn by the author)

Despite the locational advantages of the area, the exact location of CerModern does not interact with the main transportation lines, Atatürk Boulevard, Celal Bayar Boulevard, and Talatpaşa Boulevard, because of obstacles such as railway line and incomplete constructions. Therefore, the imageability of the area is weak and this part of the city has perceptual integration problems with its vicinity. Due to its central location, these problems become more important for strengthening the image of the city.

Lastly, the function is a reason to choose CerModern as the case study area. It has a cultural function after its transformation from a railway maintenance atelier. This cultural function gives particular importance to its imageability. According to Lynch (1960), an environment which has a strong imageability heightens the potential depth and intensity of human experience, and an environment like that contains strong and new meanings. For this reason, if a cultural environment has a vivid imageability and if it is well integrated to the urban context, it can better serve its purpose as a cultural center.

4.1.2 Methodology

The thesis is based on qualitative research techniques with the case study approach. Qualitative research provides better understanding on specific subjects or issues by representing the experiences of a group of participants descriptively. Observations can be used to collect data besides participant experiences and views (CSULB, 2016). Within the scope of the qualitative research, in-depth interviewing is used in the thesis, as it enables to include a wide range of individuals to the study. Also, personal observations and illustrations are included as the main utilized data in the thesis. Moreover, in order to investigate the history of the area, written and visual documents are used. These are books, theses, plans, plan reports, and other documents and reports. Development and transformation processes of the area are analyzed in order to shed light on current integration problems of the area.

Methodology of this study is based on the methodology of Lynch's imageability analysis, with some reinterpretations and additions to this methodology. According to Lynch's approach, there are two methods for analyzing the image, first method is

interviewing with a small sample of citizens about their environmental images and the second one is examining the trained observers' environmental images by means of making them map the area.

In this study, Lynch's interview questions and the mapping method were combined in one interview with the aim of investigating the participants' images for the area. As Lynch preferred trained observers for his second method, 18 trained observers (professionals specialized on fields related to the built environment; namely architects, city planners, civil engineers, architecture and city and planning research assistants, and students in architecture and city planning) were interviewed in order to get more detailed feedback. Although not trained in these fields, two other people were also interviewed as they have been living in the city for a long time, and witnessed the development of the area. The in-depth interviews were conducted between January 18th 2016 and January 24th 2016.

Although this study aimed to analyze the imageability of CerModern, the study area was handled in its wider context. Lynch used his methods of imageability analyses at the city scale. Since the study area of this thesis comprised a small part of the city, the questions and mappings in the Lynch's methodology were adapted according to scale difference. The main aim of the interview was to get users' observations, experiences, and ideas about the study area. The interview comprised open-ended questions in order to get detailed explanations, yet it was preferred adhering to the interview questions rather than extending the subject. The interview mainly contained questions to understand individual's perception of the place of the study area and his/her knowledge about the city. Also, a map which showed the study area and its vicinity was prepared to be fulfilled by the participant (see Figure 4.2).

The subject in-depth interview was basically done with the people who were familiar with the study area and attended to the area at least once. Sample size was defined according to the saturation level enabling to obtain result and conceptualize the findings. To have an equilibrium distribution, the interviewees predominantly were chosen in the age range of 25 to 40. While choosing the interviewee, some of the interviewees referred to other people whom they known that they were also familiar

with the study area. Also, during the site visits, few other people were interviewed. Moreover, some interviews were conducted in the architecture faculty of the Middle East Technical University. Also, two architectural offices were visited to conduct an interview. While interviewing, instead of audio recording, note taking method was chosen in order not to discomfort participants. In addition, a few of the interviewees preferred answering the questions by writing themselves.

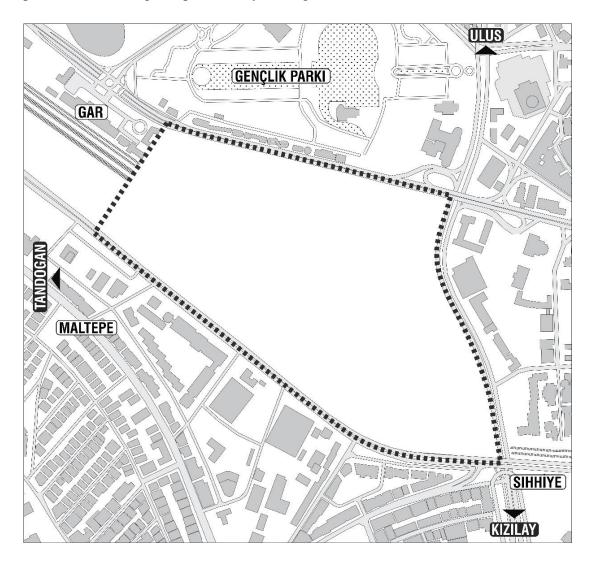


Figure 4. 2 The map which is prepared for the interview (Drawn by the author)

The questions of the interview are listed below:

- Please, fill the marked area in the map with the first things that come to your mind about the region with sketches and notes.
- Is there anything symbolic for you in this particular region? What is the first thing that comes to your mind when you look at the map?
- What are your general thoughts about the region that is shown on the map?
 - **a.** In your opinion, is this region easily accessible?
 - **b.** Do you feel anything specific when you are inside or outside of this region? Can you explain with reasons and details?
 - **c.** In your opinion, is there anything problematic about this region? Can you explain with reasons and details?
- How would you describe to strangers the way to CerModern from each of these three centers; Kızılay, Ulus, and Tandoğan Square?
 - **a.** What type of transportation would you recommend for each of these routes?
 - **b.** What should be their routes? (Draw sketches or explain with notes)
 - **c.** Can you give a reference point in the area for the strangers to understand that they arrive at the area?
- How often do you go to CerModern Art Center? What transportation mode(s)
 do you generally prefer? What are the reasons for your transportation
 preference?
- How much is it important to be conscious about the city you live in, to know how to reach a specific place in the city and how long it takes to arrive there?
 Please, explain with reasons.

The data collected from the interviews were used in order to conceptualize the image of the study area. Therefore, by the help of collected data diagrams and image maps were prepared with the aim of illustrating the participants' common image. As Lynch

(1960) stated in his methodology, these diagrams and maps did not show the physical reality itself, instead they showed the abstraction of it. In order to understand the abstraction of the participants, the mental maps of the area which were sketched by them were overlapped. Thus, a common mental map was obtained. Although this abstract map enabled to see some facts, it was reproduced by simplifying the symbols in the participants' mental maps and using certain symbols for each element in the maps. For instance, all the markings for buildings were illustrated as squares. Hence, a more legible map was obtained and used for the study. Moreover, other open-ended question answers were analyzed.

Furthermore, the site analysis diagrams and the image maps of both Ankara and the study area were prepared by using personal observations along with the collected data from interviews. Furthermore, an interview with Semra Uygur who is one of the architects of CerModern was conducted on December 28th 2015 at their architectural office in Ankara. In this interview, their design approaches to the buildings and the site were argued. Also, the architect's opinions about the current situation of the project and its relation with the surrounding were discussed. The ongoing construction of the new concert hall of Presidential Symphony Orchestra designed by Uygur Architects in the study area was also talked about. In this regard, the documents of the national competition for the concert hall were examined in order to understand the visions for that part of the city.

In short, by using these methods, it was aimed to understand the present situation of the study area and obtain data to use for analyzing the imageability of the area and defining the image problems which were mentioned in the previous chapter.

4.2 Definition of the Study Area

The study area is the place of CerModern, which is in the midst of two main districts in Ankara. It has a very central location and it is close to well-known points in the city. As mentioned before, the imageability of the area of CerModern is to be evaluated at a wider spatial context which starts from the main railways station on the west and continues up to the Atatürk Boulevard on the east. The northern boundary of this wider area is the Talatpaşa Boulevard, while the southern boundary is the Celal Bayar Boulevard (see Figure 4.3). The neighbors of this wider area are 19 Mayıs Sports Facilities and Gençlik Park on the north, Eti Neighborhood and Sıhhiye District on the south, Hacettepe Neighborhood on the east, and Ankara Railway Station and construction of a new high speed train station on the west.

The area hosts mostly public and cultural functions right along with on-going constructions. The uses in the area are as follows:

- CerModern Ankara Contemporary Art Museum and Fine Arts Gallery
- Presidential Symphony Orchestra's New Concert Hall Construction Site
- Ankara Palace of Justice
- Presidential Symphony Orchestra Concert Hall
- Selim Sırrı Tarcan Sport Hall
- TÜRSAB car parking area
- TCDD² Ankara Demirspor Wedding Hall and other facilities of TCDD
- TCDD Workers' Houses
- Old TCDD Open-Air Steam Locomotives Museum

² TCDD is the abbreviation for "Türkiye Cumhuriyeti Devlet Demiryolları", The State Railways of the Turkish Republic.

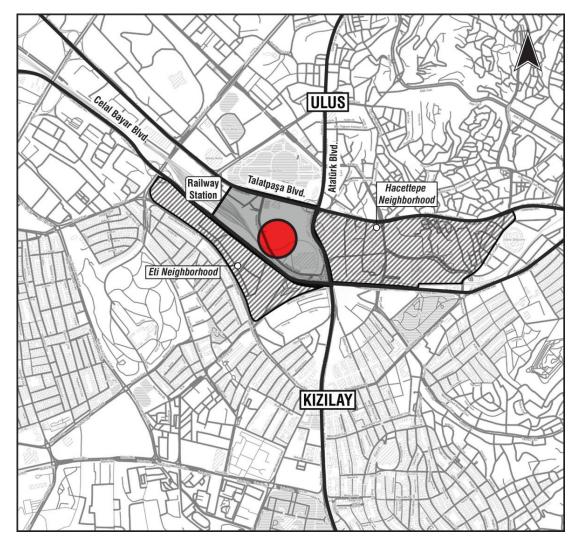


Figure 4. 3 The case study area (Drawn by the author)

4.3 History of the Study Area

4.3.1 Spontaneous Development Period of the Study Area

During the Turkish War of Independence, Ankara saw a massive influx of soldiers, civil servants, and people in search of work and maintenance which ended up with the rapid population growth. Accordingly, this brought about the need for an improvement of city conditions. After the declaration of Ankara as the capital city,

Ankara Şehremaneti³ was established on the 17th October 1923, but its organization was barely completed on the 16th February 1924 (Cengizkan, 2004; Cengizkan, 2010). In that time, the urgent needs of the city were solving the infrastructural problems of the city; the problems of sewerage system and water supply, lighting, urban transportation, road and street construction and regulation, and construction of a telephone network, solving the housing deficit related to increasing population, preparing a budget for the city expenses, and last but not least forming a development plan (Cengizkan, 2010). In order to solve the urgent needs and problems, a new city plan was required and in this respect first attempts were realized in 1924.

Up until then, the city experienced a spontaneous development. Even though Ankara was not an industrial city at all, there were always limited numbers of industrial facilities to supply the needs of city (Saner, 2004). By the connection of the railway network to the city in 1892, the rise of goat and angora wool trade improved the revenue of the city and strengthened the connection with İstanbul and other Anatolian cities; hence, this brought economic vitality besides increasing the life quality at the least (Cengizkan, 2004; Saner, 2004). Railway connection activated a series of developments both in terms of economy and the urban form. The area around the railway lines and the station was the center of this development at that time (Saner, 2004). The first dense industrial area was developed along the railway lines next to the station in the 1920s. Warehouses, large storing units, and railway maintenance ateliers, which were called Cer Ateliers, were structured next to the station. Also small scale factories started to be located next to the station such as two flour factories, one of which was established at the end of 1890s and the other was in 1906 (Tekeli, 1994, cited in Saner, 2004). These spontaneous developments lasted until the preparation of the first plan, Lörcher Plan in 1926.

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³ Şehremaneti is an old term for Municipality. The present word for municipality is Belediye in Turkish.



Figure 4. 4 The first train station constructed in 1892 (Cengizkan, 2004, p. 17)

4.3.2 Early Republican Period (1923-1953)

Lörcher Plan

Once Şehremaneti was organized in 1924, it turned out that a city plan had to be prepared in order to find a solution to the urgent needs of the city. In this sense, the first city plan of Ankara, Lörcher Plan, was prepared by Carl Christoph Lörcher. Below map shows the existing land uses in 1924, which was used as the base map for the Lörcher Plan. In this map industrial uses covered the area starting from Taşhan on the north to the railway station on the west (Cengizkan, 2004; Cengizkan, 2010).

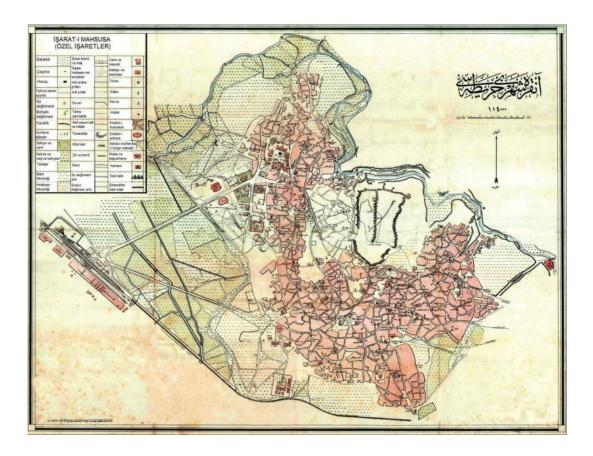


Figure 4. 5 1924 Şehremaneti Map (Günel and Kılcı, 2015, p. 80)

Three different plans were prepared at the scales of 1/2000, 1/1000, and 1/10.000. Lörcher Plan consisted of the historical core and the new city extension. The increasing population of the city was settled in the old city quarter; however, due to the pressure of rapid population growth, the design of the new city was brought to the agenda with 1/10.000 plan with the name Çankaya, as an administrative district before the completion of the plan (Cengizkan, 2010). In the plan, the relation between the old and the new city was provided peripherally without disrupting or changing. According to the Saner (2004), Lörcher used railway lines as a boundary between the two. Even though Lörcher proposed a new passenger station to isolate the industrial development area from the city and left the existing station as a cargo station, the proposal was not implemented. The industrial facilities next to the station increased in number by that time and Lörcher plan maintained the area as an "industrial district". However, until the establishment of electricity and coal gas

factories at the end of 1920s the district was not an industrial district at all (Saner, 2004). Then in 1929 both Maltepe Electricity Factory and the coal gas factory were established. In fact, the development of the district as an industrial area was performed on Lörcher's decisions at the early 1930s (Saner, 2004).

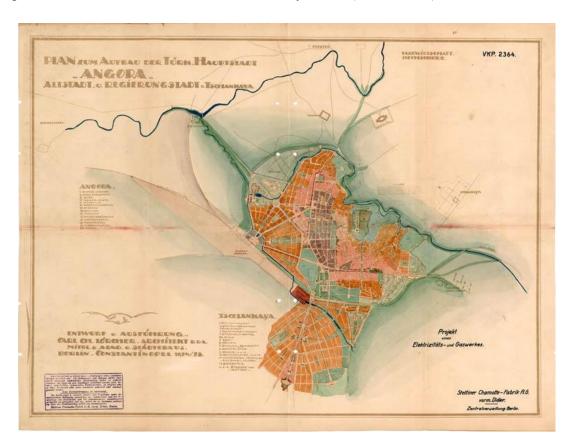


Figure 4. 6 1924-1925 Lörcher Plan (1/10.000) (Goethe Institute, 2010)

Even though the proposals of Lörcher Plan in the old city were not implemented, they made a lasting impact on the urban fabric. The paths, corridors, and areas were well thought and implemented to some extent. In 1927, it came out that some assumptions of Lörcher Plan had lost their validities because of the unexpected population growth and this ended up with a new planning decision (Cengizkan, 2010).

Jansen Plan

In 1928, Ankara Urban Development Council organized an invited planning competition with three city planners, Hermann Jansen, Josef Brix, and Léon Jaussely, and received a preliminary draft from each of them (Cengizkan, 2010). Among the drafts, the proposal of Jansen was chosen and the final plan was approved in 1932. While other planning proposals had different attitudes for the tension of old and new city for a city of 300,000 inhabitants, Jansen suggested more modest solutions by considering the limited investment opportunities of the municipality. His aim was to remain "within the limits of the possible" (Cengizkan, 2010).

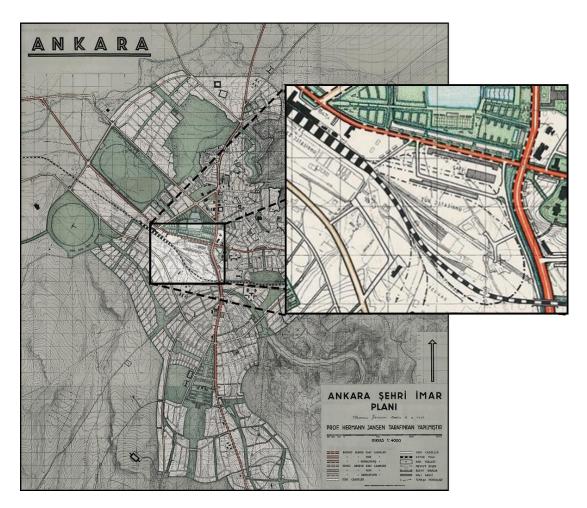


Figure 4. 7 Jansen Plan (Atılım University Ankara Digital City Archive, n.d.)

It can be recognized that Jansen took into consideration the principles and decisions of Lörcher Plan. According to Saner (2004), even it can be regarded as improving the

implementations of Lörcher plan. In the Jansen plan, both vehicular and pedestrian traffic were led among a major urban artery which was the Ulus-Çankaya artery. By the garden city approach, Jansen paid attention to the artistic value of former fabric (Yazman, 2009). While the city was supposed to be expanding to the south, Jansen proposed a three sided development around the old town by summing up the castle as the city crown (Cengizkan, 2010). According to Cengizkan (2010), by bringing the concept of beautiful castle, Jansen proposed a linear sequence of the station, the castle, and the Parliament. The station was the starting point of the new city.

At the time, around the station there was already a developed industrial area which was also reserved as the development area of industrial facilities in Lörcher plan. Hence, Jansen did not suggest a new location for industrial development and kept the spontaneously grown industrial area (Saner, 2004). Although he thought about separating cargo and passenger stations, it did not work at the implementation stage. Since the end of 19th century, while there were service structures at the north part of railway lines, there were production structures at the south part. In Jansen plan, this division namely industrial service area and industrial production area became more apparent (Saner, 2004).



Figure 4. 8 Train station and surrounding developments in 1939 (Atılım University Ankara Digital City Archive, n.d.)

During the preparation process of Jansen plan, the population of Ankara was 75,000 and the population projection of the plan was 300,000 to be reached in 50 years. However, at the beginning of 1950s, 20 years earlier than the completion of the planning period, the population was already 300,000 (Çalışkan, 2004). Therefore, as the Jansen plan lost its validity as a result of rapid urbanization, a new plan and planning decisions were needed.

4.3.3 The Area of CerModern and Its Vicinity between 1957 and 1980

Jansen Plan's visions about the population of Ankara failed to satisfy the needs. The population was estimated to be around 300.000 in the 1970s. Yet this estimation lost its validity at the beginning of the 1950s (Tekeli, 1982). According to Çalışkan (2004), the population was 455,000 in 1956. Moreover, the demand for private cars and motorways increased in the 1950s with the changing transportation policies. Hence, the city also suffered traffic problem. Consequently it was needed to set up an adequate transportation network within the city. Also, the city was dealing with squatter housing problem due to increasing population since the 1940s (Bademli, 1994). Ultimately a decision was taken to obtain a new development plan for Ankara via a competition in 1952. A committee was founded to prepare a report in order to be a guide for the competitors (Yücel, 1992).

The report consisted of explanations about the present situation and needs of the city. The report published in 1954 is important for the study area of this thesis due to its content. Some decisions in the report can be seen as the basis for the transformation of the industrial district of Ankara. The major decision is explanation of the necessity for a cultural center in Ankara.

[O]ne of the first needs of the city is a Cultural Center suitable for a modern city like Ankara; established with due consideration to the relations and ties existing between the present educational and scientific establishments and the related societies and installations. This center should include all establishments, localities and installations to meet the educational, teaching, training and art requirements of Ankara and the connected University Center. (Ankara Belediyesi, 1954, p. 118)

Moreover, the report contains recommendation for the location of the cultural center. In the report, Anıtkabir and the railway station were envisioned together to constitute the new center of modern Ankara. Therefore the location was recommended to be around this center. Also, the importance of accessibility for such a cultural center was emphasized. Consequently the proper location was stated as the area between the railway station and the Atatürk Boulevard, namely the industrial service district. The replacement of the factories and railways-related structures was recommended in the report (Ankara Municipality, 1954, p. 118).

After the proposal of Nihat Yücel and Raşit Uybadin was chosen in the planning competition, the Yücel-Uybadin Plan was approved in 1957. The transformation of the first industrial district of Ankara began with this plan. One of the major reasons that paved the way for transformation was the unexpected development of the city. The industrial district which was planned at the outskirt of the city was at the midst of housing areas at the beginning of the 1950s. Also, the area was in the middle of three centers of the city, old center (Ulus), newly developing center (Kızılay), and the mentioned center in the report of municipality (Railway Station-Anıtkabir). The other major reason is newly proposed boulevard which is passing through the area on the east-west direction, namely Celal Bayar Boulevard. The boulevard is proposed in the plan due to concern of providing accessibility within the city. The road divided industrial district into two and this separation accelerated the transformation process (Saner, 2004).

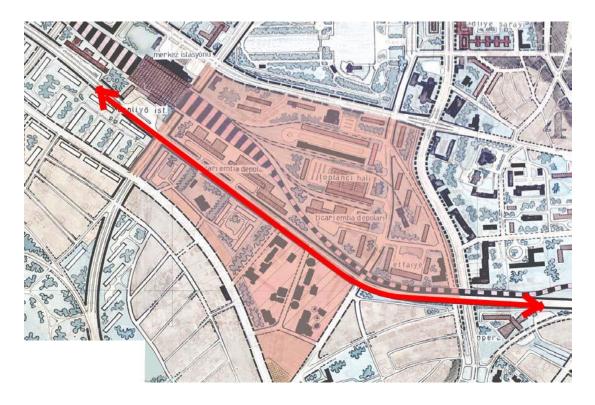


Figure 4. 9 Industrial district and proposed Celal Bayar Boulevard in 1957 Yücel-Uybadin Plan (Adapted from Saner, 2004)

In 1957 Yücel-Uybadin Plan, industrial service area which was located on the north of the Celal Bayar Boulevard was redefined with the same function at the same place in contrast with the report of planning competition. Although the report recommended removing the industrial facilities from the area, in the plan decisions the density of industrial storage units in the area increased. However, the maintenance ateliers and maneuver lines were decided to be displaced. Also, the area was divided into lots by new roads. These roads were connecting the proposed Celal Bayar Boulevard to the Talatpaşa Boulevard. The fire station placed on the south eastern part was the only new function in the area. The other major decision of the plan was relocation of the wholesale marketplace in the area (Saner, 2004).

The decisions of the Yücel-Uybadin Plan were increasing the pressure on the industrial service area for transformation instead of satisfying the necessary requirements. Then, the Ankara Metropolitan Area Master Plan Bureau (AMANPB), which was founded in 1969 to prepare master plans for Ankara, prepared

transformation recommendations for the area as a result of this pressure. The first decision in this respect was the site selection of the new Palace of Justice on the southeast corner of the industrial service area. Also AMANPB prepared another study for the area which was quite similar to the recommendations of the committee founded for the planning competition. Two reports were prepared by AMANPB in 1971 and 1978. These reports were focusing on locating a cultural center at the area. The first report contained justifications about the suitability of the area for cultural center. Firstly, the size of the area was adequate for a cultural center. Secondly, the area was easily accessible for both in-city and intercity transportation. Thirdly, the location of the area was very close to important centers, Kızılay and Ulus. Therefore, densely used areas and buildings that were located around the area were functioned with cultural uses.

When the report was prepared, the existing structures on the area were the maneuver lines and maintenance ateliers of railways, the concert hall, the sport hall, a tobacco (Tekel) depot, a private flour factory, the wholesale marketplace, buildings of Turkish Grain Board, and depots and custom buildings which belongs to the railway administration. The report also recommended removing the industrial structures from the area with the thought that present functions of the area were not convenient with such a central location (Saner, 2004).

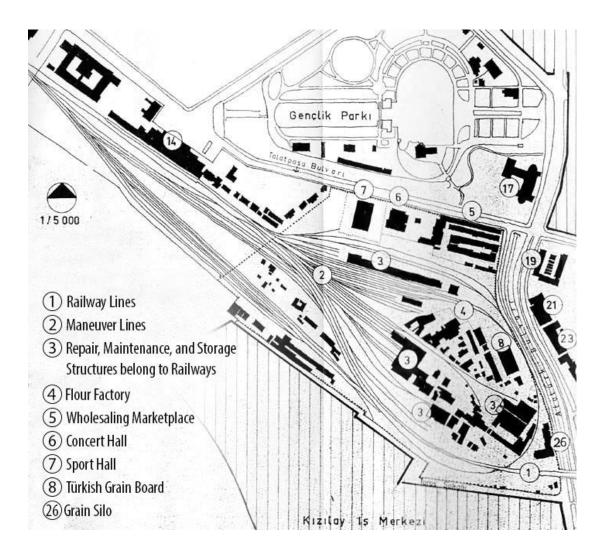


Figure 4. 10 The structures on the area at the early 1970s (Adapted from Saner, 2004)

Although the report of AMANPB had similarities with the report prepared in 1954, it had relatively a holistic approach to the cultural center idea. The area was considered as a part of aforethought culture and university zone on the east-west direction, from the universities at the east to the sport and recreational areas at the west. The area was also between the two central business districts in the north south direction. Therefore, the area could have acted as a connector between these two (Saner, 2004).

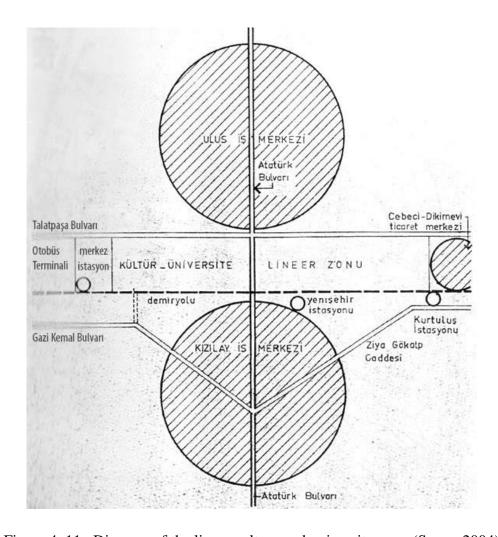


Figure 4. 11 Diagram of the linear culture and university zone (Saner, 2004)

In this vision, AMANPB prepared another report in 1973 in order to examine the property ownership on the area for the cultural center project. According to this report, the area was approximately 300,000 m² and 220,000 m² of it was occupied by the state railways (TCDD). 23,500 m² of land which hosted the concert hall and the wholesale marketplace was owned by the Municipality of Ankara. 7,500 m² of land was belonged to Turkish Grain Board (TMO), and 11,000 m² of land was occupied by the private sector. Consequently the transformation of the industrial area to cultural center was considered advantageous for public interest (Saner, 2004). However, the project of AMANPB could not be realized in spite of all the preparations due to another project of the Municipality of Ankara.

The project, namely "Ankara Axis of History / Greenery / Culture / Recreation", aimed to reveal and maintain the historical identity of Ankara and provide green area to the city center. The project area was a linear part starting from Sihhiye at the east and ending at the Hippodrome at the west. Integrating the Atatürk Forest Farm to the center of the city with various cultural and recreational functions was the significant goal of the project. The decisions about the industrial service area were not certain in the project. However, the municipality started a series of operation on the area. Some of the structures on the area were demolished for the new Palace of Justice. The wholesale marketplace was decided to be removed from the area. This project of the municipality had serious advantages to be realized in that time. Almost all of the area was in the public ownership or belonged to the municipality. Yet the long rental periods and the difficulty of removing the existing functions were serious obstacles for the municipality (Atabaş, 2004).

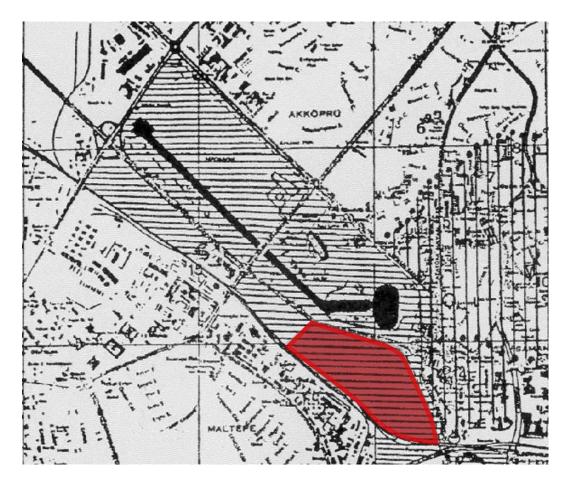


Figure 4. 12 The project area of the municipality (rendered), including the service area (highlighted) (Saner, 2004)

In 1978, a meeting was arranged by the Ministry of Culture in the context of the 100th anniversary of the birth of Atatürk. The main topic of the meeting was establishing Atatürk Cultural Center for the celebrations on 1981. About this issue, a committee was founded, and it immediately prepared a report for the project based on the previous report of AMANPB. Although location of the project was a question of debate between the municipality and AMANPB, the Hippodrome area was selected as a project area (Atabaş, 2004).

4.3.4 The Area of CerModern and Its Vicinity between 1980 and 2010s

In 1980, the political actors were invalidated because of the coup d'etat. Therefore, the decisions about the area were suspended. The military government founded National Committee to arrange the celebration of the 100th anniversary of the birth of Atatürk. The committee was also responsible for establishing the Atatürk Cultural Center project. The whole area of the municipality's previous project was determined as Atatürk Cultural Center Area and divided into five parts. The industrial service area was defined as the 4th part. The area of the new Place of Justice separated from the industrial service area. Also the area was bordered with a new road, namely the Altınsoy Street. In the light of the decisions on this area, existing structures continued to be demolished or removed. The Grain Silo, built in the 1930s, was demolished in order to prepare proper area for the new Palace of Justice. The National Committee arranged meetings in order to take decisions about the Atatürk Cultural Center Areas. A Nature and Science Museum, a chorus practice building, and a park of the municipality were decided to be located on the area in addition to the existing sport hall and the hall of Presidential Symphony Orchestrate (Saner, 2004).

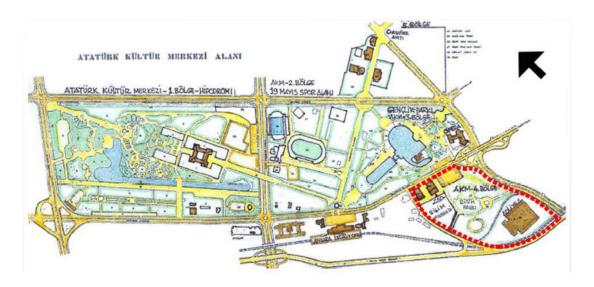


Figure 4. 13 Atatürk Cultural Center Areas (The 4th area is highlighted) (The Ministry of Environment and Urbanization, n.d.)

The final decision about the area was taken in the 5th meeting of the National Committee in 1990. Despite the previous decisions, a new concert hall of Presidential Symphony Orchestrate (CSO) was decided to be constructed on the area. Atatürk Cultural Center Areas belonged to the Ministry of Public Works and Settlement. The ministry was also in charge of obtaining the project. Therefore, a national competition was organized by the ministry and the project of Semra Uygur and Özcan Uygur was selected in 1992. The project was the main element in the transformation of the area. Yet the last intervention to the area was the protection decision of the railway maintenance ateliers in 1995. Due to their historical and architectural values, the Preservation Board suggested conserving these buildings. The National Committee was the single authority for decision making about the area, with its approval the ateliers were decided to be restored and refunctioned as a Museum of Fine Arts and Art Workshops (Interview with Semra Uygur, 2015).

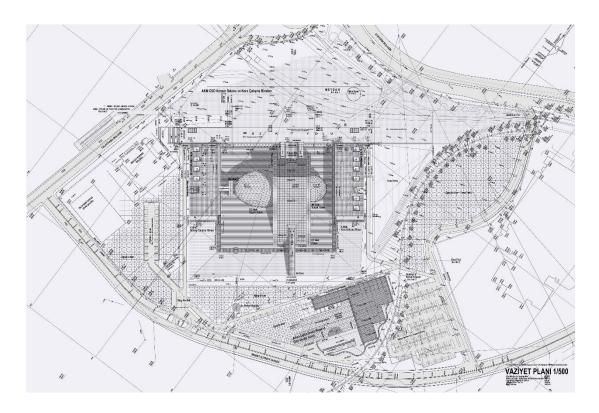


Figure 4. 14 The site plan of the new concert hall of Presidential Symphony Orchestrate (Uygur Architects, 2015)

The decision for restoration of the ateliers was taken while the new concert hall construction was going on. Although the ateliers' area was a part of the concert hall project, the ateliers were not shown as the structures to consider neither in the competition report nor in the base map. Yet the location indicated for the new concert hall of Presidential Symphony Orchestrate by chance did not overlap with the ateliers (Interview with Semra Uygur, 2015). After the preservation decisions, the duty to prepare the project of restoration and transformation of the Cer Ateliers was given to the same architects in order to obtain a coherent and integrated project. The restoration and transformation project of the Cer Ateliers started in 2000 and completed in 2010. On the other hand, the construction of the new concert hall of Presidential Symphony Orchestrate has not been completed yet. Therefore, the intended transformation of the industrial service area is still going on (Interview with Semra Uygur, 2015).

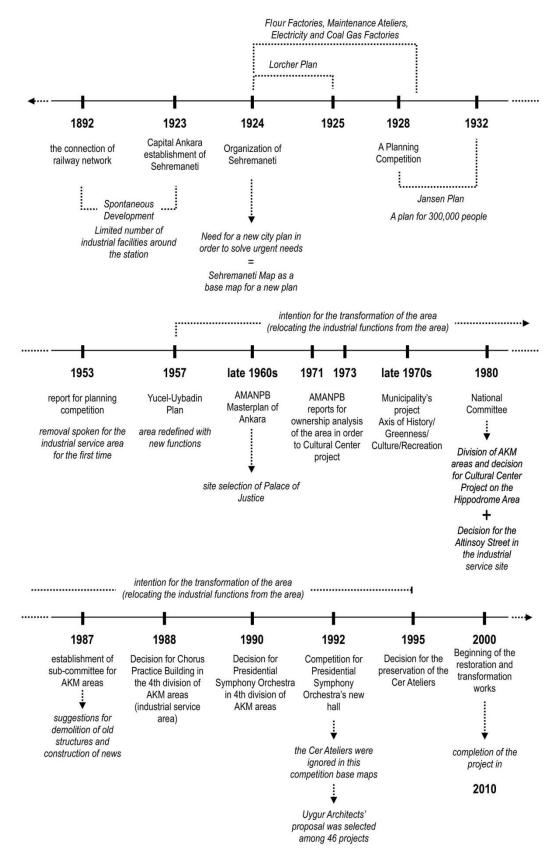


Figure 4. 15 The significant dates on the transformation process of the area (Drawn by the author)

4.4 Current Content of the Study Area: CerModern and Its Vicinity

Since the industrial facilities have important features (location, size, architecture etc.) for reintegration to the urban context, many industrial heritages have been transformed and re-functioned for cultural purposes across the world over the last decades. Transformation of these facilities with cultural functions is a crucial intervention not only for their vaguely existence but also for sustainability of cultural heritage (Severcan and Barlas, 2007). Yet the transformation of just the facilities cannot be enough for integration of these areas to the urban context in some cases. If the vicinity of an industrial heritage is not imageable and has integration problems, these directly affect the integration of it to the urban context. Therefore, the approach of this thesis to the integration problems of the CerModern is defined in this direction. CerModern, an example of industrial heritage transformation, is handled with its vicinity for the study. Accordingly, the content of the study area is defined from this vicinity.

4.4.1 The CerModern Project

CerModern is a modern art center which hosts exhibitions and events both in national and international scale. It occupies 11,000 m² (3,300 m² existing, 7,700 m² addition) in the center of the study area, consisting of 4,500 m² exhibition hall, 700 m² photography gallery, a library, a museum shop, a conference hall with the capacity of 370 people, a multi-purpose hall, a café and a sculpture park. Besides exhibitions, it also hosts open-air performances, events, and festivals. All these new functions can take place in these former industrial buildings and its open spaces in consequence of the transformation project which took ten years and completed in 2010 (The Journal of Tasarım Kültür Yapıları, 2013, p. 130).

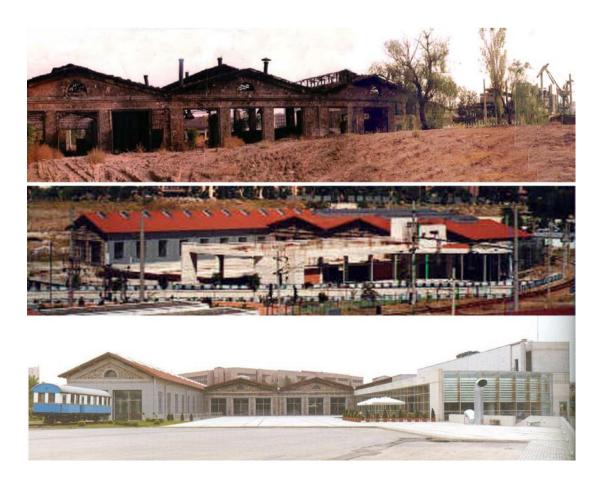


Figure 4. 16 The transformation process of the Cer Ateliers (top and middle photos from Saner, 2004, bottom photo from The Journal of Tasarım Kültür Yapıları, 2013, p. 130)

The buildings in the area were constructed in 1926-1927 as the railway maintenance ateliers. They were called "Cer Ateliers", because the locomotives' engines are called "Cer Motor". "Cer" is a Turkish word stemming from Arabic, which means pulling and dragging. The ateliers' location was in the industrial service area of Ankara and this area was under pressure for transformation because of the development of the close environment with the rapid growth of the city. Consequently, the removal of the ateliers with the other surrounding buildings was first mentioned in the report of the new improvement plan competition in 1954. Then the winning plan of Nihat Yücel-Raşit Uybadin which proposed to remove the ateliers from the area was approved in 1957. The same decision was repeated in the report of Ankara Metropolitan Plan Bureau in 1971 and 1973 for the reason that the

functions in the area were not suitable for such a central location. In the late 1970s, the ateliers were again decided to be removed from the area with the municipality's "Ankara Axis of History / Greenery / Culture / Recreation" project⁴. Although the municipality started the clearance of industrial structures from the area, it was not completed because of coup d'etat. Then the industrial service area was re-defined as the 4th division of the Atatürk Cultural Center Areas (Saner, 2004).



Figure 4. 17 The ateliers and the maneuver lines of railway relation (The webpage of Prota Engineering)

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⁴ Ankara Tarih/Yeşil/Kültür/Rekreasyon Aksı Projesi

The Cer Ateliers remained idle until the mid-1990s. Even in the competition report (Şartname) and base drawings of the competition for the project of Presidential Symphony Orchestra's new concert hall in the 4th division area in 1992, the Cer Ateliers were stated as removable structures. Therefore, they were not included within the scope of the winning proposal of Uygur Architects. Unfortunately, the Turkish State Railways relocated the maneuver lines of railway between the years of 1992 and 1995, and half of the ateliers' two units were demolished. The National Committee decided to register the maintenance ateliers and took decision for preservation and restoration of the Cer Ateliers by the efforts of the Ankara Board of Preservation of Cultural and Natural Heritage in 1995. Due to their close location in the area of the concert hall project, the transformation project of the Cer Ateliers was designed by the Uygur Architects in order to develop a coherent and integrative design approach. The restoration and transformation works started in 2000 and completed in 2010 (Interview with Semra Uygur, 2015).

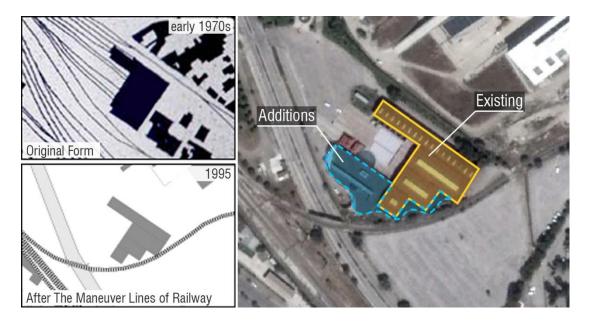


Figure 4. 18 Interventions to the Cer Ateliers in different times (Drawn by the author)

There were four structures in the area constructed in two different periods. The three short and large structures were constructed earlier than the long and narrow one, and

they were damaged during the maneuver lines' relocations. The restoration project of the ateliers was formed upon the idea of bandaging the damaged parts of the original structure with curvilinear, transparent new additions. Thus, it became possible to meet the need of space for new functions and provide noticeability for the train and railroad which are the reasons behind the presence of building's existence. The existing structures have been used for galleries because their interiors were suitable for the concept of museum. The designers avoided partition in the galleries in order to provide dynamic and flexible spaces which are important for modern museums. Also, they wanted the new additions not to be dominant over the originals (Uygur & Uygur, 2010).

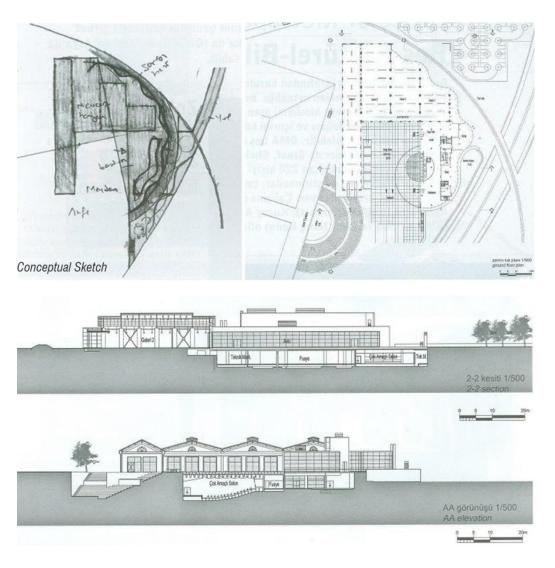


Figure 4. 19 Some drawings from the project of Uygur Architects (the Journal of Arredamento Mimarlık, 2010)

The wagon and the water nymph sculpture (Su Perileri) are symbolic objects in the CerModern's open area. Especially water nymph sculpture is the symbolic work of art in the history of Ankara. It was brought to Ankara from Italy in 1924, the early years of Republic and since then it was placed on different locations in the city until 1992. After eighteen years in the warehouse of municipality, the sculpture was restored by Metin Yurdanur in 2008 and it has been exhibited since 2010 in the open area of CerModern (Koç, 2015).



Figure 4. 20 The water nymph sculpture (Bahar Gedikli photo archive)

The ateliers are valuable in the history of the Republic as they were constructed after the nationalization process of the railroads in the early Republican Period. The preservation of these ateliers is important because they represent the architectural qualities of the transition era from the Ottoman style to modern style in architecture (Interview with Semra Uygur, 2015). Also they are one of the esoteric examples of Ankara's industrial heritage. The location and the new cultural function, namely CerModern, increase the importance of the ateliers.

In the current situation of the area, CerModern serves as a hidden art center between construction site and car parking areas. It is hard to distinguish the building of CerModern despite its very central location in the Ankara. Semra Uygur, one of the architects of the project, mentions that the construction of the CSO building could not be completed because of financial problems, and therefore CerModern cannot display its full potential because of the on-going construction process and its disconnected relationship with Atatürk and Talatpaşa Boulevards. The access to the area is only possible from the Altınsoy Street which is not attractive for pedestrians. The proposed transformation of the area will not be accomplished, unless the construction process is not completed (Interview with Semra Uygur, 2015).

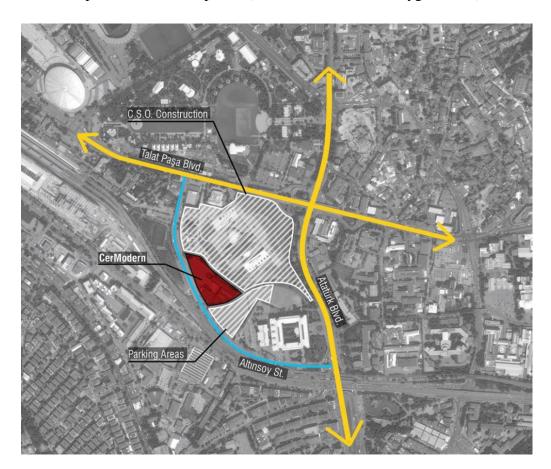


Figure 4. 21 The current situation of CerModern (Drawn by the author)

4.4.2 The New Concert Hall of the Presidential Symphony Orchestra

The original building, located on the Talatpaşa Boulevard and south of Youth Park, was constructed in 1958 as an exhibition hall. Then, the building was assigned to the

Presidential Symphony Orchestra and transformed to the concert hall in 1962. It contains a concert hall with 800 seats and occupies 6540 square meters.



Figure 4. 22 Presidency of Republic Symphony Orchestra Concert Hall (Author's photo archive)

It was decided to construct a new concert hall of Presidential Symphony Orchestra on 4th division of AKM area in the in the 5th meeting of the National Committee. The Ministry of Public Works and Settlement was in charge of obtaining the project. Therefore, the Ministry organized a national competition on May 1992. The proposal of Uygur Architects won the competition and the construction started in 1997 (Atabaş, 2004). However, the construction of the project has not been completed yet because of financial and administrative obstacles.

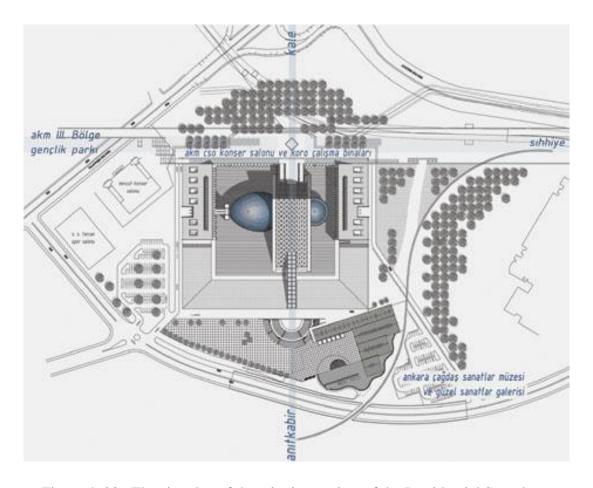


Figure 4. 23 The site plan of the winning project of the Presidential Symphony Orchestrate and a Chorus Practice Building Competition (Çırık, 2005)

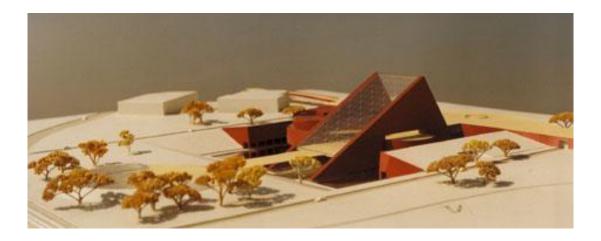


Figure 4. 24 The model of the new concert hall (Çırık, 2005)

The area was subject to various projects with cultural use in the development process of Ankara. Especially the competition played a significant role on the current situation of the area. In this regard, the documents of the competition can be enlightening for understanding the current situation of the study area.

As there was no planning decision for the area during the 1990s, the competition documents (1992) did not reveal exact planning decisions and rules about the area. Instead, Ankara Municipality Directorate of Construction Affairs made nonbinding suggestions for competitors. First of all, it was highlighted that the new building should symbolize the level of Turkish architecture, and it should be contemporary and long lasting. It should encourage people to enjoy fine arts. Besides, as the project area provided the most beautiful perspective of Anıtkabir from the Atatürk Boulevard, it was suggested to avoid the new buildings from blocking this perspective. Also, it was suggested to provide continuity between the Youth Park and newly defined green areas in the area. Moreover, the concert hall and the practice buildings were advised to work separately as a matter of priority. Yet they could be designed in one building together or separately depending upon the competitors' decision. Lastly, service and parking entrances to the area were expected to have access from Talatpaşa Boulevard and Altınsoy Street.

The winning project emphasizes the Ankara Castle and Anıtkabir Axis as a reference for alignment of the building in the manner of combining the past and the future of the city. The project contains well thought approaches to area in order to strengthen the relations with the surrounding. Hence, the winning project contains some factors that increase the imageability of the area. It connects the area with Atatürk Boulevard and Youth Park via pedestrian roads (see Figure 4.23). These connections also increase the accessibility of CerModern from Atatürk Boulevard. Also, the project offers a location for a new metro station on the north of the area. Thus the accessibility of the area is straightened not only from the surrounding, but also from distant parts of the city. The project together with CerModern assigns cultural meaning to the area. Therefore, the area is considered as a cultural focus for the city in the vision of the project. Although the on-going construction of the project is the

major element on the study area both in terms of function and size, being incomplete for about 25 years prevents this role of the area for Ankara.



Figure 4. 25 Current photo of the construction of the Presidential Symphony Orchestrate (Author's photo archive)

4.4.3 The Other Uses in the Vicinity of the Area

Ankara the Palace of Justice

The Palace of Justice is surrounded by the Atatürk Boulevard on the north and the Altinsoy Street on the south. The building was designed by the architect Umur İnan in 1976 and the construction was completed in 1987 (Arkiv, 2008). In 2011, the Ankara Metropolitan Municipality Assembly decided to move the palace of justice to the place of the wholesale market hall which was also planned to be transferred to another place, and demolish the existing building of the palace. The land of the palace of justice is planned to be a transit point for public transportation and a parking lot (NTV, 2011).



Figure 4. 26 The Palace of Justice (Arkiv, 2008)

Selim Sırrı Tarcan Sports Hall

Selim Sırrı Tarcan Sports Hall is located on the Talatpaşa Boulevard in Altındağ district. It is an indoor sports hall with a seating capacity for 2500 people and it occupies 4200 m² areas (Çırık, 2005). The construction was begun in 1958 after it was designed by the architect Gündüz Güngen and was completed in 1964. At the beginning, the sports hall was made in line with the requirements of the Turkish State Railways; however, it was handed over to the Directorate of Physical Education (Beden Terbiyesi Genel Müdürlüğü) after a while. In 2006, the sports hall has been transferred to the Turkish Volleyball Federation for 49 years.



Figure 4. 27 Selim Sırrı Tarcan Sports Hall (Author's photo archive)

Turkish State Railways Facilities

In the area, there are facilities of the Turkish State Railways next to the train station, comprised of a wedding hall which was a former clubhouse, workers' houses of TCDD (lojman), the guesthouse, and sports area. In the sports area of TCDD, there are two football fields, a basketball court, and a running track (Çırık, 2005).





Figure 4. 28 Turkish State Railways Facilities (Author's photo archive)

4.5 Imageability of the Study Area

People perceive and experience the things in the environment with their relations to other things and series of events leading them to occur. In this sense, the context of a city element becomes more important, when this interaction between an observer and a perceived thing is taken into consideration at the city scale (Lynch, 1960).

CerModern and its vicinity have always been in the center of many transformation attempts by various actors particularly due to its location. Yet, the area was transformed much less than the surrounding despite all the transformation attempts, and remained idle for years. The questionnaire survey shows that this situation has led to loss of remarkability of the area in the people's image of city.

Although the image can adapt to changes, the transformed areas may lose their place in the image, if they do not have certain physical qualities which are mentioned in Chapter 3. The study area is an isolated part of the city, and has imageability problems due to the lack of these qualities.

According to Lynch (1960), an imageable city is well-formed and has high continuity of distinctive parts which are interconnected clearly. Also, image is directly affected by circulation network in the city and accessibility. Any difficulty or confusion in the circulation of an urban area affects the imageability of that area. Therefore, analyzing the accessibility of the study area can be a good starting point to discuss its imageability.

The area where CerModern is located is at the intersections of public transportation exchange points due to its central location and proximity to the main districts of Ankara. Ulus and Sıhhiye metro stations are within walking distance. Also, its accessibility is easy via public buses and "dolmuş" on the Atatürk and Talatpaşa Boulevards. Despite its central location and being at walking distance from Ulus and Kızılay, the accessibility for pedestrians is not easy because of the Boulevards with dense traffic. Also, the accessibility of the area from the south is not easy because of the railways and the Celal Bayar Boulevard's traffic density.

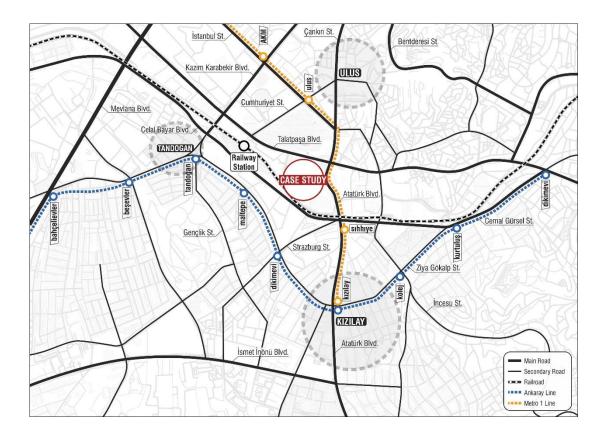


Figure 4. 29 Accessibility of the area (Drawn by the author)

Along with the locational advantages of the study area, also the surrounding landuses, mostly with cultural and recreational functions, provide an advantage for the area to have a strong impression on people's image of the city. Although densely used areas are located in the immediate surroundings, the area is not perceptible and imageable due to its physical condition in this surrounding. Also this surrounding contains recreational and cultural functions. CerModern has a coherent function with this cultural and recreational surrounding, yet it is not physically integrated with them. The land-uses in and around the study area are shown in the Figure 4.30.

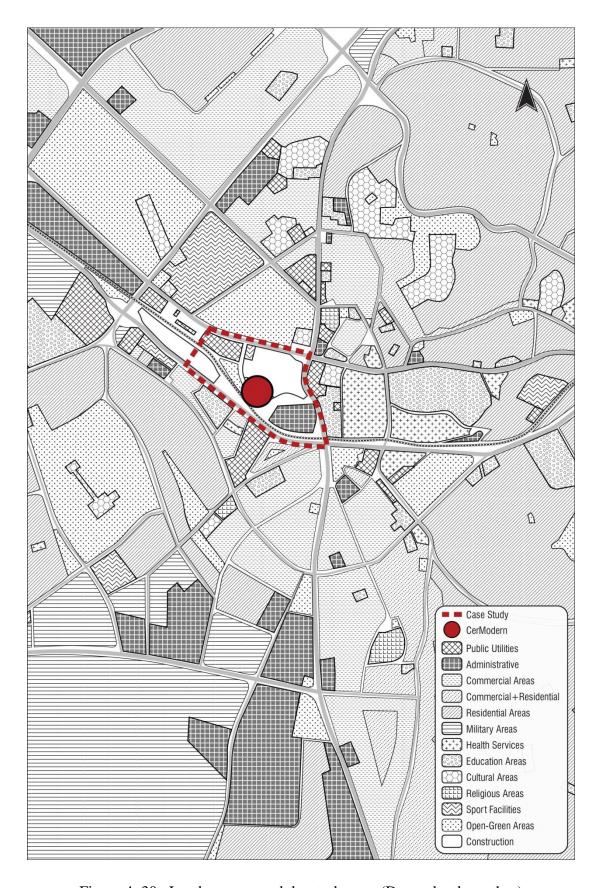


Figure 4. 30 Land-uses around the study area (Drawn by the author)

It is possible to say that the area where CerModern is located is accessible. Yet, it does not mean that the area is imageable. Although the location and the functions around the study area make the region accessible and attractive, the study area is still isolated. According to Lynch's methodology of imageability analysis, it is important to analyze the existing form and public image of the study area. In order to analyze the public image for an area, analyzing the Lynch's image elements on the area is essential because these elements have a major impact on the formation of the people's city image. Therefore, the visual form of Ankara is analyzed by using Lynch's method (see Figure 4.31).

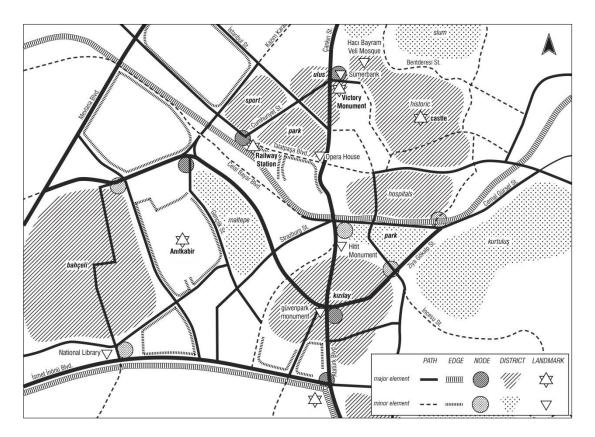


Figure 4. 31 Analysis of the visual form of Ankara (Drawn by the author)

The area where CerModern takes place has an historical identity and meaning which are two of the three components of vivid environmental image (Lynch, 1960). Although the CerModern Art Center sustains these values of the area, the land uses and edges around the area prevent this area from having a clear image. Using

Lynch's methodology of the image analysis, Figure 4.31 is prepared through personal observations, which shows the visual form of Ankara. However, analyzing the study area more closely will help to reveal the area's problematical situation in the image of the city more specifically. For this purpose, Figure 4.32 is prepared with the same methodology in order to illustrate the elements around the area which affect the image.

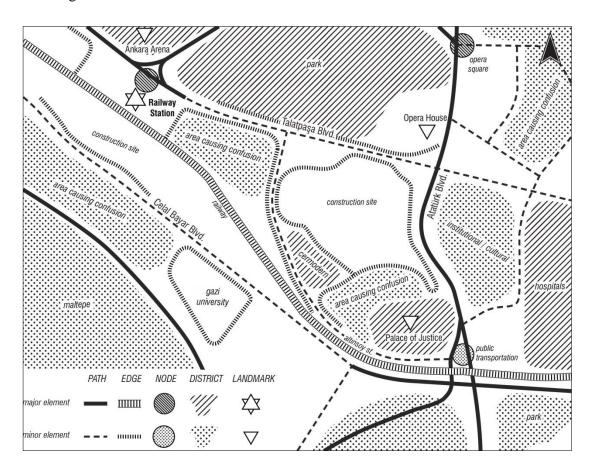


Figure 4. 32 Analysis of the visual form of the study area (Drawn by the author)

Structure, which is the other component of the image, is the most distinct missing part of the puzzle in the area. It means the relations of the factors that constitute the image with observer and each other (Lynch, 1960). All the buildings and open spaces are dissociated by wire fences. The construction site is the major factor that disconnects the buildings from each other and hinders their perceptibility. The most isolated building is CerModern. With its cultural function, it needs to have strong

connections to the city and to other cultural functions. The parking lots, the containers of the construction, and the low elevation of the Altinsoy Street separate CerModern from the context.

The clarity in the figure and ground relation is an important form quality of a city (Lycnh, 1960). It makes the objects more identifiable, recognizable, legible, and consequently more imageable. The study area and its vicinity consist of buildings and structures which are independent from each other because of wire fences, car parks, the railway, and the vehicle underpass. This situation of figures and open spaces leads to weak relations between them and create anti-spaces, in other words lost spaces in the area. The greater part of the open spaces in the area is surrounded with wire fences and some of them are used as parking areas. Only the CerModern's open spaces can be perceived and experienced by users (see Figure 4.33). The relation of figures and open spaces are shown in the Figure 4.34.



Figure 4. 33 The open spaces of CerModern (Bahar Gedikli photo archive)

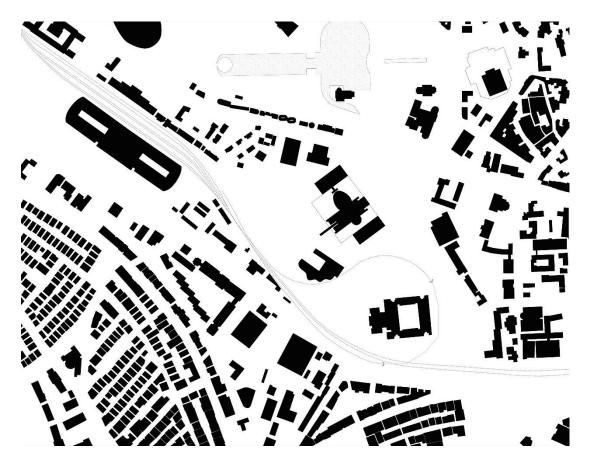


Figure 4. 34 Figure-Ground map of the study area (Drawn by the author)

Legibility of an area is crucial for formation of a vivid environmental image. It also provides interpretation of environmental information and eases the way-finding process (Köseoğlu and Önder, 2011). Thus, observer's sense of belonging increases, and getting into action gets easier both socially and physically, if the legibility of image elements and interrelations of them are well structured in the environment (Lynch, 1960). In the area, the interrelations of image elements are not enough for a clear image. Altınsoy Street is the only path in the study area. Yet, it has not got the qualities to contribute to the image. Altınsoy Street passes through the retaining walls, and people cannot observe any environmental information. It does not serve any directional purposes, and the walkability of this street is weak due to narrow pavements.





Figure 4. 35 The Altinsoy Street's current situation (Author's photo archive)

Figure 4.36 is prepared according to the personal observations and it displays the pedestrian circulation density in and around the area. According to the figure, despite dense pedestrian circulation lines such as Atatürk Boulevard and Strazburg Street, and nodes such as Sıhhiye, Democracy Square, and Opera Square, the Altınsoy Street is barely used by pedestrians. Also, the Talatpaşa Boulevard is not used by pedestrians due to the lack of connection to Atatürk Boulevard except for cars (see Figure 4.37). In short, the study area is suffering from lack of well-defined paths.



Figure 4. 36 Pedestrian circulation diagram of the study area (Drawn by the author)



Figure 4. 37 The lack of connection between Talatpaşa Boulevard and Atatürk Boulevard (Author's photo archive)

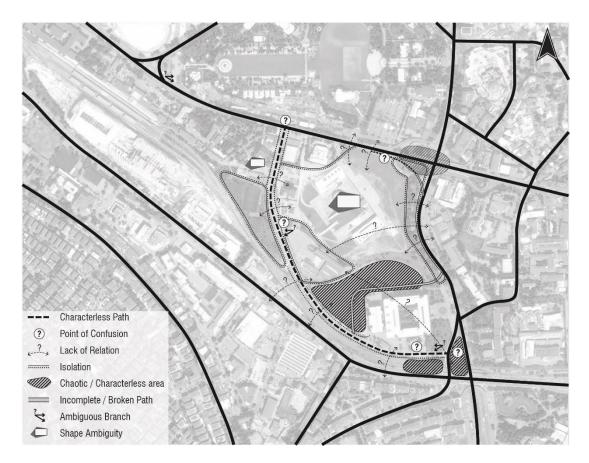


Figure 4. 38 Problem definitions of the image of the study area (Drawn by the author)

In Figure 4.38, the image problems of the area are illustrated on the map in the scope of Lynch's problem definitions. The problems were defined via personal observations and analyses on the area. The area is suffering from lack of relations with its surrounding. Only the Palace of Justice, Hall of the Presidential Symphony Orchestra, Selim Sirri Tarcan Sport Hall, and Demir Sport Wedding Hall are in interaction with the surrounding paths. The on-going construction of new Hall of the Presidential Symphony Orchestra is the major element on the image of the study area due to its large size. But it has not been completed yet and it is the primary reason for this lack of relations. The other reasons for the lack of relations are the Altinsoy Street and the railway on the ground which is preventing the circulation. Also, there are some points in the area that cause confusion for people while finding the way especially to CerModern. Most of these points are on the Altinsoy Street because the street has problematic characteristics that prevent perceiving the environment. The

other common image problem in the area is the isolation and CerModern is the foremost example for this problem. The problematical accessibility to the CerModern and the surrounding vacant areas are the primary reasons for the isolation. There is no relation or continuity between open spaces in the area. They are mostly construction sites or parking areas. A few open spaces are accessible.



Figure 4. 39 Open spaces used as parking lots (Bahar Gedikli photo archive)

These all defined image problems in the area obtained by personal observations, which are later used as a basis by embracing the findings of the interviews in order to obtain more definite imageability problems of the area.

4.6 Interview Results

As mentioned in the previous sections, the methodology of the study is based on the methodology of Lynch's image analysis. Therefore, interviews were conducted with the 20 users of the area. The selection criterion of the interviewees was being trained observers in the field of built environment. Two of them were exceptions of this criterion due to their experience about the area for many years. The interviews contained a blank map of the area and six questions aspiring to understand the environmental images of the users. The interviewees were asked to fill the map by

using the data that remain in their minds. The following figure shows the mentioned objects in the area. The numbers in the circles reflect the number of interviewees which mentioned the existing object.

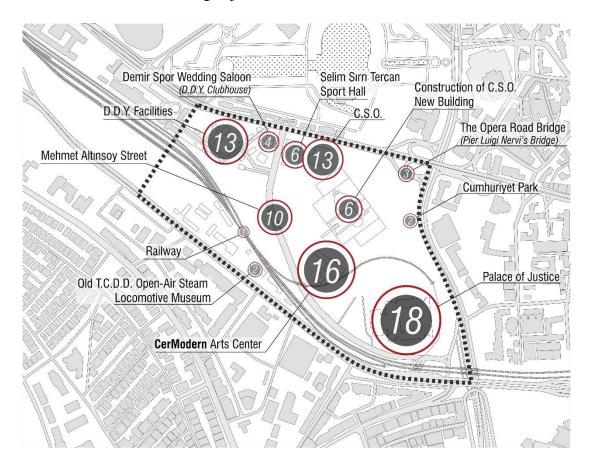


Figure 4. 40 The most mentioned objects in the area by the respondents during the interviews (Numbers indicate the number of mentioning) (Drawn by the author)

In the light of the data shown on the Figure 4.40, the most mentioned objects are the Palace of Justice, CerModern, and the concert hall of the Presidential Symphony Orchestrate. The location of the Palace of Justice and its building size increase its perceptibility. Function of the building is also important to be remembered easily. Also, it is the first thing that is in sight, while arriving to the area from Kızılay. Thus, it comes to the fore in the interviews. CerModern and the concert hall are the other most mentioned objects in the area due to their cultural functions. According to the interviews, they are the buildings that are mostly used by interviewees. The railway, Cumhuriyet Park, and the old Open-Air Steam Locomotive Museum which was

removed from the area in 2013 due to construction of the new high speed train station are the least mentioned objects in the area.

According to the interviewees, the area is not quite popular. Only people who are interested in cultural activities are familiar with the area. Participants mostly think that the area is isolated by the side of the road and people bypass the area. Due to its location, the area is perceived as easily accessible by the majority of the interviewees. However, even CerModern is located between two centers, Kızılay and Ulus, it stays in the background. Entrance to the area is threatening and disturbing according to most of the interviewees. Moreover, pedestrian access is not well defined for them. Most of the interviewees go to the area from Kızılay. Some of the participants use their own car, as there is a parking lot. Some of the participants use public transportation till Sıhhiye Bridge and walk to the area from there. The area does not make most of the interviewees feel safe. Related to vacant lands around, the area gives the feeling of dereliction.

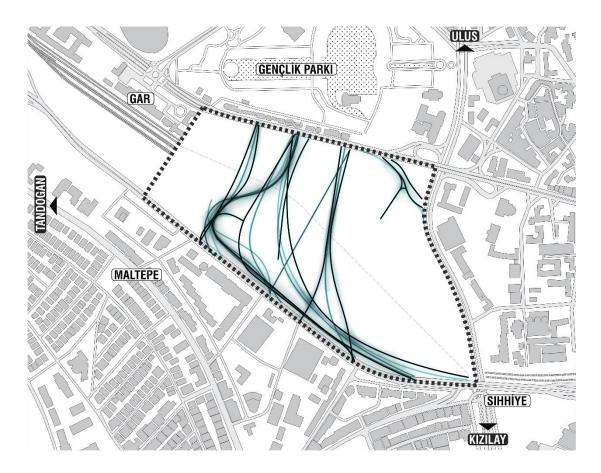


Figure 4. 41 Overlapping of the cognitive maps drawn by respondents about the circulation system in the area (Drawn by the author)

According to Lynch (1960), paths are the major elements of the observer's environmental image. They are the main circulation lines and the observer perceives its environment during the movement. Also, the paths are directive for observer. For this reason, Figure 4.41 was prepared in order to understand the perception of the circulation of area by using the collected data from interviews. As mentioned before, the Altınsoy Street is the only path in the area, yet it does not have the qualities to enable the observers to adequately perceive their environment. In fact, the foremost reasons are the level of the street which is below the ground level and the narrow pavements. The figure was prepared via overlapping the circulation lines in the maps drawn by the interviewees. As it can be seen in the Figure 4.41, almost all of the interviewees drew the entrances of the Altınsoy Street correct, but the route of the street inside the area was drawn in many different ways. Decreasing level of the

street prevents people from perceiving the environment, so they have a feeling of isolation, lack of relation, and direction ambiguity which are three of the image problems. Therefore, Altınsoy Street is one of the major reasons for imageability problems due to its characteristics.

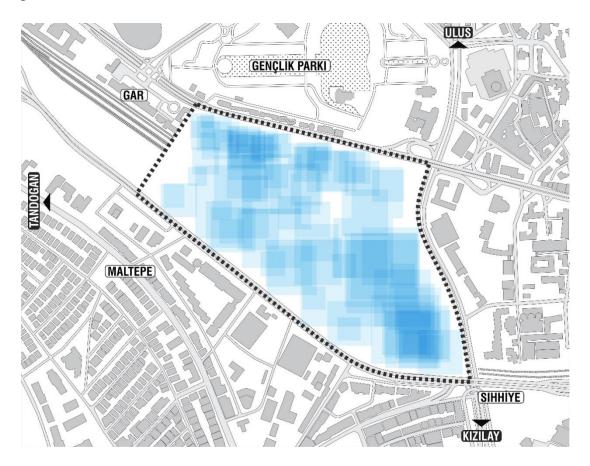


Figure 4. 42 Overlapping of the cognitive maps drawn by respondents about the figure density of the study area (Drawn by the author)

Another major objective of the interviews is to investigate the imageability of the buildings on the study area. For this reason Figure 4.42 was prepared. The method of preparation of this figure was as follows: The markings for the buildings on the maps prepared by interviewees were illustrated as squares. The squares were scaled according to size of the markings by interviewees and all the maps were redrawn in this way. After overlapping all the maps, Figure 4.42 was obtained. It shows areas with blue color in different opacities. As the color becomes darker, it means that the building on that area is marked by more interviewees. In the light of the figure, the

Palace of Justice, Demir Sport Wedding Hall, Sport Hall, and the Hall of the Presidential Symphony Orchestra are the most perceived buildings with their correct locations on the area. Especially the Palace of Justice is marked on its exact location by 18 out of 20 interviewees.

Another important inference that can be extracted from the Figure 4.42 is the uncertainty for the locations of the buildings in interviewees' images about the area. Almost all of the area marked as a building in the overlapped map. The buildings except the abovementioned ones were marked on various locations on the area.

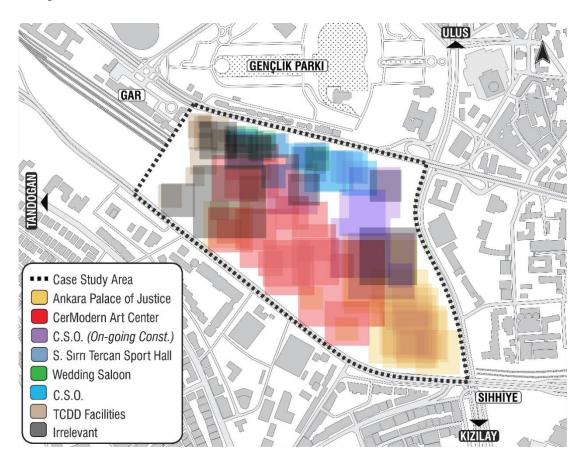


Figure 4. 43 Overlapping of the cognitive maps of respondents about the distribution of functions in the study area (Drawn by the author)

Figure 4.43 was obtained via reorganizing the collected data from interviews which were used for Figure 4.42. The markings of interviewees are colored according to the function of the building and then overlapped. Thus, the buildings' imageability can

be evaluated separately. The buildings which are located on the perimeter of the area are marked more correctly due to their proximity to the Atatürk Boulevard and Talatpaşa Boulevard. However, CerModern is marked on various points in the map. The main reasons for this situation are its central location on the area and being isolated from the densely used surrounding paths by buildings and construction sites. While Altinsoy Street is the only path that provides accessibility to the area, it does not give people an adequate opportunity to perceive the environment. Therefore, CerModern has imageability problems in its vicinity, even though it is a unique and well known center in Ankara with regard to its cultural function. Most of the interviewees go to the area only in order to attend to the special organizations and meetings in CerModern. For instance, none of the participants goes to the café of CerModern.

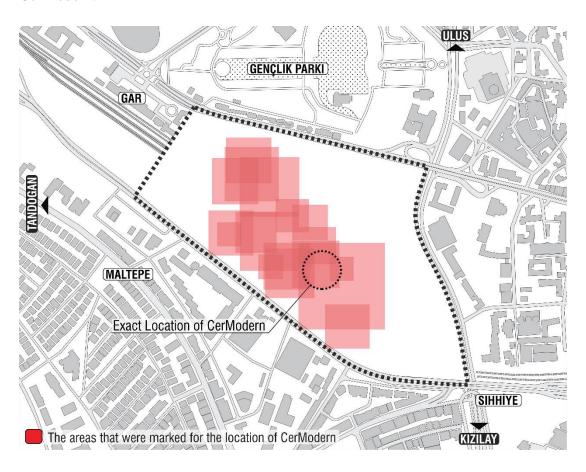


Figure 4. 44 The map shows the comparison of the total area, marked as the location of CerModern, and the exact location of CerModern in the study area (Drawn by the author)

As Lynch (1960) mentions in his methodology, the mappings about the image of an area are the abstractions of physical reality. They are dealing with mainly perceptual matters. Likewise, these diagrams which were obtained via overlapping all the maps drawn by the interviewees aim to manifest the current perceptual situation of the area and the effect of this situation to the imageability of the area.

The image consists of three components. They are identity, structure, and meaning. The structure contains physical elements and it is the perceivable side of environment that affects the image. Although the identity and the meaning are influenced by physical reality, they are more related with the interpretations of physical reality in the observer's mind. Therefore, these mappings and the collected perceptual data for the area are about the structure of the image. As mentioned before, the main problem for the imageability of the area is the structure. The study aims to investigate the potentials of the area to strengthen the image by defining the problems of the structure.

CHAPTER 5

CONCLUSION

This thesis aims to investigate the problems of transformed inner-city industrial heritages in the process of reintegration to the urban context. For this purpose, industrial heritages are evaluated with Roger Trancik's concept of "lost space" for the pre-transformation period, and Kevin Lynch's concept of "imageability" for the post-transformation and reintegration process.

The aims for selecting these two concepts are as listed:

- First, defining these areas in the urban context and emphasizing their opportunities and potentials for transformation
- Second, investigating the urban design approaches upon these areas via analyzing the best practices across the World
- Third, defining the problems underlying the reintegration process of transformed industrial areas.

With the economic, social, and technological changes, cities have gone through new development models during the twentieth century. Industrial production in the city center has decreased and most of the existing industrial areas moved to outskirts (Thornton and Franz, 2006, cited in Alpan, 2012). Accordingly, their building stocks and landscapes remained functionless and abandoned parts of the cities. This situation is seen among major urban design issues of modern cities (Hall, 1998; Polanyi, 1944). Redevelopment of these areas has become an important part of land

use policies for sustainable urban development. They offer both challenges and opportunities for being re-integrated to the city. Their historical and cultural values are the most important reasons to be sustained in order to connect the collective memories of past and future. Also their locations, sizes, and existing building stocks are the other opportunities for regaining these areas (Severcan and Barlas, 2007).

In the scope of this thesis, one of the main concepts is Trancik's "Lost Space". Lost space is anti-space, i.e. an undesirable urban area which does not make any positive contribution to the surrounding, and which is in need of redesign. Inadequate perceptibility of urban space leads the loss of space in the cities. The term of 'Lost Space' is important to define both the problematic areas in the cities and the reasons causing these problematic parts. Therefore understanding the concept of lost space is considered essential for the contemporary urban design practice. The problem of emergence of lost spaces in the cities accelerated during the 1950s and 1960s with the movement of the industries to the periphery. The concept of lost space has a broad range of space types in the city including inner-city industrial areas, too (Trancik, 1986). Abandoned industrial areas are elaborated as lost spaces in this thesis. Lost spaces are important urban design problems due to their effects on the city form. They cause gaps which break the continuity of city form and pedestrian links between important destinations. Therefore, identification of this gaps and reintegrating to the city setting is significant.

With the values they have and the problematic existence in the city settings, abandoned industrial areas have been subject to urban design approaches. Besides the transformation process, how their transformation impacts on the wider city parts is also important. The best practices elaborated in this study are determined by taking this importance into consideration. The two industrial transformation examples, namely Bicocca District in Milan and Simmering Gasometers in Vienna, have differences in both function and scale. Yet the important common trait is their pioneering role in the development of their surrounding environment, even the city. The Bicocca project changed the development planning of the city. It is a noteworthy transformation project realized through public-private collaboration. The success of

the project lies behind this relation and the willingness of both public and private agents. The other example, Simmering Gasometers project, was also designed not only as a transformation of abandoned industrial buildings, but also as a flagship project for broader development of the region. The aim was making the area more attractive for the new investors. The transformation of the Gasometers and the broader development project gave positive feedbacks in a very short time. Likewise, the success of the project lies behind the administrative factors. The project area connected to the city setting with well-organized public transportations. Transformation of the Gasometers was completed in two years and the developments around the area were completed in five years. The project area was integrated to the city in a very short time due to the willingness of public and private actors both mentally and financially (Enichlmair and Borsdorf, 2008).

According to Trancik (1986), the most important factor that effects the formation of lost spaces in cities is public institutions' unwillingness and inability for controlling the appearance and physical structure of cities. The lack of this willingness is a great difficulty standing in front of the reintegration of inner-city industrial heritages to the city. The given industrial heritage examples are very symbolic for their cities. They bring the traces of their industrial past into the present day and continue to serve their users with new functions. They are far away from being lost spaces in the city. On the contrary, they are very perceivable and imageable.

In addition to the historical and architectural values, the industrial heritages have always been important factors in the images of cities due to their physical and functional unique features. The imageability of the transformed industrial areas is crucial for efficient and sustainable urban design. The transformation of these areas or buildings is a design challenge in itself. In this thesis, this challenge is evaluated at the urban design scale by taking these areas into consideration with their surrounding areas. Moreover, the integration of these areas to the city setting is analyzed together with the areas' vicinities. CerModern is chosen as the case study for the thesis. First of all, the current situation of the project area and its vicinity is defined. Then the history of the buildings and the area is examined thoroughly in order to understand

the factors which led the current situations to occur. After understanding the history and current situation of the area, integration problems of the area are defined. The integration of the area is examined by using the "imageability" concept of Lynch. His methodology of imageability analysis is used as a basis for the methodology of this thesis with some additions and interpretations. Obtaining common maps, which demonstrate the imageability of an area's components, by overlapping the mental maps which are obtained via interviews, are additions to his methodology.

The outcomes of the case study analysis reveal the area's imageability together with the problems. These outcomes show that although CerModern is a successful transformation project, it has imageability and integration problems that arise from environmental factors such as the on-going construction, the condition of Altinsoy Street, undefined open spaces around, car parks, and the fences which prevent the access to the area from Atatürk Boulevard. The study area was a former industrial service area for the railway station of Ankara. The area was located in the periphery of the city until the 1950s, and then it got stuck inside the city as a result of the growth of the city. Hence, this situation created pressure on the area for transformation since the early 1950s. This pressure increasingly continued with the Yücel-Uybadin Plan for the development of the city. The new planned Celal Bayar Boulevard separated the industrial production area and service area. The transformation pressure on the area was always in the direction of removal of the industrial structures there. The area was subject to various projects by public institutions since the 1960s, such as the Municipality, AMANPB, the National Committee, the Ministry of Public Works and Settlement. These transformation attempts aimed to remove the existing structure in order to prepare the area for a new cultural project. Some of the structures on the area were demolished or replaced. Yet the buildings of maintenance ateliers remained there despite some major damages. The ownerships of the areas in the industrial service area belonged to public institutions at the rate of approximately 95%. Therefore, it was very suitable to gain a cultural center for the capital city. However the attempts for the cultural project were not successful mostly due to changes in the administrative actors. After the coup d'etat in 1980, industrial service area was defined the 4th division of the AKM areas and the only actor that have the right to take decisions for the area was National Committee. Accordingly, the Committee decided to obtain a cultural center in the 1st division of AKM areas (Hippodrome area) with the reason of the celebrations of the 100th anniversary of the birth of Atatürk. The industrial service area remained uncertain until the beginning of 1990s. The Committee decided to construct a new concert hall of Presidential Symphony Orchestrate in the area and organized a national competition in 1992. The project of Uygur Architects won the competition, and the construction started in 1997. The maintenance ateliers were stated as removable structures in the competition reports and base drawings for the project; however, as the architectural and historical values of these building were realized soon and preservation and restoration decisions were taken for the structures with the efforts of the Ankara Board of Preservation of Cultural and Natural Heritage in 1995. The restoration and transformation works started in 2000 and completed in 2010 (Saner, 2004).

In the current situation of the area, the ateliers serves the city as a contemporary art museum and fine arts gallery namely CerModern. The new concert hall of Presidential Symphony Orchestrate is still under construction. The existing concert hall is in service. According to the findings of the interviews, the Palace of Justice is the major building in people's images about the area. The rest of the area consists of lost spaces. As mentioned in the previous chapter, the area suffers from imageability problems. According to collected data from interviews it can be said that, despite the central location and the cultural functions on and around the area, this part of the city is a gap in the people's image of the city. CerModern is an important figure for the city due to its rareness as being a regained industrial heritage. Yet the project cannot adequately integrate to the city as it should be. The main reason is that its vicinity is isolated from the city due to incomplete construction of the new concert hall of Presidential Symphony Orchestrate. The area is considered and projected as a cultural focus for the city due to its location and cultural functions on and around. Yet the area is a construction site for about twenty years because of administrative and financial problems. Although the winning project contains solutions for the integration of this area to the surrounding area, these solutions cannot be realized in

the present day. The comprehensive design of the Uygur Architects connects the area with Atatürk Boulevard and Youth Park with pedestrian roads.

Figure 5.1 shows the locations of current cultural and recreational functions in the city center. The central location of CerModern is surrounded with cultural activities. Due to this reason, in case of completion of the new concert hall of Presidential Symphony Orchestrate's construction, the area has a potential for triggering cultural activities in the city. The vision for the area since a half century, as being cultural focus of the city, is quite suitable for the needs of the city.

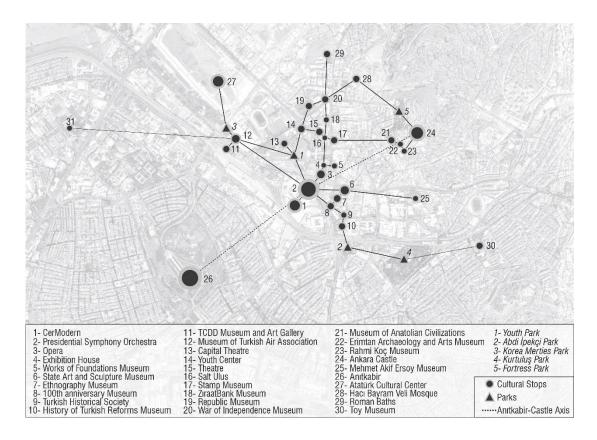


Figure 5. 1 The cultural and recreational uses around the study area (Drawn by the author)

This thesis elaborates new approaches to the transformation and reintegration of lost spaces to cities by taking into consideration abandoned industrial areas. It emphasizes the importance of the imageability of these areas during and after the

transformation process. The thesis takes the methodology of Lynch's image analysis that is developed for urban scale as a basis, and adapts it to district scale.

The integration of industrial areas to their wider context is elaborated within the scope of perceptual integration. For further researches, the thesis may shed light on the studies about other types of integration. In this sense, the theoretical framework developed in this study may provide a basis for further researches.

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APPENDIX A

THE INTERVIEW OF KEVIN LYNCH

- 1. What first comes to your mind, what symbolizes the word "Boston" for you? How would you broadly describe Boston in a physical sense?
- 2. We would like you to make a quick map of central Boston, inward or downtown from Massachusetts Avenue. Make it just as if you were making a rapid description of the city to a stranger, covering all the main features. We don't expect an accurate drawing—just a rough sketch. (Interviewer is to take notes on the sequence in which the map is drawn.)
- 3.a) Please give me complete and explicit directions for the trip that you normally take going from home to where you work. Picture yourself actually making the trip, and describe the sequence of things you would see, hear, or smell along the way, including the path markers that have become important to you, and the clues that a stranger would need to make the same decisions that you have to make. We are interested in the physical pictures of things. It's not important if you can't remember the names of streets and places. (During recital of trip, interviewer is to probe, where needed, for more detailed descriptions)
- b) Do you have any particular emotional feelings about various parts of your trip? How long would it take you? Are there parts of the trip where you feel uncertain of your location? (Question 3 is then to be repeated for one or more trips which are standardized for all interviewees, i.e., "go on foot from Massachusetts

General Hospital to South Station," or "go by car from Faneuil Hall to Symphony Hall.")

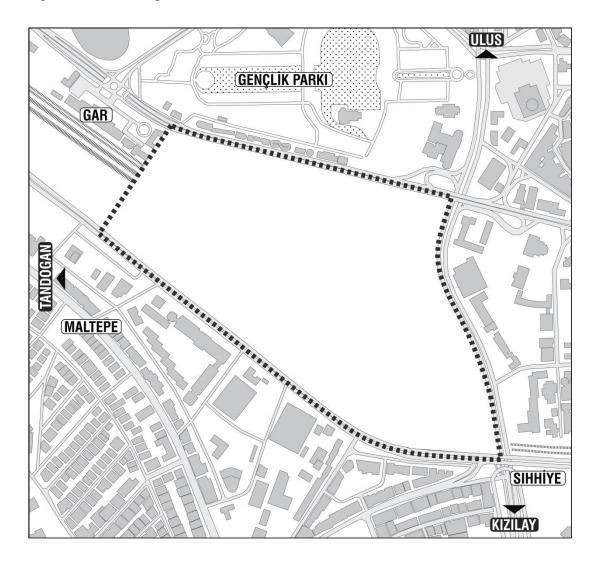
- 4. Now, we would like to know what elements of central Boston you think are most distinctive. They may be large or small, but tell us those that for you are the easiest to identify and remember. (For each of two or three of the elements listed in response to 4, the interviewer goes on to ask question 5)
- 5.a) Would you describe _____ to me? If you were taken there blindfolded, when the blindfold was taken off what clues would you use to positively identify where you were?
- b) Are there any particular emotional feelings that you have with regard to _____?
- c) Would you show me on your map where _____ is? (and, if appropriate) Where are the boundaries of it?
- 6. Would you show me on your map the direction of north?
- 7. The interview is over now, but it would help if we could just have a few minutes of free discussion: (Remainder of questions are inserted informally)
- a) What do you think we were trying to find out?
- b) What importance is orientation and the recognition of city elements to people?
- c) Do you feel any pleasure from knowing where you are or where you are going? Or displeasure in the reverse?
- d) Do you find Boston an easy city to find your way in, or to identify its parts?
- e) What cities of your acquaintance have good orientation? Why?

APPENDIX B

THE INTERVIEW OF THE THESIS

Age, Sex, and Occupation:

Year of settlement in Ankara:



- 1. Please, fill the marked area in the map with the first things that come to your mind about the region with sketches and notes.
- 2. Is there anything symbolic for you in this particular region? What is the first thing that comes to your mind when you look at the map?
- **3.** What are your general thoughts about the region that is shown on the map?
 - a. In your opinion, is this region easily accessible?
 - **b.** Do you feel anything specific when you are inside or outside of this region? Can you explain with reasons and details?
 - **c.** In your opinion, is there anything problematic about this region? Can you explain with reasons and details?
- **4.** How would you describe to strangers the way to CerModern from each of these three centers; Kızılay, Ulus, and Tandoğan Square?
 - **a.** What type of transportation would you recommend for each of these routes?
 - **b.** What should be their routes? (Draw sketches or explain with notes)
 - **c.** Can you give a reference point in the area for the strangers to understand that they arrive at the area?
- **5.** How often do you go to CerModern Art Center? What transportation mode(s) do you generally prefer? What are the reasons for your transportation preference?
- 6. How much is it important to be conscious about the city you live in, to know how to reach a specific place in the city and how long it takes to arrive there? Please, explain with reasons.

APPENDIX C

THE COGNITIVE MAPS OF THE INTERVIEWEES

