

**A DESIGN PROBLEM OF UNDER-UTILIZED SPACES:
THE CASE OF ANKARA-OLD INDUSTRIAL DISTRICT**

**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 CITY PLANNING
IN
URBAN DESIGN**

MARCH 2005

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ABSTRACT

A DESIGN PROBLEM OF UNDER-UTILIZED SPACES: THE CASE OF ANKARA-OLD INDUSTRIAL DISTRICT

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March 2005, 101 pages

The problem of under-utilized spaces has become an important problem of cities during the last decades. In rapidly urbanizing cities, especially in the city centers where the early city settlement or old town was situated, many urban and industrial functions have moved out leaving behind abandoned or under-utilized. These spaces, due to political, economical, cultural and spatial reasons, could neither undergo healthy urban transformation process nor be reused. Such spaces pose problems to contemporary urban planning and architecture.

This thesis takes up the problem of under-utilized space exemplified in the inner city of Ankara, where a large stock of land is public property. The thesis defines the problem of under-utilized space and analyzes the causes for their emergence. The aim of the study is to understand the urban character of under-utilized part of the old industrial district, which is one of the most important districts in the city center of Ankara, and develop urban transformation approaches in particular for the old industrial district as well as for similar urban areas.

The thesis focuses on the urban design dimension of transformation process. Urban design as a public policy makes important contributions in solving urban problems. The thesis develops

some urban design principles in accordance with some spatial, functional and social concerns in order to redevelop the old industrial district. With this contribution the study emphasizes the importance of urban design as a tool which can be utilized in the urban transformation process by urban planners and architects.

Key Words: Under-utilized Space, Public Land, Old Industrial District, Inner City of Ankara, Urban Redevelopment, Industrial Archaeology.

ÖZ

BİR TASARIM PROBLEMİ ATIL KENT MEKANLARI: ANKARA-ESKİ SANAYİ BÖLGESİ ÖRNEĞİ

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Yüksek Lisans, Şehir ve Bölge Planlama Bölümü, Kentsel Tasarım

Tez Yöneticisi: Öğr. Gör. Sevin OSMAY

Mart 2005, 101 sayfa

Atıl kentsel alanlar günümüz kentlerinin önemli bir sorunu haline gelmiştir. Hızlı büyüyen kenlerin özellikle ilk yerleşme alanlarında yani merkezlerinde terkedilmiş veya verimli kullanılmayan kentsel mekanlar ortaya çıkmıştır. Politik, ekonomik, mekansal ve kültürel nedenlerden dolayı sağlıklı kentsel dönüşüm süreci ile yeniden değerlendirilemeyen bu tür mekanlar çağdaş kent planlamasının ve mimarlığın ilgilendiği önemli bir kentsel problemdir.

Bu tez atıl kent mekanları problemini kamu arazilerinin yoğun olarak bulunduğu Ankara kent merkezi örneğinde ortaya koyan bir çalışmadır. Çalışma Ankara kenti örneğinde problemi tanımlamaya ve nedenlerini ortaya koymaktadır. Bu araştırmanın amacı atıl olarak tanımlanan, kent merkezinin önemli bir bölgesi olan ve dönüşümü tamamlanamamış eski sanayi bölgesinin kentsel karakterini ortaya koymak ve özel olarak bu bölgenin, genel olarak da benzer bölgelerin dönüşümleri için olası yaklaşımları geliştirmektir.

Çalışma dönüşümün kentsel tasarım boyutu üzerinde durmaktadır. Bir kamu politikası olarak kentsel tasarım kentsel problemlerin çözümüne önemli katkılar sağlamaktadır. Çalışma Ankara'nın eski sanayi bölgesinin kente pozitif mekansal, işlevsel ve sosyal katkılarda bulunabilmesi için uygun kentsel tasarım prensipleri ortaya koymaktadır. Bu yönü ile çalışma kentsel dönüşüm süreçlerinde kentsel tasarımın kent plancılarının ve mimarların kullanabilecekleri önemli bir araç olduğunu vurgulamaktadır.

Anahtar Kelimeler: Atıl Kentsel Alanlar, Kamu Arazileri, Eski Sanayi Bölgesi, Ankara Kent Merkezi, Kentsel Yeniden Geliştirme, Endüstriyel Arkeoloji.

To My Parents...

ACKNOWLEDGMENTS

I would like to express my gratitude to my supervisor Inst. Sevin Osmay, for offering intellectual guidance and prudent criticism throughout the study. Her insightful comments and suggestions have released my vision in the congestive stages of my study. I would also like to thank my other committee members, Assoc. Prof. Dr. Bakan Günay, Assoc. Prof. Dr. Çağatay Keskinok, Assoc. Prof. Dr. Güven Arif Sargın and Inst. Dr. Müge Akkar for their comments and suggestions.

I offer special thanks to architecture Atilla Tükoğlu and Servet Sariarslan (Directorate of TCDD Museums) who supported me technically or by providing documentary for the study.

I have to express my gratefulness to personnel of VEKAM (Vehbi Koç ve Ankara Araştırmaları Merkezi) who gave a kind interest to the study.

I would like to express special thanks to Tolga Levent for his comments and guidance throughout the study.

I would like to gratefully thank to my friends; A. Mert Burnaz, Uğur Çalışkan, Olgu Çalışkan, Burak Belge, Melike Kuş and Seda Sırakaya for their invaluable presence and supports.

Finally, I would like to thank to my parents for their endless patience and supports. This thesis would not be realized without their confidence.

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ABBREVIATIONS

TCDD	Turkish State Railways
AOÇ	Atatürk Forest Farm
AMANPB	Ankara Metropolitan Area Master Plan Bureau
AKM	Atatürk Cultural Center
EGO	Ankara Electricity and Bus Operation
TEDAŞ	Turkish Electricity Distribution A.C.
GMK	Gazi Mustafa Kemal
TMO	Agricultural Product Office
T.C.	Republic of Turkey
CSO	Presidency of Republic Symphony Orchestra
AŞTİ	Ankara Bus Station

CHAPTER 1

INTRODUCTION

The basic concerns of this study are the emergence of under-utilized spaces owned by public in the inner city of Ankara and the contribution of urban design in urban transformation process. This thesis is a monographic study examining the first industrial district of Ankara, which locates in city center and exists in under-utilized condition, as an urban design problematic. Investigating the publicly-owned under-utilized spaces in Ankara inner city overall, the study concentrates on the old industrial district, the transformation of which is yet incomplete. The aims of the study are to understand the urban character of old industrial district as an under-utilized space and to evaluate the position of urban design in redevelopment process of the district.

Every modern city faces with the problem of under-utilized space. Lots of vacant, unused or abandoned lands are located in cities downtown. The under-utilized urban spaces are abandoned waterfronts, train yards, vacated military sites, and industrial complexes that have moved out to the suburbs for easier access and perhaps lower taxes, and never redeveloped for a multitude of reasons. They are deteriorated parks and marginal public housing projects that have to be rebuilt because they do not serve their intended purpose. They are the surface parking lots that ring the urban core of cities and sever the connection between the commercial and residential areas. These spaces have become lost, negative, disconnected, and contributing to a lack of perceivable edges or form in urban environment (Trancik, 1986: 1-3).

In general sense, ‘under-utilized space’ means an “undesirable urban area that is in need of redesign, an antispace, making no positive contribution to the surroundings or users” (Trancik, 1986: 3-4). The definition of under-utilized space covers the definitions of vacant, abandoned, derelict or unused space as an umbrella definition. Aruninta (2002: 8) defines the under-utilized spaces with the frame of ‘urban voids’. Reviewing the literature defining the meaning of ‘urban voids’, he suggests three different definition of urban voids.

1) Voids as the low-quality physical urban space:

“Urban voids are defined as city spaces which disrupt the urban tissue, leaving it incomplete and throw into question the use of those spaces. They are sometimes called urban ruins at the limit between private and public space, without belonging either to the one or to the other. Urban voids are containers of memory, fragments of the built city and the natural environment; memories of the city which constitute a random, unplanned garden” (<http://parole.apore.org/work>).

2) Voids created as a result of development processes within the context of economical, political and cultural environment.

The mechanisms, which create the urban voids, are listed under three categories: economics, politics and culture.

Economics: “Urban voids are tangible and visible result of the interlinkages between economic shifts and urban change” (Grönlund, 2002). The radical restructuring of global economy in recent decades has resulted in an explosion in the number of urban voids throughout the industrialized world. Economic restructuring has re-shaped both society and space (Moore, 2002). It has caused the decline of former industrial and commercial sites in cities and encouraged suburban development. This situation has increased socio-economic exclusion.

Politics: Inefficient decision making, poor land management, poor co-ordination among decision makers, and ignorance of responsible actors as the main policy problems that create urban voids.

Culture: Technological development and economic growth has lead to a car-dominated society with low population density in newly developing suburbs; residential or industrial. People living in suburbs started to spent time at home instead of in the city (Aruninta, 2002: 9). This situation has decreased the use of inner-cities for many kinds of purposes such as commercial and recreational activities. City centers, being unpopular places by this process, have created suitable environment for appearance of urban voids.

3) Voids as the potential for urban redevelopment:

“Urban voids are unutilized, abandoned or under-utilized land and premises which exist in urban areas due to outdated or defunct uses. Urban voids can even be created by identifying dilapidated premises which have potentially to redevelop for new urban functions. The term should not be confused with open areas such as parks or side-walk which have specific

functions assigned to them. As used in legal terms (e.g., null and void contracts- the contract exists but not effective), void means ineffective in urban planning context too” (Perera, 1994, cited in Aruninta, 2002: 9).

The M.I.T. Consultants Team (1994) also listed the sources of under-utilized space for the public parks development of Bangkok. This study had looked to the potential and opportunity of the vacant lands in different ownership and gave some examples of the potential land as these followings;

- Disused housing and factories
- Storage facilities and waste disposal
- Interstitial space in industrial sites
- Land in abandoned areas
- Pond, or water retention areas
- Land created along canals and rivers
- Land along railways, roads and expressways, both old and new

There are mainly three major explanations given as the causes of under-utilized spaces; political explanation, explanation in terms of obsolescence (economical, locational, and physical) and explanation within urban design context.

According to the political explanation, the problem of under-utilized space results from inefficient decision making, poor land management, poor coordination between planning and investments, ignorance of responsible actors, the limited capabilities of government sector and market involvement (Aruninta, 2002: 14). These political inefficiencies have created under-utilized spaces in the urban area, which finally lead to urban blight, deteriorated environment and low quality of life.

Explanations on obsolescence stress on economic, locational and physical obsolescence of cities’ downtown where under-utilized spaces emerge. Changing technologies in the production, distribution, and marketing of goods have resulted in the underutilization and frequent abandonment of the cities’ large stock of commercial and industrial properties. The physical configuration of many properties makes them uneconomical for the most modern business (Philadelphia City Planning Commission, 1995: 7). Also disinvestment in the form of closure causes the emergence of abandoned factories, warehouses, shops, offices and also housing (Feagin and Smith, 1987: 56). As for the locational obsolescence, the effects of the

development new commercial and industrial suburbs and new information technologies that require less regular face-to-face interaction on central cities are vital. These have lessened the necessity of central city locations in many modern cities (Philadelphia City Planning Commission, 1995: 7-8). Also the increasing car ownership has enabled people to challenge the pressure of urban life in smaller suburbs (İşbir, 1991: 19). As locational choices for residential, commercial and industrial land uses have increased within metropolitan areas of cities, overall demand for such properties in central cities has decreased. Thus less competitive city properties often become under-utilized. Again, the newer regional suburbs have superseded the cities' aging infrastructure, housing stock, and its dense pattern of neighborhood development. Due to the decreasing demand for such uses as residential, commercial and industrial, physical obsolescence of the stock of buildings in cities downtowns has occurred. Many of these properties have fallen into serious disrepair and eventually become unusable (Philadelphia City Planning Commission, 1995: 8).

According to the explanation given as an urban design problematique, there are five major factors that have contributed to under-utilized spaces (Trancik, 1986). The use of automobile which results in highways, thoroughfares and parking lots, the modern movement in design, creating separate buildings floating among parking lots and roads, zoning and urban renewal, segregating functions and destroying connections between the districts, privatization of public space that causes loss of unity of total environment, and changing land use that creates wasted or underused spaces are the reasons for the emergence of under-utilized space in cities downtown.

The explanations in literature that present the reasons for the emergence of under-utilized spaces do not correspond to the Ankara case completely. The main problem in Ankara results from the political context. The institutional political actors who are responsible for the transformation of these areas have generated resistance mechanism to the transformation process.

In general sense, a transformation means a structural change; and an urban transformation means a structural change in spatial, functional, or social formation of urban areas. Any urban transformation comprises a structural change such as a renovation, regeneration, rehabilitation, revitalization, redevelopment, re-definition, or gentrification, (Tekeli, 2003: 5). The urban transformation is intended in order to create healthy and livable urban spaces. In some cases urban transformation are impeded by resistance mechanisms generated by economical factors, symbolic values, property relations, or by some restrictions imposed by plan decisions.

Impending transformations are usually met with a resistance mechanism. If the pressure beyond, either will or necessity for transformation is stronger than resistance factor, then the transformation occurs. On the other hand, if resistance factors are stronger, the transformation either does not occur or sustains until the resistance diminish. When the transformation pressure and resistance factors meet, or even when the transformation requirements come into existence, an authority may decide whether or not the transformation should be exercised. Nevertheless, the authority may not be powerful enough to decide, but may take its position for either supporting the transformation or the resistance mechanism. If the authority supports the transformation, the process accelerates; and if the authority strengthens the resistance mechanism, the transformation either does not occur, or sustains until another authority supports the transformation. In the other case, when both a transformation is supported and its resistance mechanism is strengthened by different authorities, there occurs a confrontation between the authorities. Then the transformation becomes an authority problem; and since it is an urban transformation, it appears as an authority problem on the urban realm. In Ankara case, political attitude of responsible institutional actors for the transformation of the under-utilized spaces prevented the necessary operations to be done for the transformation in a rational way. In short, it was resistance of political actors that made the transformations of the under-utilized spaces remains incomplete.

Investigating the problem of under-utilized spaces and their transformation is a very much worked issue in the world since the beginning of the 20th century. All policies related to urban regeneration, rehabilitation, renewal and redevelopment sought to tackle the problem of under-utilized spaces, and numerous research is done on this issue, especially during the last 30 years. But in Turkey very little research is available on this subject and satisfactory results are not achieved. However, the problem of under-utilized space is very important in the life of cities due to the following considerations: It is an inevitable reality that will support the image of cities, besides affecting people positively or negatively from social, cultural and psychological dimensions. Therefore, this study aims to contribute to understanding the problem of under-utilized spaces particularly in Ankara, the capital city of Turkey, and thus in Turkey.

The thesis focuses on under-utilized lands that are located in the inner city of Ankara and owned by public institutions. The reason for choosing Ankara inner city as the research topic is related to vital role public land plays in the urban planning process.

One of the most important roles of public land is to direct urban developments. In planning implementation, urban developments can be controlled by the market mechanism or outside of it with the existence of public land stock. Public land can be used to direct urban development

for public interest within the appropriate legal, administrative and participation mechanisms. The second important role of public land is to create healthy urban space. To create healthy urban space means obtain a balanced relationship between common use spaces and population density. Today, in our cities this relationship can not be established with the existing laws and regulations. To create spaces for sports, health and education complexes and recreation activities which require extensive land is not possible in a city that does not have a stock of public land. Therefore, public land plays an important role in solving this problem (Akkar, 1997: 29). The third role of public land in urban planning is to provide social support. Public land is important in decreasing tension among social classes. Public can provide common use urban spaces by using public land stock (Akkar, 1997: 30).

Considering all these facts, investigating the subject of under-utilized space for Ankara will be fruitful in creating a more healthy and successful urban environment. In this study, the problem of publicly-owned under-utilized space in the inner city of Ankara is discussed. Ankara inner city that has great deal of public lands that are under-utilized provides substantial research opportunities in the study of under-utilized space.

The methodology used in this research is developed through case studies. The data utilized in the study is mainly qualitative data obtained by the interpretation of plans and land use maps, compiling the written documents related to the subject, and analyzing the results of land use studies and interviews with people, mainly representatives of various public agencies such as directorates, chairmen of departments and staff.

In this study, the area chosen for illustrating the problem of publicly-owned under-utilized space in the inner city of Ankara is the old industrial district of the city, and this area is analyzed as an urban design problematique.

In the second chapter, first, the problem of publicly-owned under-utilized space in central area is discussed, next, types of publicly-owned under-utilized space available in Ankara are defined, and third, the development of extensive public land strip housing these spaces and extending east-west direction between the centers of the city is analyzed.

In the third chapter, the historical evolution of the old industrial district of Ankara is analyzed in four subsequent periods. First period covers the spontaneous development from the arrival of the railways in the city in 1892, until the first planning attempt in 1924. The second period is the first planned development period of the area according to the Lörcher Plans, between 1924 and 1932. The third period is Jansen Plan period, between 1932 and 1957. And the fourth one is the transformation period of the study area according to Yücel-Uybadin Plan, from 1957 until today.

In the fourth chapter, the present situation of the old industrial district is analyzed. The area is studied in two districts. First area is the district of factories that was the ‘old industrial production’ area before 1990. And the second district is the ‘old industrial service’ area that had been cleaned from industrial structures.

In the fifth chapter, in order to understand the urban character of the old industrial district, contextual, conceptual and spatial analyses are made. Firstly, the area is evaluated within the urban context. Secondly, the situation of the district within the image of the city is analyzed. Thirdly, an accessibility study of the area in physical and visual terms is made. Fourthly, the borders that prevent spatial and visual relations between the sub-areas of the area, and between the area and its surroundings are analyzed. And finally, the opportunities and constraints of the area are presented.

In the concluding chapter in reference to the contextual, conceptual and spatial analyses made, an attempt is made to develop some urban design principles appropriate for the redevelopment of the old industrial district. The redevelopment of the old industrial district is a many-sided urban design problem. It is a district that has the traces of historical development of the industry in Ankara. Secondly, the old industrial district comprises the only industrial archaeological site. Thirdly, the area is a subject of under-utilized space problem, and finally, it is a part of interrelated urban problems due to its central location in the city. Considering all these concerns, the urban design principles are developed under five categories; re-definition with new functions, conservation of the historical values, spatial development, relations with surroundings and integration into the urban context.

CHAPTER 2

PUBLICLY-OWNED UNDER-UTILIZED SPACES IN INNER CITY OF ANKARA

2.1. Historical Development of Public Land Strip in Inner City of Ankara

The formation of the public land strip that extends in the east–west direction in Ankara urban center today, leads back to the arrival of the railway in the city at the end of the 19th century. This strip, which forms an access from the Sıhhiye hospitals area at the east to the Atatürk Forest Farm (AOÇ) at the west, is bordered with İstanbul Avenue at north, Cebeci–Bahçelievler axis at south, and Celal Bayar Boulevard in the Sıhhiye region.

The development of this land strip has begun with the appearance of the first industrial structures around the railway and the station in particular, after the railway system was opened to service in 1892. For about 30 years, until the Republican period, this development has taken place without a proper plan. This was a period in which small scale industrial structures, storage units, railways maintenance ateliers, and the weapon factory (İmalat-ı Harbiye), which was founded during the war period, emerged by itself. First enterprises for the development of the station area as an industrial zone were also undertaken in this period.

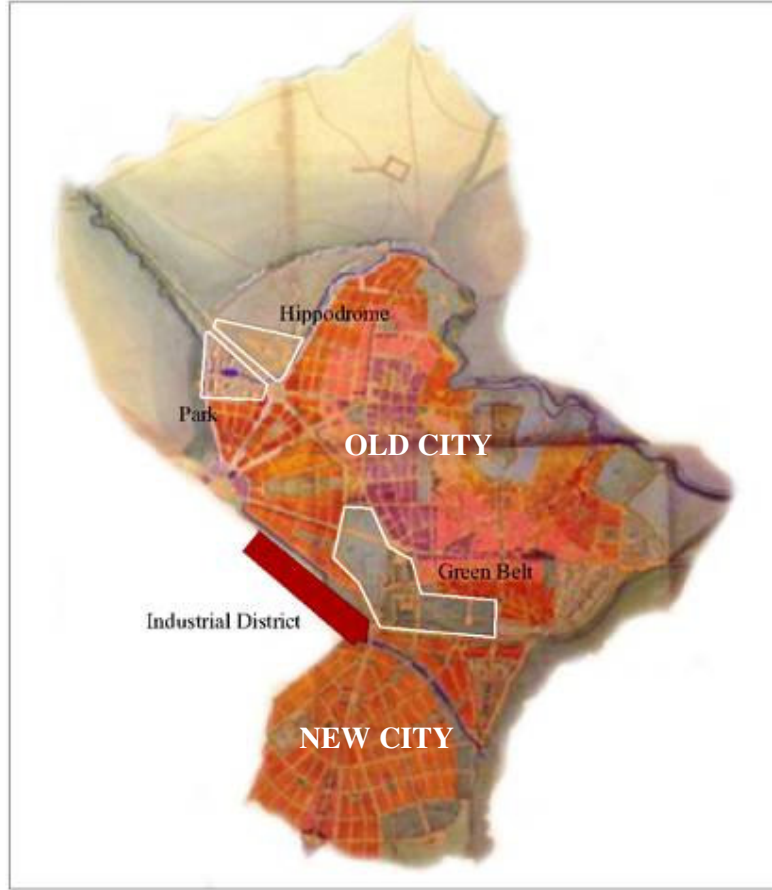


Figure 2.1. Basis of public land strip in Lörcher Plans.

In the first years of the Republic two plans were prepared by Dr. Carl Lörcher, for old Ankara in 1924 and for Yenışehir in 1925, in order to find a solution for the urban problems of Ankara that were increasing in correspondence with the increasing population. Important decisions that would direct the development of extensive public land strip were taken in this plan. The most essential decision among them concerned the development of the industrial district of the city. In the plan, a 3 km. long and 400 m. width flat area (Figure 2.1) that extends along the railway in the western direction was anticipated for the development of station, industrial connections and industrial regions (Vardar, 1989: 39). The other important decision was related to the green areas. Within the frame of the ‘consecutive green areas series policy’ as stated by Cegizkan (2003), Lörcher had aimed to create a green-area-system by combining the green areas, which intended to allocate in the city center, with İncesu Stream in the south and Ankara Stream in the north. He designed the areas where the hospitals and the courthouse are located today and the area that is located at the south of these areas,

which later become Kurtuluş Park, as a green belt between the old and new city. Along with this green belt, Lörcher proposed a large park, through which the Ankara Stream would pass and form a pond, near the north-west periphery of the city, in the area where today the Atatürk Cultural Center Complex is located. At the north of this park, an area that is also known as Kazıkıçı Bostanları was reserved for a hippodrome (Figure 2.1). Although 1924-25 Lörcher plans could not be carried out, they have become essential documents for the plans that were prepared later on.

The planning decisions of Hermann Jansen's plan won in a competition in 1929 and made certain in the year of 1932, strengthened the development of the public land strip, and are generally stated in the explanation note of the plan. Under the title of 'grouping of city spaces', the reasons of land choices and functions of several land uses are explained. As for the industrial areas, the vicinity near the station that is located at the west of the city was chosen, similar to the location in the Lörcher Plan. From the Atatürk Boulevard, the area just to the west of the Railway Station was determined as an industrial area. High accessibility and the direction of dominant winds were given as the reasons of this decision (Tankut, 1991: 79). As a planner that accepted the principle of maintaining urban health with green areas, recreation areas and playgrounds, Jansen, like Lörcher, has also designed large parks and recreation areas between old and new Ankara. In the west of the Atatürk Boulevard and at the north of Istasyon Avenue, quite a wide area that belongs to AOÇ was reserved for the construction of a hippodrome, a stadium, and a park that contains a large pond. This green belt, which is the most important part of the urban green system, forms the basis of the area that is determined as the AKM area today. Between the old and new city, at the east of the Atatürk Boulevard, surrounding areas of the existing hospital along the boulevard and the south of this area was designed as a region where the public structures are located within the green areas. In addition, an airport was suggested on the area where faculties and universities are located today (Figure 2.2).

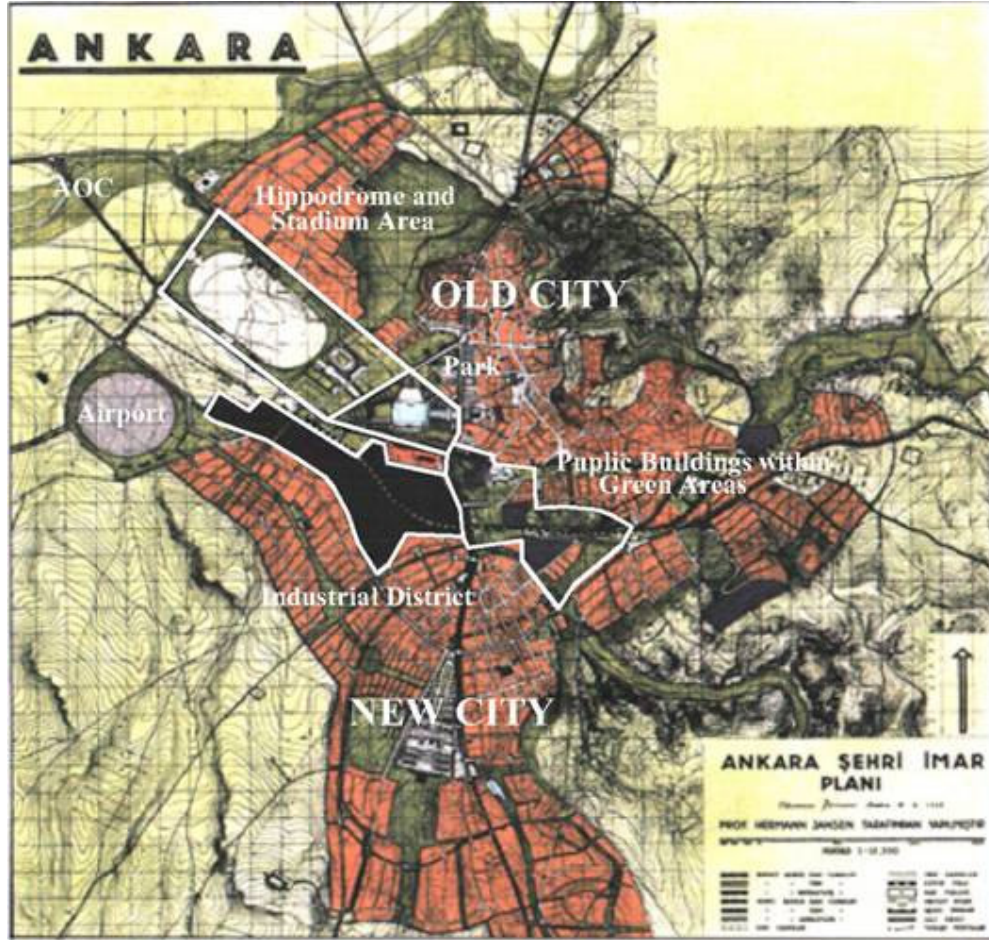


Figure 2.2. Proposal of extensive public uses in western part of the city and in between the old and new city in Jansen Plan.

Jansen plan maintained its validity until 1939 and after this date important alterations were undertaken in the plan, which have caused the plan to lose its function. However, the period that goes up to year 1957 when a new plan was prepared, can be described as the Jansen Plan period. Main decisions that were carried out and led to the formation of the extensive public land strip, are the industrial development area that extends from the east of the Atatürk Boulevard to the west of station, and recreational and green area development decisions at the north of the industrial development area. The area that started to become an industrial zone with the construction of the coal gas and electricity factories before the Jansen plan, held on to its peculiarity with the construction of new industrial buildings during the Jansen plan period. At the north of this area, a narrow site around the station was reserved for service buildings and houses that belong to Turkish State Railways (TCDD) and the site has developed at this direction starting from 1930's. Again, with reference to the plan decisions, a

stadium between years 1934-36, a hippodrome between years 1936-38, and the Youth Park (Gençlik Parkı) in the year 1944 were constructed at the north of this area.

Besides these implementations, another important development was observed at the east of Atatürk Boulevard, at the both sides of the railway; in particular around the existing hospital at the north. In the area located at the north of the railway, in the period between the declaration of Republic to the preparation of the plan, important cultural and educational buildings such as Ethnography Museum (1927), Turkish Society (Türk Ocağı, 1930-Museum of Art and Sculpture after 1980), Turkish Language Association (1932), Turkish Historical Association (1931), Turkish Aeronautical Association (1925), İsmet İnönü Kız Meslek Lisesi (1930) were constructed. Ankara Kız Lisesi (1933), Ankara University Faculty of Language-History-Geography (1937-39) and Ankara Radio were added to these buildings in the implementation period of the plan. In addition, construction of a new hospital at the southern direction of the existing hospital has been a major step in order for the area to become a hospital district. Before the plan was prepared, Institute of Hygiene (Hıfzısıhha Enstitüsü, 1927-29) and Health Ministry (1926-27) were constructed in the area that is located at the south of the railway. During the carrying-out period of the plan, the parks that were suggested in this area were opened to service. To sum-up, the area in which culture and health institutions were mainly located before the Jansen plan, has sustained its development with the appearance of new usages such as education institutions and green areas in the implementation period.

Certain developments that conflicted with the plan were undertaken at the west of the city, where Jansen did not suggest an urban development and had an intention to form a border with the airport. The airport (Figure 2.2) that was suggested by Jansen in Tandoğan district was left out of service after serving for a short time. While public and military usages were allocated in the Tandoğan-Beşevler district where the airport project was called off, first faculty and institution buildings appeared at a certain part of this area and at the west of Konya-Samsun road, on the AOÇ land. In addition, the area that falls between the airport and the hippodrome at the north of the railway began to be used by the municipality bus administration (Figure 2.3).

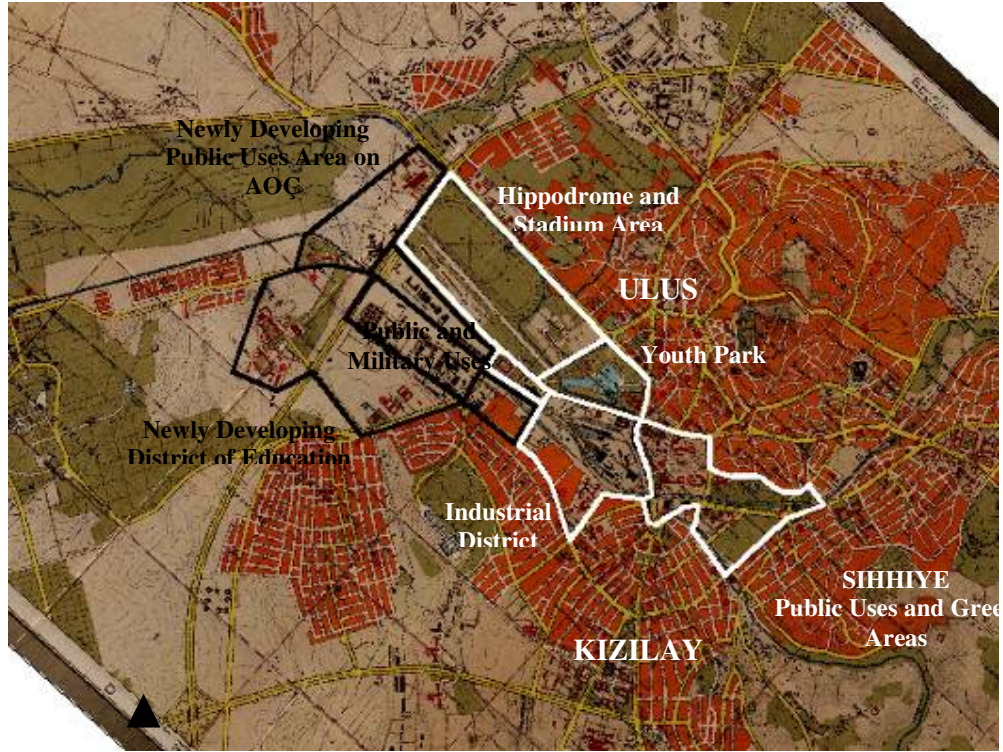


Figure 2.3. The land use map dated to 1959. The white bordered areas were developed with reference to the Jansen Plan. The black bordered areas were developed in conflict with the plan.

In 1957, after the Jansen plan period, the Yücel-Uybadin plan period started. In this plan period as well, between the old and new city, the extensive public land strip development (Figure 2.4) that was formed in the Jansen plan period and divides the city into two as north and south parts has continued. The plan anticipated the development of this land strip as an urban portion in which the cultural and social usages required by the capital are allocated. A transformation for the section of this land strip where the industrial usages are located was proposed in the plan. The industrial area that Jansen planned away from the city was left in between the residential areas by the beginning of the 1950's. Redevelopment of the industrial area, which was left as a barrier between the two urban centers and threatened the health of citizens, with the help of alternative functions, was decided. The recreational and green areas located at the north of this area were preserved as they were, a decision to change the characteristic of the region at the east of the Atatürk Boulevard, on which cultural, educational and health buildings are located, was not taken. On the other hand, it was pointed out that the area that is located in Tandoğan-Beşevler region and at the west of Konya-Samsun highway was assigned to educational institutions. Furthermore, new bus terminal was

proposed in the area near the municipality bus administration that is located at the south of hippodrome and the north of railway.



Figure 2.4. Proposal of public uses area in Ankara city center in 1957 Yücel-Uybadin Plan.

Yücel-Uybadin master plan has been valid until the approval of the master plan that was prepared by Ankara Metropolitan Area Master Plan Bureau (AMANPB) in 1982. In this period, the most considerable implementation with reference to the plan decisions that are mentioned above, was undertaking the process of removing the industrial structures from the industrial area. A major portion of this removal process had occurred after plan period. Therefore, the transformation of this area into other usages has not taken place in the plan period. The recreation areas located at the north of this area have continued to serve the city. Medical faculties of two universities and hospitals choosing places in the area that is located at the east of these two areas, where cultural, educational and health usages exist, strengthen the peculiarity of the area as the ‘hospitals district’. On the other hand, in the area that is reserved for educational buildings, construction of faculties, universities and institutional buildings showed a significant increase and the area has become an education region at the west of the city. In addition, the new bus terminal (1969) was constructed in the area that is used by the municipality bus administration.

Although AMANPB that was founded in 1969 as minor department of Ministry of Public Works and Settlement in order to prepare the master plan of Ankara completed the studies that determined the macro-form of the city in 1972; it wasn't until 1982 that the master plan that aimed the year of 1990 was approved. The plan that was approved on this date was negatively altered with the modifications, revisions, additions, partial plans concerning outside the planning area and fragmented policies without a common goal (Tekel, 2001: 164).

Orientation of such a plan in the direction of the accepted macro-form was not possible. Apart from the industrial zone, hippodrome and terminal area, the land uses that took place in this public land strip at the early 1980's have carried on.

As a result, the development of the extensive public land strip (Figure 2.5), which started to shape up with the Lörcher plan and divides the city into two parts as north and south, was maintained until present time. As Akçura stated in his research on Ankara, this strip starts with hospitals, parks, faculties and other social institutions at the east, changes into the old industrial area, railway facilities, university, and bus and lorry garages that belong to the local administrations at the west of Atatürk Boulevard, and is strengthened by the green belt that is formed by Youth Park, sports facilities and the former hippodrome. After carrying on through district in further west where faculties and institutions are located, the strip continues to AOÇ, and then outside the city center (1971: 122).

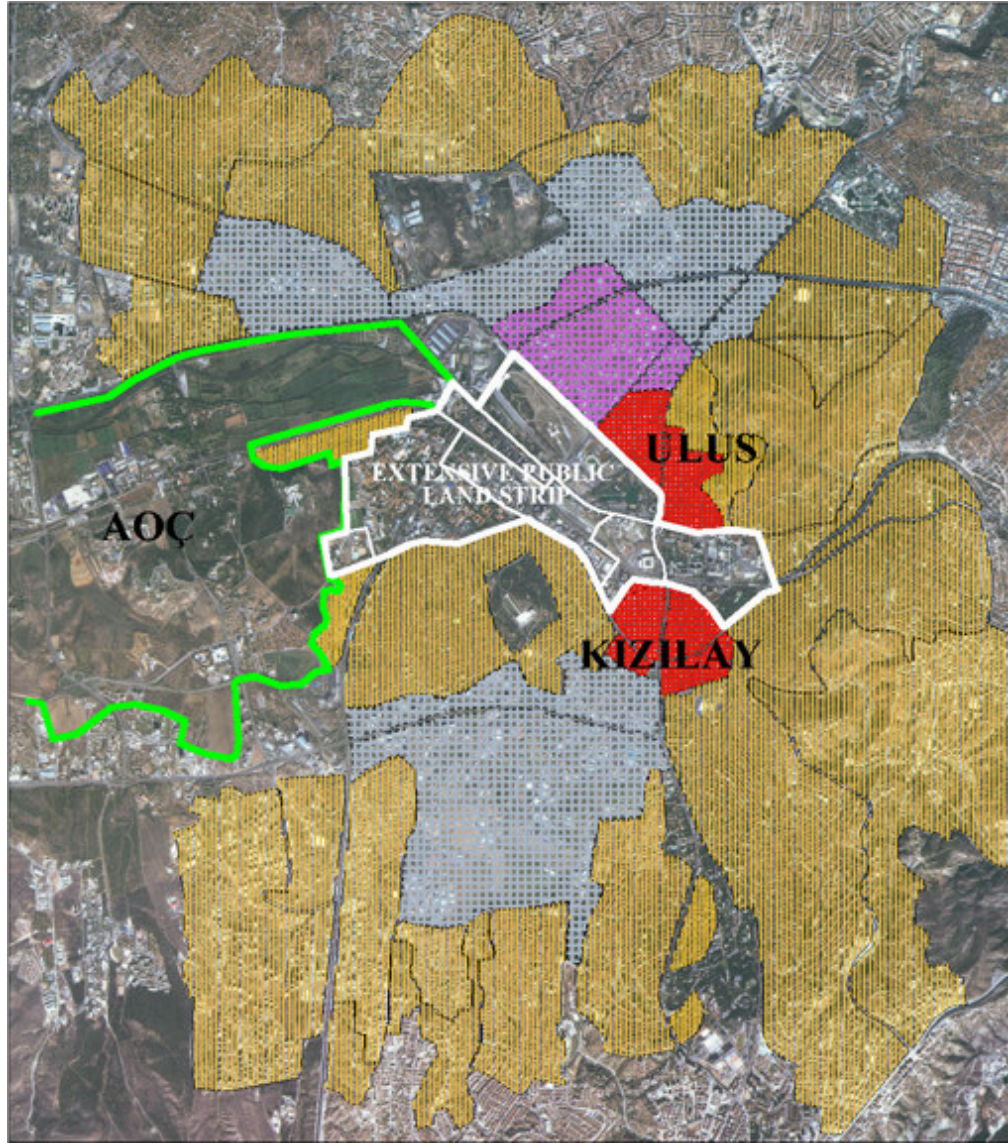


Figure 2.5. The extensive public land strip in inner city of Ankara.

2.2. Publicly-Owned Under-Utilized Spaces in Inner City of Ankara

The extensive public land strip, whose development from the arrival of the railway till present was explained above, and that divides the city into two parts as north and south, due to a number of reasons mentioned below, has led to urban public spaces that were either unused or inefficiently used. When these type of urban spaces that were studied in detail in the first part are examined according to the definition of ‘under-utilized space’, four distinct areas (Figure 2.6) that cannot be integrated into the urban area and therefore that do not have a contribution to the urban life are defined:

- 1) AKM area 1st division (the old Hippodrome area),
- 2) Southern part of AKM area 2nd division (19 Mayıs Sports Zone),
- 3) Service areas that belong to local governments and old bus station district,
- 4) Old industrial district.



Figure 2.6. Publicly-owned under-utilized spaces located in public land strip in inner city of Ankara.

2.2.1. AKM Area 1st Division (Old Hippodrome Area)

Development of the former hippodrome area which is the 1st division of AKM area goes back to 1938. At the site that was planned as a hippodrome area with the 1932 Jansen Plan, horse racings were performed between years 1938-79. The area was determined as the 1st division of AKM area with the law numbered 2302 that was put into application after the 1980 coup

d'état. No developments have taken place in the site that was planned to be re-utilized with cultural and recreational facilities; except for the AKM Complex that was constructed in 1987.

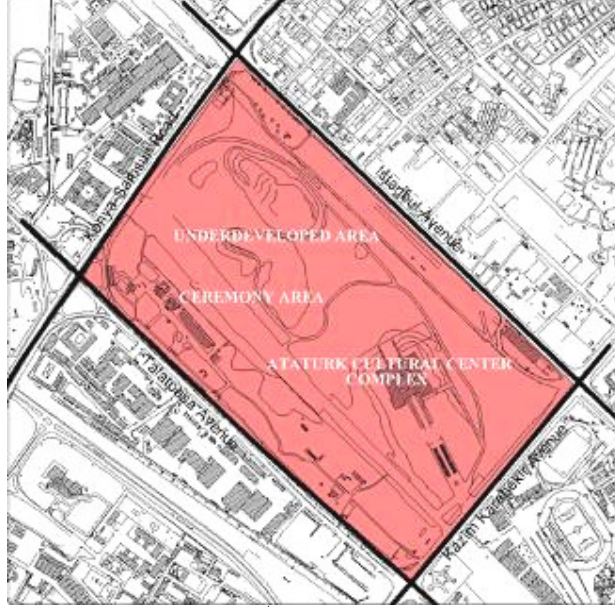


Figure 2.7. AKM area 1st division.

The site that is bordered with the Istanbul Avenue at the north, Kazım Karabekir Avenue at the east, and Talatpaşa Boulevard at the south and Konya-Samsun Road at the west is 75 hectares (Figure 2.7). The area is only owned by Greater Municipality of Ankara. About 8 hectares of this area is used for Cultural Center Complex (Figure 2.8). The remaining area of 67 hectares, except from the runway used for ceremonies (Figure 2.9) is in underdeveloped condition. The reasons behind this condition can be examined under two titles.



Figure 2.8. AKM Complex



Figure 2.9. Ceremony area in AKM 1st division.

Political Actors

The political actors that have determined the development of the area since early 1970's have been the Municipality and AMANPB until 1980, and the National Committee after 1980.

The municipality prepared '**Ankara History/Green/Culture/Recreation Axis**' project that also covered the area that is defined as AKM area between years 1970-80. With this project that covers an area of 140 hectares between Hippodrome and Sıhhiye, putting forward the idea of historical sustainability and characteristics of Ankara, creation of the green belt that the city requires, and spreading of the cultural activities over the axis was intended (Saner, 2003: 375). With reference to these principles, recreation, walking and entertainment areas were going to be constructed within the hippodrome (Atabaş, 2004: 15).

In this period, as the Municipality was preparing this project, AMANPB proposed the '**Cultural Center**' project for the redevelopment of industrial district that is located at the eastern fringe of this axis, beginning from 1971. It was planned that the Cultural Center involved certain functions required by the city such as the national library, national museum, modern arts museum, convention center, exhibition center, theatre, opera, cinema, and hotels.

In this period when they had preserved their political powers, municipality and AMANPB were unable to come to a common agreement considering their projects that were very essential for the future developments of the city. These policies did not have a common platform until 1980, and with the 1980 coup d'etat, the projects of the actors who had lost their political powers in the previous periods were put into application after being taken into consideration in peaces by the National Committee after 1980. A majority of the areas that the project 'Ankara History/Green/Culture/Recreation Axis' of the municipality involves, including the hippodrome area, were determined as AKM area mostly for the same purposes. However, the original project of the municipality was not taken into consideration. Hippodrome area was defined as the 1st division and in the plan that is prepared for the area; re-evaluation of the site with cultural and recreational facilities was intended. The 'Cultural Center' project that AMANPB proposed for another area as in buildings scale was carried out in the hippodrome area with different functions in 1987.

Lastly, the National Committee took a decision on the construction of multi-functional halls (opera, ballet, theatre, etc.) next to the existing Cultural Complex on May 10th, 1993. In 1995, Ministry of Public Works and Settlement organized a national competition for obtaining the projects of buildings of '**Ankara Cultural and Convention Center**' - Opera-Ballet, Theatre and Meeting Halls (Bayındırlık ve İskan Bakanlığı, 1995: 2). The project of Özgür Ecevit won the competition. The detail and implementation projects of the Opera-Ballet part of the project were completed in 1998. But these projects have not been implemented yet because the redevelopment of the area was not the priority of the key decision makers.

In conclusion, the projects that were prepared for the area since early 1970's were not carried out in a comprehensive and healthy way due to political actors not having a common agreement and the problems in the structure of the single actor after 1980. Although AKM Complex has been a step for execution of the functions that were assigned to the site, development of the recreational activities was not implemented. As a result, a majority of the area cannot serve the city today.

It's Location within the City and the Effects of the Surrounding Areas

It can be said that the location of the area within the city and the uses located around it are among the reasons that determine characteristics of the area.

The area is one of the components that form the western edge of the extensive public land strip, which extends parallel to the railway between the two urban centers. The area is the part of the strip passing through the city east-west direction that is the most distant part from the urban centers. It is possible to make a relation between these functions assigned to the area with this distance. In the Jansen and Yücel-Uybadin plans, the site was given a function as a hippodrome that has continuity with AOÇ and that is a component of the green belt which extends into the city. In the beginning of 1980's, the Hippodrome area was left in the middle of Ankara, which was growing fast since mid 1950's due to increasing population, as a large cavity. Although the function of the site was altered, recreational usages were suggested for the protection of the green belt that was mentioned in the previous plans.

It possible to mention the effects of the urban uses around this area that gives the impression of being outside the city within it.

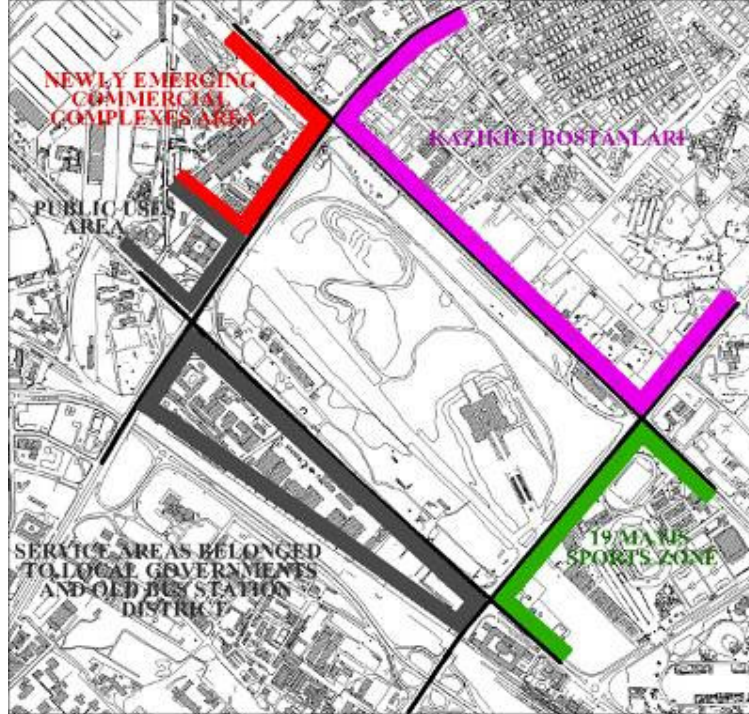


Figure 2.10. The surroundings of AKM area 1st division.

At the north of the area, ‘Kazıkıçı Bostanları’ district is located (Figure 2.10), which developed mostly in respect to the 1957 Yücel-Uybadin plan that suggested small-scale industrial uses in the area. The area was planned as a ‘Central Development Zone’ in the plan that was prepared by AMANPB for the year of 1990 (Çakan, 2004: 76). However, because no studies considering the implementation were done, the area continued to develop according to the 1957 plan. In 2015 Urban Transportation Master Plan, with respect to the main principles of the 1990 plan, the area was taken into consideration as ‘urban redevelopment project’ in the context of the ‘Ulus Business District’ project. However, because the plan was not approved, transformation process was not started (Çakan, 2004: 80). Finally, in the 2025 master plan prepared by the Metropolitan Municipality of Ankara, the area was designated as the new ‘Central Business District’ of the city. Although the plan has not been approved yet, an urban design project based on the 1990 plan was prepared for the site in 1998, and the evacuation process of the industrial uses in the area was initiated in order to put the project into application (Çakan, 2004: 84).

At the south, the area is adjacent to old bus station, bus administration of the local governments, and the site where service buildings and bus-lorry garages that belong to science works institution are located (Figure 2.10). The area, whose initial development started in early 1950’s, was reserved for uses that are related to urban transportation. The new bus station of the city was opened here in 1969, and was closed in 1994. For 10 years, no new uses were assigned to the area from which the bus terminal was removed. Development of the abandoned bus-station area as business district is planned with a project that was put into practice near the end of year 2004. The areas apart from the bus-station area are still being used by local governments with the same purpose. Currently, municipality does not consider the re-utilization of these areas with other purposes.

At the west of the area, buildings belonging to public institutions that started to appear on the AOÇ land in the mid 1950’s and large-scale commercial uses (Migros Shopping Center) that has been developed since early 2000’s are located (Figure 2.10).

When the progresses around the area in the last 50 years are evaluated, certain outcomes can be reached. First, intended objectives were not reached in Kazıkıçı Bostanları district which was planned as central business district, and the district remained as a dilapidated and low-quality urban area. Secondly, development of the district that is located at the south of the area in a way that could influence the spatial and social transformation of its surrounding areas was not ensured. Thirdly, in the district located at the west of the area, uses that are more appealing to citizens have started to appear in the recent few years. In conclusion, redevelopment of the old hippodrome area that was surrounded with urban areas that either

were unable to integrate with city or that weren't successfully developed to integrate with it, has not taken place as intended with the functions that were assigned to it within the last 30 years. These sites surrounding the area were unable to gain to a formation that could trigger its development. On the contrary, these sites had preventive effects on this development.

2.2.2. AKM Area 2nd Division (19 Mayıs Sports Zone)

The development of the 19 Mayıs Sports Zone goes back to the Jansen plan period. In the plan, the area was reserved for the stadium as a part of the linear green belt that extends from city center to AOC. The area has mostly developed as the plan suggested and this development has carried on till today. With mostly sportive uses being taking place within, a dual structure can be observed in the area: the northern portion where sportive uses are located, and Korean Garden and the campus of Parachute Tower that are located at the south of the first portion. The area was determined as the AKM area 2nd division by the law numbered 2302 that became valid in the year 1980.

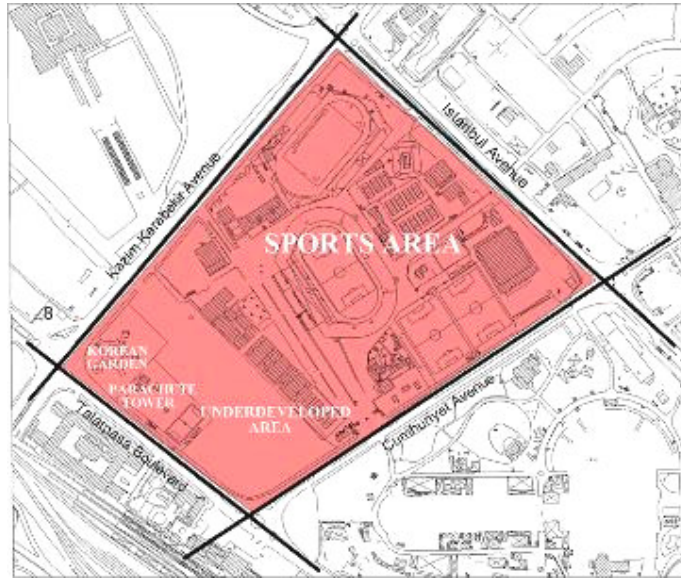


Figure 2.11. AKM 2nd division.

The area is bordered by İstanbul Avenue at north, Cumhuriyet Avenue at west, Talatpaşa Boulevard at south and Kazım Karabekir Avenue at east. Sports facilities are over-densely located in the northern 20-hectare part of the area that has an area of 26 hectares. The

southern part that covers an area of 6 hectares consists of an 1.5-hectare area where Korean Garden and Turkish Air Museum are located and a 4,5-hectare area which has portions that cannot be used or are empty (Figure 2.11). This underdeveloped area was not utilized in a comprehensive way that could integrate with the usages located in north and south (Figure 2.12). Observing the underdeveloped character of the area as an urban design problem instead of taking political, economical or locational factors into consideration, would facilitate the comprehension of the area.



Figure 2.12. The underdeveloped area in AKM area 2nd division.

The area and the hippodrome area that showed integrity until the year 1969 were separated from each other after Kazım Karabekir Avenue was opened to service in this year. The 40-meter width road that came through the hippodrome area extended to edge of Youth Park. This road has been the most important component that determined the form of the area. Sports facilities were constructed at the north of this area, bounded by this road. Although the stadium that was constructed in 1936 was the only sports facility in early 1960's, in addition to this, the sports hall was constructed in 1965, and after this date many sports fields and halls for different sports branches were constructed in the area. In this area, existence of dense sports usages can be observed. The other area that is bordered by the road is the southern part where the museum and the park are located today. First development of this area goes back to the year 1937 when the parachute tower was constructed. After the construction of the tower, its surrounding areas were designed as a park. The surroundings of the Korea Memorial, which were constructed in 1973 at the west of the tower, were separated from the parachute

tower area after being designed as Korean Garden. Thus, development of this southern part has almost been completed except for the synthetic soccer field that was constructed next to the tower area.

In the 1/5000 scaled Atatürk Cultural Center Development Plan that was prepared in 1987, the area that covers the Korea Memorial, Parachute Tower and its surroundings were determined as 'special project area', and it was decided to have a passive recreational and sportive character in general. Furthermore, allocation of parking lots in this area to meet the requirements of the district was decided. It was stated that the requirements of the site where sports facilities are located will be met.

The functions, which were planned to have a harmony and be located within the southern district that was seen as the troubled part of the area, were not accommodated with respect to the appropriate design principles. Sports facilities, which vary from each other and are independent of their surrounding areas, were allocated around the Korean Garden and the Parachute Tower campus, which were designed as passive-recreational uses. In addition to this, although the underdeveloped area located at the east of this field was determined as a parking lot, no arrangements were done in respect to this decision, and the area was designed as a training area for the hammer throwing athlete who won a medal in Olympic Games (Figure 2.13).



Figure 2.13. New arrangement of training area of hammer throwing near to the Parachute Tower campus.

While such a portion with no inner-integrity has emerged at the south of the area, the northern portion has continued its closed inner development independent of the south as an area where intensive sports uses are located. The area that falls in between these two sites is in an underdeveloped condition today. Allocation of the parking lot that was suggested in the master plan in this area is considered.

In this area, which was determined as the 2nd division of AKM area, two distinctive areas were defined and the physical developments of these two areas were taken into consideration separately. Whereas a part of the area was over-functioned with many sports facilities, a majority of the other part was in an under-utilized condition. The recent developments have taken without considering the integrity of the area and the relations between uses. The construction of the synthetic soccer field and arrangement of training area for the hammer throwing near to the Parachute Tower campus indicate that the development in this area have taken place with no respect to the design principles.

To sum up, a design theme that could lead to efficient and comprehensive use of the spaces within this area couldn't be developed, and therefore, due to this design problem, an under-utilized space has appeared in the area.

2.2.3. Service Areas Belonging to Local Governments and the Old Bus Station District

The area, which neighbors the Hippodrome area and Railway Station, is surrounded by Talatpaşa Boulevard at north, Kazım Karabekir Avenue at east, TCDD houses and railway line at south, and Konya-Samsun Avenue at west. Although no usages for the area were suggested in the Jansen plan, the allocation of Ankara Municipality bus administration in this area has started the development process. In 1969, the new bus station of the city was constructed at the eastern part of this area due to its nearness with the Railway Station. On the other hand, the west of the bus administration area is again occupied by science works service buildings, bus and truck garages (Figure 2.15-16) that belong to Metropolitan and Yenimahalle municipalities, and the area has completed its physical development.

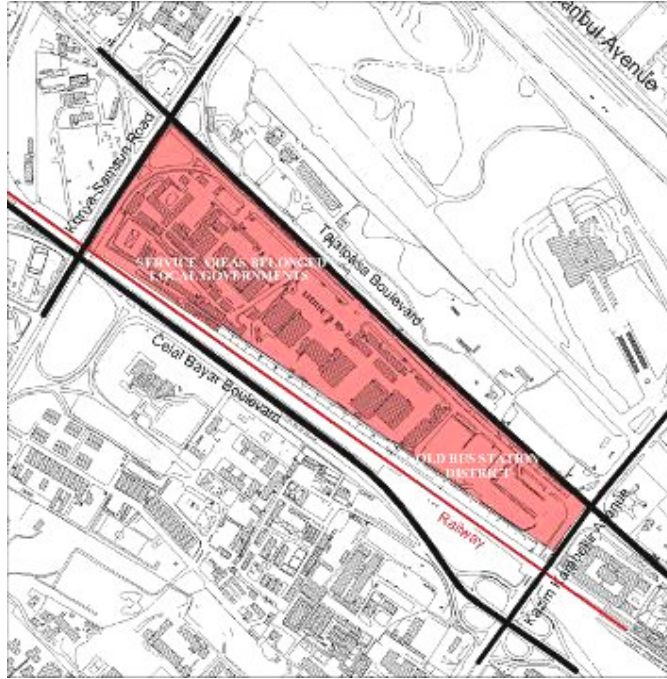


Figure 2.14. Service areas belonging to local governments and old bus station district.

12 hectares of the area that covers 15 hectares is occupied by service buildings and garages belonging to municipalities. The area covering an area of 3 hectares was used as a bus station until year 1994 and with a project that was launched near the end of 2004, the process of area's transformation into a business district was undertaken (Figure 2.17).



Figure 2.15. Western part of the area where service buildings and truck garage are located.



Figure 2.16. Central part of the area where service buildings and bus garage area located.

The area that started to develop in early 1950's at the western urban border is located within a district in the middle of the city, where essential urban projects are suggested and will be suggested, with intensified historical and cultural values. A majority of the area, which is located in such an important part of the city and belongs completely to the municipality, is not used effectively with its current situation and is unable to positively contribute to the urban life. The reason to this status is the fact that the municipality, which is the only authorized political actor, is unable to produce the policies and to prepare the projects that will lead to the redevelopment of the area.



Figure 2.17. Eastern part of the area, old bus satiation district, where the new business center construction are located.

2.2.4. Old Industrial District

The development of the old industrial area goes back to the arrival of the railway in Ankara, in the year of 1892. The development of this district as an industry area has continued until 1957. The area has developed a dual structure with the south of railway as an industrial production area, and north as an industrial service area. Within the frame of the master plan that was prepared for the city in 1957, the development of the area was halted, the clearance of the area from industrial structures and its re-use for different functions was intended. In mid. 1980's, a majority of the area, except for the coal gas and electricity factories, and railways maintenance ateliers, were cleared of industrial structures, however, the aim of redevelopment of the area with the help of different functions, was not achieved.

The old industrial area is bordered by Talatpaşa Boulevard at north, Atatürk Bulevard at east, Gazi Mustafa Kemal Boulevard and Toros Street at south, and Railway Station at west. The area that this thesis concentrates on will be handled in detail as an urban design problematique in the following chapters.

Since 1957, a very small portion of the area has redeveloped with altered functions until today. Factors that halted the redevelopment of the 27-hectared part and led to its under-utilized status in the urban center can be summarized under four titles.

Political Actors

The dual structure that emerged in the industrial area with the allocation structure types was also observed during the political actors' intervention to the transformation process.

While the area that falls in between the Calal Bayar Boulevard and GMK Boulevard and that is defined as a production zone is taken into consideration, there are two political actors that have been authorized and responsible of the process since year 1957 that was determined as the transformations starting date: municipality which is the local administrating unit, and the Conservation Board of Ministry of Culture and Tourism.

The municipality has prepared an implementation plan in 1965, after the 1957 Yücel-Uybadin plan. In the plan, industrial production area was divided into parcels and its redevelopment with central business district functions was intended. However, the desired transformation hadn't taken place due to accessibility problems and existing industrial activities continuing. The portions of the plan that were put into practice were large-scaled structures (school, hypermarket) instead of parcel-scaled structures (Saner, 2003: 373-74).

First large industrial structures of the city that play an important role in the development of the area as an industrial production zone, coal gas and electricity factories that were abandoned in 1990, were taken under protection by the Conservation Board in their original locations in 1991. With the decision of the Conservation Board, developments in the areas where these two factories are located were not continued.

The municipality that advocated the clearance of factory structures, instead of their preservation, has not made any efforts concerning the re-utilization of these structures after the decision that was taken in 1991.

The political factors that had a major role in the transformation process of the industrial service area that is located between Celal Bayar Boulevard and Talatpasa Boulevard, are not only excessive in numbers, but also have different structures. Political actors' influences to this transformation process should be examined under two time periods: the 1970-80 period and the period after 1980's.

In the first period between years 1970-80, there were two institutional actors with the authority to take decisions concerning the area. These are Ankara Municipality and AMANPB. Both the Bureau and the municipality have suggested similar projects for the development of the area. However, due to their different political positions and approaches, these two institutional actors were unable to evaluate and direct the transformation of the area under a common project. Municipality that has a tendency towards implementations and the Bureau had different opinions over various topics. The municipality has criticized the Bureau for the delays in the preparation of the plans, and for turning in the data to Ministry of Public Works and Settlement, which the bureau is committed to, instead of the municipality. The criticisms of the Bureau were directed to the municipality for undertaking actions that were based on profit-dependent policies and ownership-benefit relationships (Saner, 2003: 374-76). Although these two political actors were unable to ensure the development of the area, their projects have been determinative in the subsequent period.

In the period that began with the 1980 coup d'etat, 'National Committee' was given authority to as the only decision maker instead of the institutional political actors that were effective in previous years. With a law that was brought forward in 1980, a very large section of the industrial service area was determined as the 4th division of AKM area. With this law, construction of structures other than those approved by the National Committee was prohibited. Projects concerning the area were prepared and some of these were even carried out. However, the committee, which was required to be involved in macro-scale decisions and policies, consisted of members with no experience in micro-scale decisions and

implementations and held a meeting once in every six months, was unable to bring dynamism to the development of the area. It is this ponderous structure of the committee that has caused the projects concerning the area to be abandoned.

On the other hand, a part of the industrial service area that was separated from the 4th division of AKM area has demonstrated an independent development with the TCDD's museum and sports area implementations from its surroundings.

As a result, in these publicly-owned areas, sometimes as a result of responsible actors being unable to reach to a common agreement, and sometimes due to the disorganizations within the structure of a single actor causing the physical structure and transformation to have an idle character, large-scale projects that would have positive contributions to the city, urban life and its close environment were unable to be carried out, and these areas remained to be unhealthy urban parts.

Change in Urban Transportation System

Physical development of the first industrial district of Ankara was carried on with the transportation opportunities provided by the railway until the end of 1950's. Railway has been an essential factor that determined the development of the city until late 1950's. In addition to its influence on the determination of urban centers and new residential areas, it has had the major role in allocation of industrial structures. In a period, when the railway had such an important role in the city, public service areas such as considerable public buildings that symbolize the capital, universities, hospitals, recreation areas and industrial production and service zones were located around railway lines that extend between east and west. These extensive public service areas that developed in-between the city's old (Ulus) and newly developing (Kızılay) centers have formed an essential development spine.

Along with the domination of the highways in transportation and carrying sectors in 1950's, the importance of railways has decreased in comparison to previous time periods. With the road networks suggested in the 1957 Uybadin-Yücel plan, intra-city accessibility relations have been reformed, and as a result, railways that were the major determinative in the urban development and allocation of industry have lost its importance drastically.

While the public sector industrial investments of industrial establishments that require allocation due to enlargement continue to choose locations near the railway; new lands located outside the urban area, which are accessible by highways, large and comparably cheap, have appeared as attractive areas for private sector investments that are either newly founded or wish to enlarge work-scale. Thus, highways have become determinative in the

allocation of industry and therefore in the development direction of urban forms. This progress has halted the development of the primary industrial district of the city and, later on, complete clearance of industrial structures from the area and their integration to the city under different functions was aimed at.

Transportation policy, which has decided the fate of the area in macro-scale, has also directed the development of the area in the micro-scale. The industrial district was divided into several sections by the new road networks, and the redevelopment of these parts was intended. The road-network, which was proposed in 1957 for the integration of industrial areas into the city with new functions, was completed after a 30-year delay period. This delay has impeded the desired transformations to take place in the area, and development with new functions was achieved only in a small part of industrial production area.

Financial Problems

Financial problems play an important role in emergence of under-utilized urban spaces. Ankara Municipality like other municipalities in Turkey has spent its financial sources to create new development areas rather than to solve the problems of urbanized area. Ankara Municipality did not appropriate funds for transformation of dilapidated area where old factories are located.

Also, other public institutions responsible for the redevelopment of the under-utilized space could not put into practice the redevelopment projects due to economic problems. The projects were prepared for redevelopment of AKM area 4th division and they started to be implemented. But their constructions could not be completed because of financial problems.

Technological Change

The radical changes in productions technologies can cause to end production function of old industrial structures that can not be adapted physically to new way of production.

The first large-scale industrial structures of Ankara, coal gas and electricity factories, was constructed in 1929-30 to meet the needs of increasing population of the city. The operation of these factories producing gas and electricity from coal had continued until 1990, when natural gas brought to the city. The factories and their surroundings, located at the outskirts of the city in early 1930s, were at the middle of the city center with rapid development of the city in 20 years. The factories closed 15 years ago have not been re-evaluated for new functions. Today, the factories constitute an under-utilized old industrial site in the city center.

CHAPTER 3

DEFINITION OF THE STUDY AREA AND ITS HISTORICAL EVOLUTION

3.1. Definition of the Study Area

Study area of this thesis is under-utilized part of the first industrial district of Ankara, which is a part of extensive public land strip located parallel to railway in the city center. The area is surrounded by Talatpaşa Boulevard at north, Atatürk Boulevard at east, Gazi Mustafa Kemal Boulevard and Toros Street at south and Ankara Railway Station area at west. It is divided into two by railways line and Celal Bayar Boulevard (Figure 3.1). There are old factories in the south part of the area, whereas north part is cleared from industrial buildings.

Ownership of the land is hold by various public institutions. 2 hectares out of 6 hectares of the land where there are factories is owned by TEDAŞ, which is a public economic enterprise and the rest 4 hectares is owned by EGO. North part of the area which is cleared from industrial buildings covers an area of 21 hectares excluding the Palace of Justice. 15,5 hectares of this land is owned by Ministry of Culture and Tourism, and the rest 5,5 hectares is owned by TCDD.

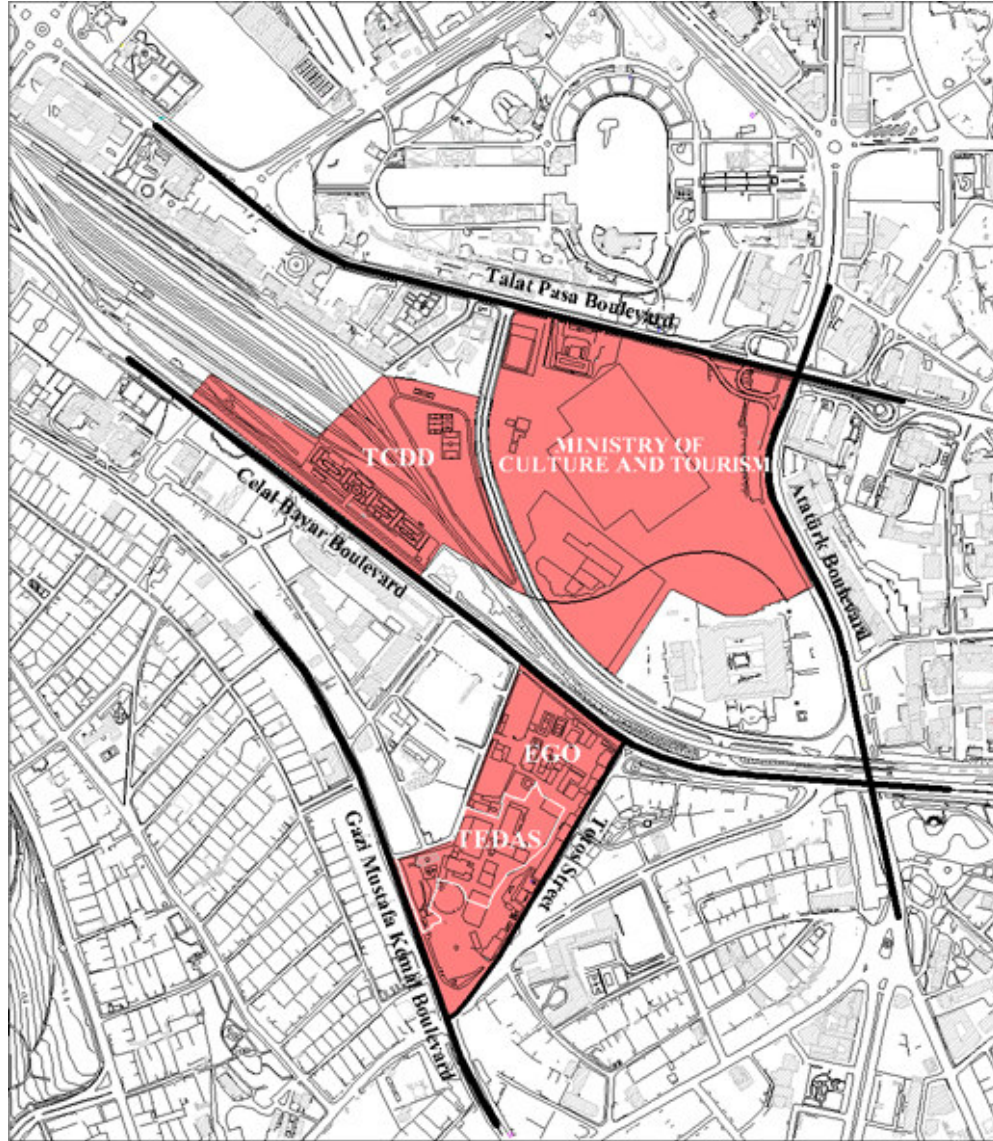


Figure 3.1. Boundaries of the study area and ownership on the area.

3.2. Historical Evolution of the Study Area

3.2.1. 1892-1923: Spontaneous Development

The initial factors determining the development of area as an industrial district were the railway lines and the central railway station (Saner, 2004: 9). Ortaylı states that the beginning of the development should be dated to 1892, when the railway connection of Ankara was provided as a leg of railway project between Istanbul and Baghdad (1994: 112).

The most important effect of railways had been the vitality it brought to the economic life of the city (Tekeli, 1994: 176). The railway connection provoked the emergence of new agricultural areas, and consequently the increase in the agricultural production at regional scale (Yavuz, 2000: 201-202, cited in Saner 2004: 9). The increasing agricultural surplus controlled in the city provided the variation of urban services and activities; and railways and station appeared as new determinants in the site selection of those urban services (Tekeli, 1994: 176). Railway connection triggered a series of developments not only in the economy of the city, but also on the urban form. The area around the railway lines and the station was the center of the development (Saner, 2004: 10)

Saner, in his research, examined the new formation of the area in three categories; storing units, small-scale industrial structures and maintenance ateliers of railways. Performing as a collecting station, there must have emerged a requirement for storing units in the city. Large stores and warehouses (Figure 3.2) were located along the railway lines, in close proximity to the station, and especially at the east side for the trade and transportation of stored products and goods. Railways and station were new determinants in the site selection of new small-scale industrial structures at the neighborhood. For example, a flour factory was established as a new urban service at the end of 1890s (Aktüre, 1978: 128, table 3, cited in Saner, 2004: 10). The second flour factory was established near the station in 1906. The maintenance ateliers of railways were also set with two lathe-workbenches (Tekeli, 1994: 176). They were located at the east side of the area together with the hangars where they developed into railways factory (*Şimendifer Fabrikası*) (Figure 3.3). The equipment of the maintenance ateliers was allocated for the weapon factory (*İmalat-ı Harbiye*) founded at the west side of the station during the War of Independence (Saner, 2004: 10-12).

This type of unplanned development of the area had continued until the preparation of Lörcher Plan in 1924. Therefore, the planned development should be investigated starting from 1924 (Saner, 2004: 13).



Figure 3.2. A map of Ankara dated to early 1920s, showing the large stores along the railway, in close proximity to the station.

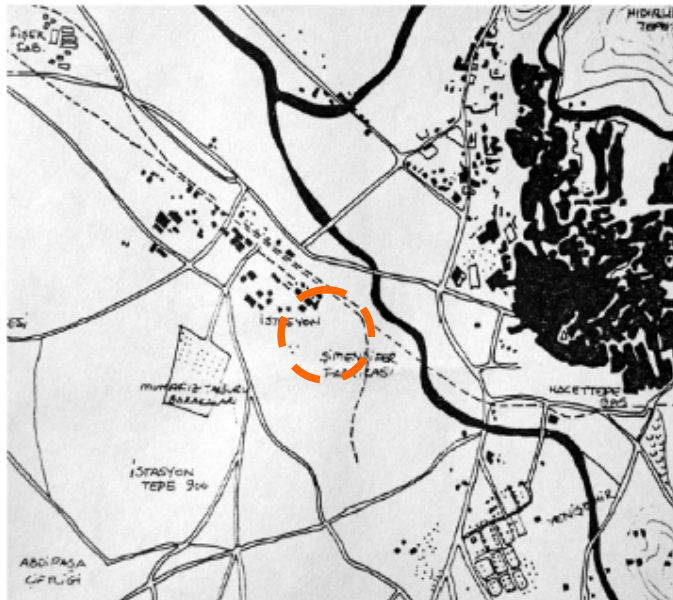


Figure 3.3. Railways factory (*Şimendifer Fabrikası*) is right at the east of the station.

3.2.2. 1923-32: Early Republican Period

After the War of Independence finished, Ankara was declared as the capital city and Republic of Turkey was founded in 1923. In 1924 *Şehremaneti of Ankara* (Municipality of Ankara) was founded to produce solutions of the urban problems consisting sewer system, clean water supply, illumination of streets, street construction, transportation, and telephone system (Cengizkan, 2002: 39-40). Lörcher Plans were devised to serve for this purpose. These plans for old city and the new city (Yenişehir) (Figure 3.4) comprised the first footsteps of a planned development process for the industrial district (Saner, 2004: 13).

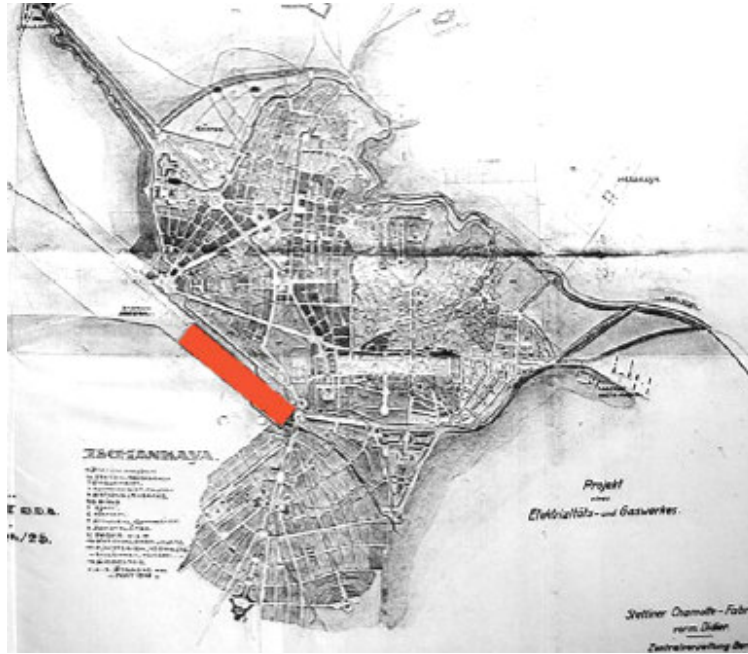


Figure 3.4. 1924-25 Lörcher Plans. Highlighted area was reserved for industries.

At this period the number and scale of industries at the area did not increase rapidly. There were small-scale carpentry, timber, and other woodwork factories, located nearby the station (Tekeli, 1994: 178). However, those enterprises were far away from labeling the area as an industrial district. Although the area had been reserved for industrial development in Lörcher plan, it was not possible to define Maltepe as an industrial district, until the establishment of electricity and coal gas factories in the area at the end of 1920s (Saner, 2004: 15).

Electricity factory started to operate in 1929, coal gas factory was founded in Maltepe in the same year, and the next year, an oxygen factory was established as integrated to the coal gas

factory. A cold air and ice factory, a beer factory of Bomonti, and a flour factory were the other establishments founded in this period (Tekeli, 1994: 179). It is essential here to note that the location of the electricity factory was an important determinant in the site-selection decisions for the industries, because there was a central electricity network at that period, and it was advantageous for the industries to be in close proximity to that single power plant (Saner, 2004: 17).

The emergence of these railways-aided large-scale factories should be considered as a threshold, where the fragmentary development of the area was replaced with a comprehensive development process. This means that the development of the district was still performed on Lörcher's decisions at lately 1920s and early 1930s (Saner, 2004: 16).

3.2.3. 1932-57: Jansen Plan Period

The second comprehensive development plan for Ankara was obtained by a competition, where three international architects were invited to attend (Tankut, 1993: 66). Among them Hermann Jansen won the competition, and his proposal was implemented as an avant-project between 1929 and 1932 (Tankut, 1993: 91). In 1932, Jansen's complete plan (Figure 3.5) was approved and implemented extensively between 1932 and 1939 (Tankut, 1993: 127). The development of Ankara continued until 1950s according to the general framework of this plan. The development of the industrial district was also sustained with this plan up to 1950s (Saner, 2004: 21).

Jansen did not propose a new location for industry and left the same area proposed by Lörcher to industrial development. Neither Şehremaneti, nor Jansen offered any location for industry, different than what already grown spontaneously, and what Lörcher's had made definite afterwards (Saner, 2004: 22). Jansen's decisions on the development of the industrial district should be considered as an important step in the process, which not only legitimated the current formation of the area, but also made the future development persistent. Therefore, they had better be regarded as improving those of Lörcher for implementation (Saner, 2004: 24).

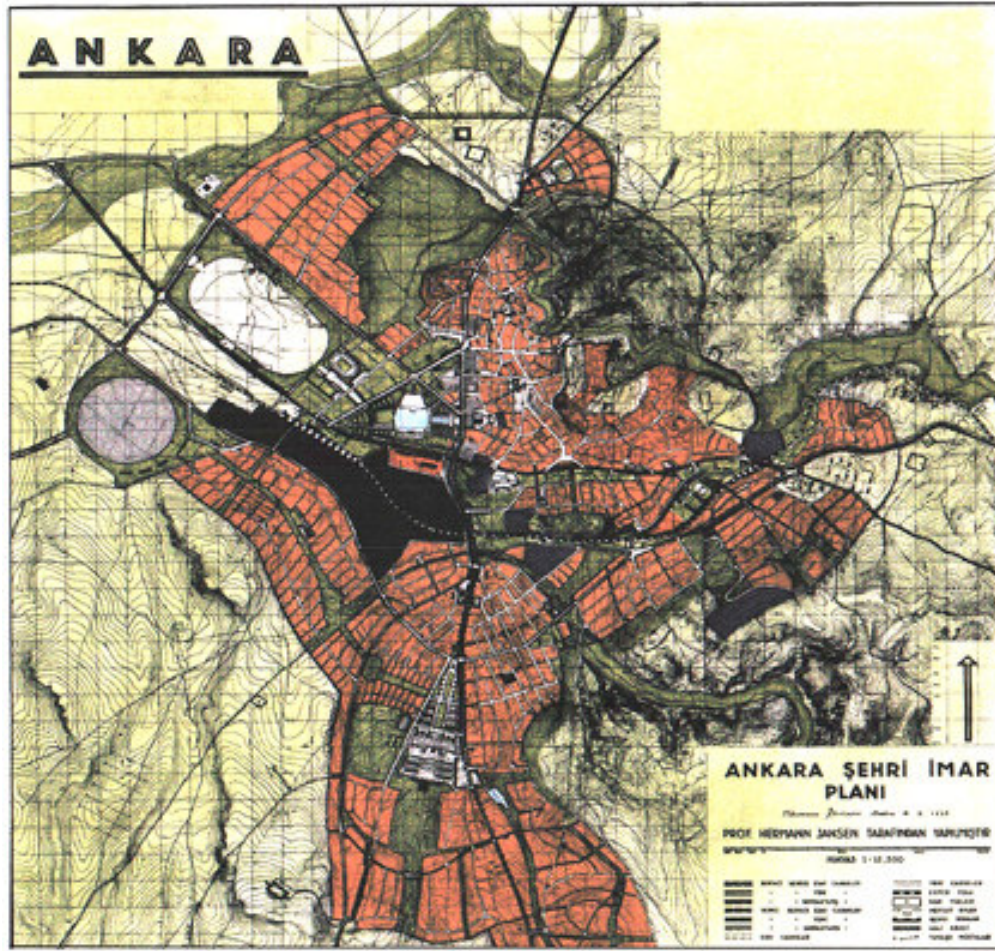


Figure 3.5. Industrial district in Jansen Plan. Black-colored area was reserved for industries.

Service structures such as stores, warehouses, freight depots, hangars, and ateliers, had been located at the north of the railway lines, where production structures had been settled at the south since the end of the 19th century (Figure 3.6). This tendency continued increasingly between 1924 and 1932 and finally after the approval of Jansen plan in 1932, the division of the district into two, as 'industrial service area' and 'industrial production area' became more apparent. Railway lines were extending to south to serve for the electricity and coal gas factories by means of the transportation of charcoal. At north, the services of railways lines were of two kinds. They were extending either for the transportation of raw materials and other goods, or for the maintenance ateliers and hangars. Again at the north of railway lines, the number of stores and warehouses increased (Saner, 2004: 26). Additionally, the wholesaling marketplace of the city was located at the northern portion of the area in 1942 (Akgün, 1996: 192).



Figure 3.6. Small-scale factories at the south of the train station in early 1940s.

3.2.4. 1957: Yücel-Uybadin Plan

In 1954, an international competition was organized to obtain the third plan of Ankara. Nihat Yücel and Raşit Uybadin won the competition, and their project was approved in 1957 as the new development plan of the city (Figure 3.7) (Yücel, 1992: 20-21).

The general attitude of the designers was effective on determining the route of the transformation. Their primacy concern was to provide accessibility within the city through a road network. The industrial district was also approached with the same attitude (Saner, 2004: 36).

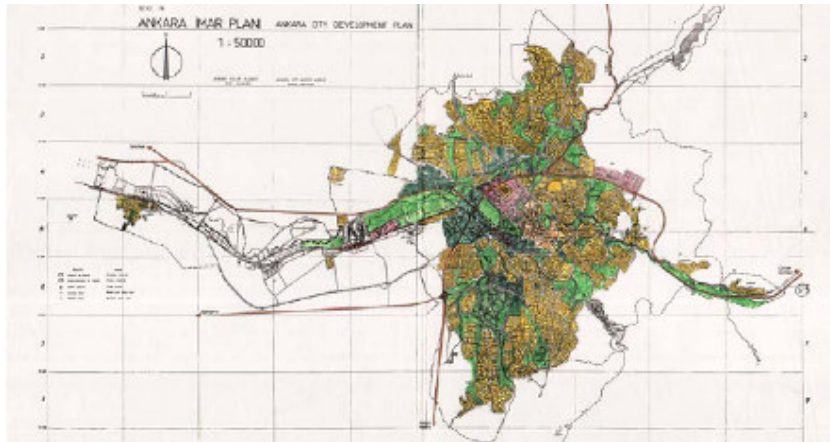


Figure 3.7. 1957 Yücel-Uybadin Plan.

There had been indirect and direct effects of the plan on the district. The indirect effect of the plan on transformation of the district was that the plan proposed new places for industrial establishments in need of changing location in the city. State enterprises obliged to change their locations due to growing problem had chosen new place around the railway. On the other hand, newly emerging private enterprises had preferred new, cheap, extensive lands, accessible by roads, out of the city. Thus, roads had been main determinant for site-selection of industrial establishments (Tekeli, 1994). This process did not cause structural change in district in short term. Maltepe had continued to serve with industrial functions in 1970s, even though it had a very small proportion (%2,73) in total industrial production of Ankara. Coal gas and electricity factories and storing, freighting, commercial units located between Railway Station and Atatürk Boulevard, and the railway maintenance services had continued the industrial characteristic of the district (Saner, 2003: 370).



Figure 3.8. Industrial district in Yücel-Uybadin Plan.

The direct transformative effect of the plan on the area was the proposal of Celal Bayar Boulevard. Although its construction could not be completed until the 1980s, it was always paid attention in any decisions about the district. The proposal of the boulevard has been a significant fact that shaped the transformation since 1957. It is significant because the functional division of the industrial district was carried to the transformation stage by the

position of that road. The road, proposed parallel to railway lines, took on the role to separate the district. Consequently, the transformation of the industrial district would inevitably occur on two distinct areas as two distinct processes (Saner, 2004: 37).

3.2.5. 1957-2005: Transformation Process

Celal Bayar Boulevard, proposed by Yücel-Uybadin Plan, had taken important role in all decisions and proposals related to the area since 1957, although it was constructed 30 years later. Therefore, it can be said that proposal date of new boulevard not the date of construction is emergence date of two-sided structure of transformation. So, the transformation of the district should be studied in these two different areas between 1957 and 2004 (Saner, 2003: 370-371).



Figure 3.9. Industrial district in 1967 City Map.

3.2.5.1. Area 1: Between GMK and Celal Bayar Boulevards (Industrial Production Area)

Saner summarized the outcomes inferred from 1957 Yücel-Uybadin plan related to the area as followings;

- The most important intervention was proposal of Celal Bayar Boulevard passing through the production area on east and west direction. The road would detach the area not only from main railway lines, but also from the industrial service structures at the north (Figure 3.10).
- The roads, connecting the proposed boulevard to GMK Boulevard, divided the area into lots for development (figure 3.10).
- Coal gas and electricity factories complex, flour and macaroni factories were left untouched. These establishments were separated by new designed secondary roads.
- The western portion the area was planned for new structures with new functions, where the eastern portion of the area was not so much changed. (2003: 371)

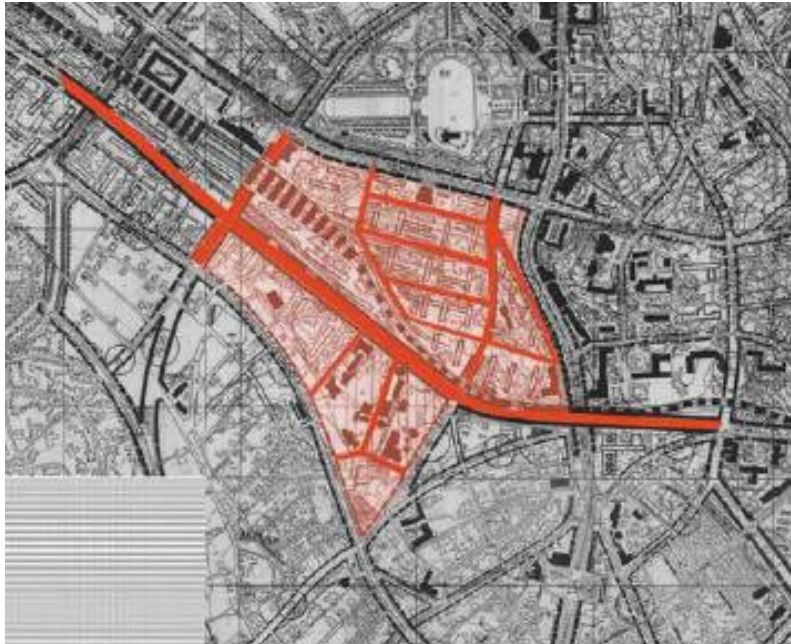


Figure 3.10. Main and secondary roads proposed in and around the industrial district in Yücel-Uybadin Plan.

Municipality Directorate of Development (Ankara İmar Müdürlüğü) prepared an implementation plan in 1965. That plan was consisted of adjustments and detailed decisions on 1957 Yücel-Uybadin plan at implementation stage:

- A different decision in application plan from 1957 plan was that the flour and macaroni factories were removed from the area. The lot they had occupied was divided into smaller lots with the design of new secondary roads.
- Lots were not allotted for specific functions in general. The expectations were a private school, and a kindergarten proposal (Saner, 2004: 41-42).

These were not the final decisions for the transformation of the industrial production area. Many important changes had been occurred in the area since 1965:

- Celal Bayar Boulevard was constructed in 1986-87, 30 years later from its proposal,
- Secondary roads connecting Celal Bayar Boulevard to Gazi Mustafa Kemal Boulevard had been partially constructed, they did not function properly as proposed in the original plan until the late 1980s,
- Flour and macaroni factories had worked until the beginning of 1990s, and in the area, hypermarket project had been implemented in 1993 according to the application plan of Yücel-Uybadin plan,
- The production of the coal gas and electricity factories ended in 1990, and at the same year, most of the coal gas factory complex and some parts of electricity factory were preserved as they were in their original location by the Conservation Board decision (19.03.1991),
- The service buildings of EGO and TEDAŞ had been constructed around the preserved coal gas and electricity factories,
- A private school decided in 1965 implementation plan was constructed and served for Yükseliş High School until 1983, when it was turned into building of Engineering and Architecture Faculty of Gazi University (Saner, 2003: 371).

3.2.5.2. Area 2: Between Celal Bayar and Talatpaşa Boulevards (Industrial Service Area)

The area, bordered by Atatürk Boulevard and Railway Station on east-west axis, is north part of the old industrial district. Because of the proximity to central station, the area had been a part of industrial district with storage, freighting and commercial units and railway maintenance services.

The area was not re-defined with new functions in 1957 Yücel-Uybadin plan. Only the ateliers and maneuver lines were decided to be displaced. The plan was not satisfying the necessary requirements for the industrial service area. Railway lines were not taken out of the area immediately and the industrial service facilities within the area persisted with their existing operations until the end of 1970s (Saner, 2004: 56-57).

In 1971, AMANPB took important decision for the whole area. At that time maneuver lines, maintenance ateliers of railways, depots, customs buildings belonging to railways administration, a private flour factory, wholesaling marketplace, buildings of TMO (Toprak Mahsülleri Ofisi), Tekel depot, and sports and concert halls differentiated from other uses were located in the area (Figure 3.11). Physical transformation of the area started at the end of 1970s. The necessary preparations and operations for the removal of the maneuver lines, freight depots, and maintenance ateliers were initiated. Also, the construction of new Palace of Justice was started and parts of existing building stock were demolished for this construction (Saner, 2003: 372).

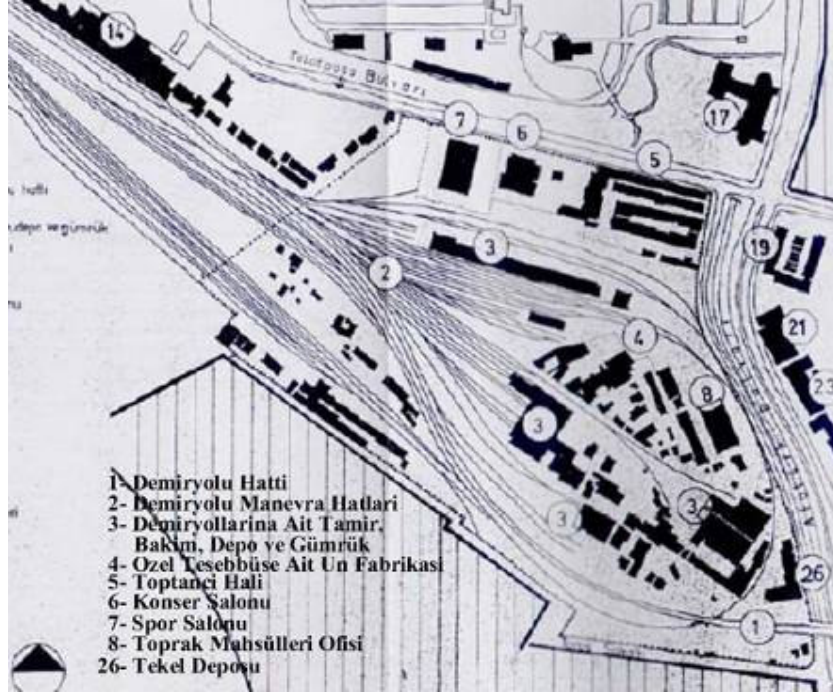


Figure 3.11. Industrial service area at the early 1970s.

The transformation of the industrial service area has been defined in a different context after 1980. The military government founded National Committee to take on the responsibility to arrange the celebration of the 100th anniversary of the birth of Atatürk and to establish the Atatürk Cultural Center (TC Law#2302). The major part of industrial service area was a part of cultural center project. In 1981, the area was determined as the 4th division of AKM (T.C Law#2302, Alteration: Article 3) with two exceptions. First, the 4th division was limited within the boundary drawn by a new road (Altınsoy Avenue) at west and south. Second, the new Place of Justice was left aside. Although the previous decisions for the area were invalidated, the old industrial service structures continued to be either demolished or removed (Saner, 2004: 66). For instance, Ankara Grains Silo, built between 1933 and 1937, was demolished in 1986 for providing a plain land for the new Palace of Justice (Cengizkan, 1994: 87).

The removal process of old industrial service structures had continued in 1980s and finally for the area, that became vacant at the end of the process, 'Presidency of Republic Symphony Orchestra Concert Hall and Chorus Buildings' architecture project competition was organized in 1992 (Saner, 2003: 372). Although the project started to be implemented, its construction could not be completed because of financial problems. The final decision about the industrial service area was taken while the construction of the new concert hall was going on (Saner,

2004: 70). In 1995, the Conservation Board decided on the preservation of the old maintenance ateliers of railways (Cer Atölyeleri) as they had a historical value.

At the final situation, the old sports hall, the old concert hall, railways maintenance ateliers, construction of the new concert hall, that are on AKM area, and Palace of Justice is located on the area bordered by Altınsoy Avenue at west and south.

The other portion of the industrial service area, between the avenue and the Railway Station, belongs to TCDD. The area designed as sports area and open-air museum in the early 1990.



Figure 3.12. Old industrial district in 1994 City Map.

CHAPTER 4

PRESENT SITUATION OF THE STUDY AREA

4.1. Area 1: Between GMK and Celal Bayar Boulevards (District of Factories-Old Industrial Production Area)

4.1.1. Coal Gas Factory

Production of the coal gas factory was ended in 1990 and it was preserved as ‘cultural value’ (T.C. Law#2863, Article 3.a-1) in 1991. Four main production units of the factory and its’ two additional structures (crane and cooling tower) were preserved. The factory complex occupies 4.029 square meters area on the area of EGO General Directorate. Main structures of the factory are steel-brick, crane is steel and cooling tower is wooden-steel construction.

The factory producing coal gas for 61 years has been abandoned since 1990. In 15 years, any restoration attempt has not been initiated. Authorities of EGO General Directorate are talking about decay of carrier parts and metal fatigue. Today, the coal gas factory structures faces risk of collapse.



Figure 4.1. View of the factory area from the passageway on Celal Bayar Boulevard.



Figure 4.2. Structures of the coal gas factory and EGO service buildings.



Figure 4.3. Two main coal gas factory structures.

4.1.2. Electricity Factory

Production of the electricity factory was ended in 1990 and some parts (two depots and chimneys) of it were preserved as 'cultural value' (T.C. Law#2863, Article 3.a-1) in 1991. Main structure of the factory occupies 3.064 square meters area on the area of Başkent Electricity Distribution A.C. and some parts of it are still used as depots. There are three chimneys attached to the main structure.



Figure 4.4. Electricity factory building



Figure 4.5. Electricity factory building



Figure 4.6. West side of the building of electricity factory.

4.1.3. EGO General Directorate Buildings

EGO General Directorate with all service buildings, coal gas factory structures, parking lots, streets and green areas occupies 38.015 square meters area on the site. There are 26 service buildings belong to EGO General Directorate. They occupy 8.193 square meters area.

4.1.4. Buildings of Başkent Electricity Distribution A.C.

Başkent Electricity Distribution A.C. with all service buildings, electricity factory structure, parking lots, streets and green areas occupies 21.035 square meters area on the site. There are 8 service buildings belong to Başkent Electricity Distribution A.C.. They occupy 5.430 square meters area.

4.1.5. Maltepe Multistorey Car Park

Maltepe five-storey car park located south of the site occupies 3.875 meter square area on the site. EGO General Directorate Chairmanship of Subscriber Service Department is located on the second floor of the building.

4.1.6. Parking Lots

Approximately 7.400 square meters on the area of EGO General Directorate are used as parking lots. There are 3300 square meters area parking lots on Başkent Electricity Distribution A.C. area.

4.1.7. Green Areas

While there are 4.480 square meters green area on the area of EGO General Directorate, 3.371 square meters area are used as green area on Başkent Electricity Distribution A.C. area. The green areas on both foundations' land are passive areas that are used very rarely by personnel and other people.

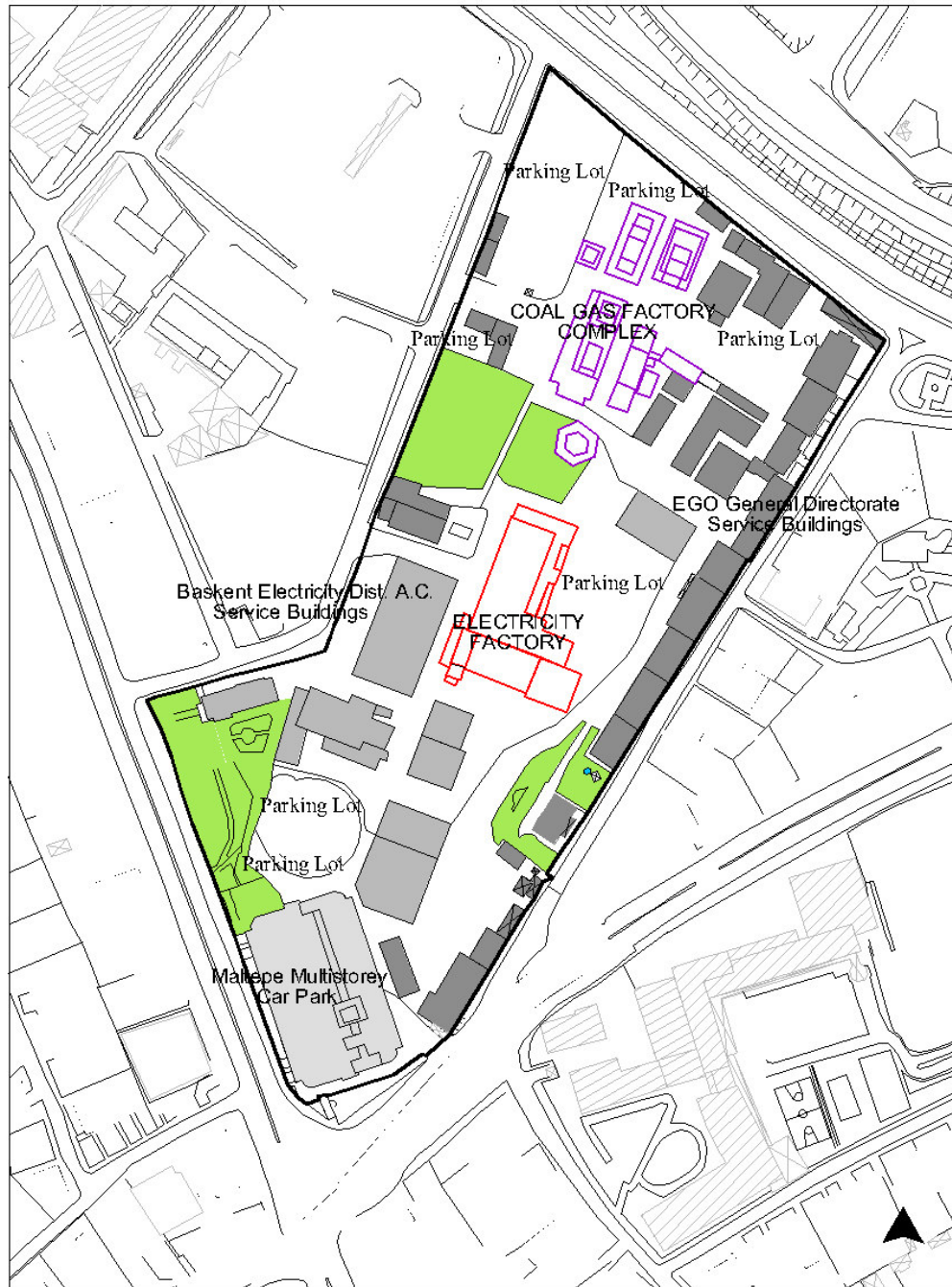


Figure 4.7. Present situation of the area between GMK Boulevard and Celal Bayar Boulevard (old industrial production area).

4.2. Area 2: Between Celal Bayar and Talatpaşa Boulevard (Old Industrial Service Area)

4.2.1. The Area between Altınsoy Avenue and Atatürk Boulevard (AKM Area 4th Division)

4.2.1.1. Railway Maintenance Ateliers

The railway maintenance ateliers constructed in 1926-27 was preserved as ‘cultural value’ (T.C. Law#2863, Article 3.a-1) in 1995. The National Committee decided on the restoration of maintenance ateliers and they were re-defined as Ankara Museum of Modern Arts and Fine Arts Galery (04.08.2000).

The old four atelier buildings that occupy 3.700 square meters on the area. Their restoration had been completed nearly. A new building construction adjacent to the old structures was started in 2000. The three-storey building which occupies 1.935 square meters area has not been completed until today. An open-court exhibition area construction, part of the new contruction, is just in beginning. The construction and restoration process has not been going on due to the financial problems. The ateliers and its environs has been left as a construction area since 2002.



Figure 4.8. View of the railway maintenance ateliers from the passageway on Celal Bayar Boulevard.



Figure 4.9. The four old railways maintenance ateliers and a new additional building.

4.2.1.2. Presidency of Republic Symphony Orchestra New Concert Hall Construction

The architectural project of the concert hall was obtained via a competition resulted on October 9th, 1992; the project of Semra and Özcan Uygur was selected among 46 proposals (Güzer, 1992: 61). The construction of the new concert hall was started in 1993 on 100.500 square meters area between current concert hall and Palace of Justice. The concert hall is composed of four blocks designed for different functions; A block is for chorus building, B block is for 2.000-seat concert hall, 500-seat chamber music hall, cafe, foyers, exhibition and cocktail hall, C block is for artist works and D block is for car park. The construction of the concert hall, foundation of which has been weakened by Incesu Stream, could not be completed because of financial problems.



Figure 4.10. The construction area of the new concert hall.



Figure 4.11. View of the construction area of the new concert hall from Talatpaşa Boulevard.

4.2.1.3. Presidency of Republic Symphony Orchestra Concert Hall

The building, located on Talatpaşa Boulevard and south of Youth Park, had functioned as a sports hall until 1962. At that time, it was restored and transformed into the Presidency of Republic Symphony Orchestra Concert Hall. 800-seat concert hall occupies 6.540 square meters area with its garden and parking lots.



Figure 4.12. The concert hall.



Figure 4.13. Back side of the concert hall.

4.2.1.4. Selim Sırrı Tarcan Sports Hall

The 2.000-seat sports hall constructed at early 1960s occupies 4.200 square meters area. It is used generally for amateur sports competitions.



Figure 4.14. The sports hall.



Figure 4.15. Back side of the hall

4.2.2. The Area at the west of Altinsoy Avenue

4.2.2.1. TCDD Open-Air Steam Locomotives Museum

The museum, founded on a land of 12.600 square meters at Ankara Station area, opened to public by TCDD in 1991. It covers ten steam locomotives, operated between early 1910s and late 1980s in our country, and an exhibition wagon in which some information and photographs related with the railways are displayed. The museum is visited by small number of people and also lack of good care is in question due to financial problems.



Figure 4.16. Entrance of the museum.



Figure 4.17. Inside of the museum.

4.2.2.2. TCDD Sports Area

In 28.600 square meters area, there are one big (Demirspors' training field) and one small football fields, and one basketball field. Also there is a walking-running path surrounding these sports area. It is an under-utilized area because very small number of people spend their times on the area during the day.



Figure 4.18. TCDD sports area.



Figure 4.19. TCDD sports area.



Figure 4.21. Present situation of the area between Celal Bayar Boulevard and Talatpaşa Boulevard (old industrial service area).

CHAPTER 5

EVALUATION OF THE OLD INDUSTRIAL DISTRICT AS AN URBAN DESIGN PROBLEMATIQUE

It is necessary to know the urban characteristics of the area in detail to develop appropriate urban design principles for redevelopment of the old industrial district. For this purpose, *contextual*, *conceptual* and *spatial* characteristics of the area are discussed in five different analyses. First of all, the area is discussed through a contextual analysis, which elaborates its importance within the city and where it stands in the urban scenarios. Secondly, location of the area with regard to the image of the city and its potential contribution to this image is analyzed within the frame of Kevin Lynch's urban element classification. Thirdly, the relations of the area with transportation system within the city are analyzed. Fourthly, spatial and visual boundaries of the area affecting its relations with its sub-districts and its neighborhood are discussed. Finally, opportunities and constraints that would give important clues for redevelopment of the area are revealed.

5.1. Old Industrial District within the Urban Context

The physical development of the first industrial district of Ankara had been developed until the beginning of 1950s. The industrial district of the city, which had been planned at the outskirts of the city, was no longer distant from the residential areas. On the contrary, it was at the midst of housing areas at the beginning of 1950s. Furthermore, the industrial district was just between the old center, Ulus, and the newly developing center, Kızılay. Besides, railways station and Anıtkabir had been predicted to form up another center within the city; and the industrial district was almost at the middle of these three. The industrial facilities were also threatening the public health and there was an increasing consciousness about the pollution created by the industries (Saner, 2004: 33). These urban and environmental factors revealed the thought of replacement of industrial facilities.

Jansen Plan, which had already been changed with a number of regulations since 1939, was no longer functional solve the urban problems of Ankara. In 1952, a decision was taken to obtain new development plan for the city via a competition, and a committee was founded to prepare a report to guide the competitors (Saner, 2004: 30).

The last section was important not only for demonstrating the necessities within the city, but for also preparing the basis for the transformation of the industrial district. The section of the report explained the necessity for a cultural center, including ‘all establishments, localities and installations to meet the educational, teaching, training, and art requirements of Ankara and the connected University Center’ (Saner, 2004: 30).

It was anticipated that the Railways Station and Atatürk’s Mausoleum (Anıtkabir) would together constitute the center of modern Ankara; and thus, the cultural center had better be located around this newly developing area. The report stated that the area extending from Atatürk Boulevard to the railway stations, and also to the north and the west of the stations, would be a suitable location for that cultural center. Various facilities were thought to take place on the area extending to the west of the city as a corridor, from Railways Station towards the AOC. And the area between railways station and Atatürk Boulevard, namely the industrial district, was thought to transform into a cultural center area, which could serve as a gateway for the rest of the cultural center area (Saner, 2004: 31).

This report was important for guiding the new development plan for Ankara prepared by Yücel-Uybadin in 1957. With this plan the physical development of the first industrial zone of Ankara was stopped and transformation process was started.

After 1957 Yücel-Uybadin Plan, industrial production area was divided into parcels with new secondary roads and central business district related functions were proposed on these parcels with an implementation plan prepared by Ankara Directorate of Development in 1965. AMANPB established in 1969 instead of Ankara Directorate of Development considered the area as a part of central business district. Although, it would be assumed that the area would transform easily as it is quite near to central business district, it took 30 years for factories producing macaroni and flour to leave their places to university and hypermarket, due to transportation problems as a result of delay in construction of Celal Bayar Boulevard and connection roads and ongoing production and service activities in its neighborhood. Coal gas and electricity factories could not be transformed for a long time as they were active. The process couldn’t be managed as these factories were subjected to a conservation process when they loose their function.

The area where coal gas and electricity factories, which are preserved as historical and cultural values, are located has not been subjected to any development activities since 1991. Factory buildings in the land of EGO and TEDAŞ are surrounded by service buildings of these institutions and thus are isolated from the city.

On the other hand, the area described as industrial service area has been a part of a different urban development. Importance of this area for Ankara increased from the beginning of 1970's. Policies and projects developed for the area should be discussed in two terms: 1970-80 and after 1980. First projects related to the area were produced by Ankara Municipality. Projects in 1973-77 Vedat Dalokay term and 1977-80 Ali Dinçer term considered the city from social and cultural aspects. During Dalokay term, it was aimed to manage a '**Ankara History/ Green/ Culture/ Recreation Axis**' project including the area. It was aimed with this project, covering an area of 1.40 hectares from Hippodrome to Sıhhiye, to reveal historical identity of Ankara, to create the green belt needed for the city with recreational facilities supported by big scale water element, to create integration by distributing cultural facilities, which are isolated, along the axis.

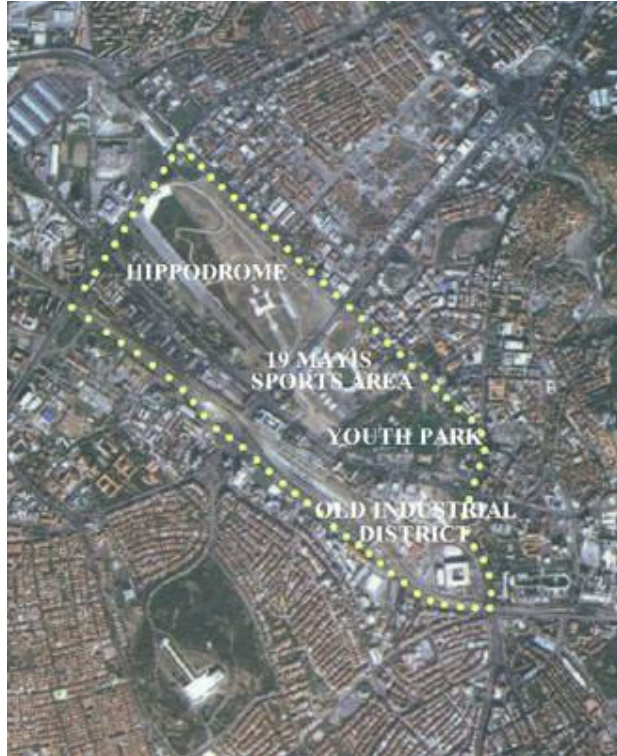


Figure 5.1. The area of 'Ankara History/Green/Culture/Recreation Axis' project.

Besides this project, a ‘**Cultural Center**’ project was proposed by AMANPB for redevelopment of the area in the period of 1970-80. The Bureau started to present area reports within the project concept from 1977 on. According to the report, the area including industrial service activities and covering a 35 hectare land was appropriate for Cultural Center proposed to include facilities considered needs of the city of Ankara, such as; National Library, National Museum, Modern Arts Museum, Congress and Exhibition Center, Theatre-Opera-Cinema Complex, hotel and relative service facilities (Kaymaz, 1995: 92). Furthermore, it was mentioned that the area has a potential to create a ‘**Culture-University Linear Zone**’ in east-west direction, between two strong centers Kızılay and Ulus and central business districts in their periphery, considering Faculty of Language, History and Geography, Turkish Historical Association, hospitals and Hacettepe University group in the east.

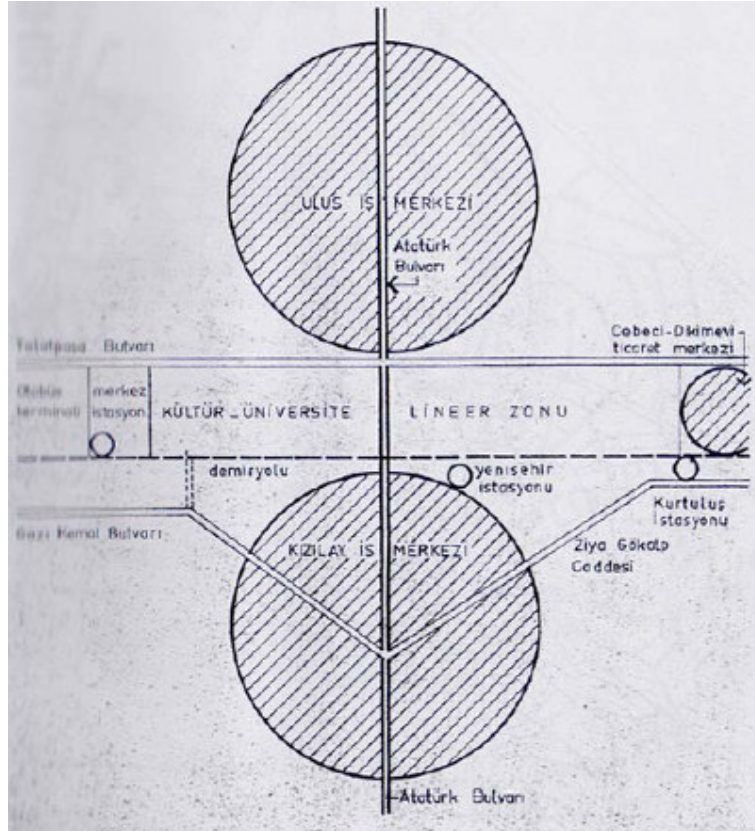


Figure 5.2. Schematic representation of ‘Culture-University Linear Zone’ proposed by AMANPB.

The condition of the area and existence of Cultural Center project was declared as a very important opportunity by the Bureau, when proposed movements of maneuver lines and ateliers of the railways from the area in 1957 Yücel-Uybadin Plan overlaps with the idea that others buildings should not be in the city center anymore. When ownership analysis is conducted, it seems as an advantage for realization of the proposed project that the land-except from flour factory area owned by private enterprise- is owned by public institutions such as TCDD, TMO (Toprak Mahsülleri Ofisi) and the Municipality (Saner, 2003).

During the period started with 1980 coup d'état, instead of authorities in charge of transition of the area in previous years, 'National Committee' was charged as the unique decision making authority by "the law of 2302, 'Celebration of Hundredth Year of Atatürk's Birth and Establishment of Atatürk Cultural Center', dated to September 23rd, 1980. According to this law, it was forbidden to construct buildings other than foundations proposed by National Committee within AKM area. By 1/5000 scale development plan prepared according to this law, it was aimed to fulfill cultural, entertainment, sports and recreational function needs of Ankara to be a modern capital city with AKM. Area covering 4th division of AKM area and a big portion of industrial service area was proposed as an important arts center of Ankara. It was determined to construct a new, big concert hall and restore the railways maintenance ateliers as first and unique modern arts museum and fine arts gallery for redevelopment of the area. From 1990 on, these plans were started to be conducted. However, neither new concert hall nor restoration of ateliers could be finished due to political and financial reasons. Moreover, projects for other parts of industrial service areas owned by TCDD, which would contribute to the city and help functional and spatial transformations, were not produced.

Important policies and projects were produced for these two areas, which form first industrial district of Ankara, since 1957. There are three important features of this area in urban context:

- 1- The area is located between two urban centers of the city (Ulus and Kızılay). It has a potential of being a transition zone combining these two centers.
- 2- Ownership of the land is held by public institutions.
- 3- The area has a potential to make affective contributions to the city in social, cultural and aesthetic aspects.

Finally, this old industrial district stands as under-utilized areas which are not used by the urban dwellers in any way, although it has a potential to make very important contributions to the urban life.

5.2. Old Industrial District within the ‘Image of the City’

The most important feature of cities of our era is that they are far more above a scale that would be observed at a glance. This problem has been emphasized for many times and requirement of developing a new language has been mentioned. It was Lynch’s ‘Image of the City’ that looked for an answer and managed to some extent. (Günay & Selman, 1993: 295).

This study is, first of all, an attempt to understand environment and identify with it and it gives us an opportunity to observe image of the city and understand its structure.

According to Lynch, city should be readable first of all. There are three components of a readable city: Identity, structure and meaning. It is identity that separates image from others; image should include relations between elements. Elements in image should have a meaning. These components come together and form image of the city. Components of this image are: paths, edges, districts, nodes and landmarks (1960).

A ‘City Image Scheme’ can be obtained for the city of Ankara in Figure 5.3, considering five elements of Lynch (paths, edges, districts, nodes and landmarks).

Paths, in Lynch’s definition, are ‘channels along which the observer customarily, occasionally, or potentially moves’ (1960: 47). When we look at the whole city macro form, we see that ring road creating relation of the city with outside and collecting roads from south and west and going towards east, and Atatürk Boulevard, İnönü Boulevard-Eskişehir Road and Cebeci-Bahçelievler spines carrying traffic of inner city, create main scheme. According to Günay and Selman, the only spine is Atatürk Boulevard that serves beyond functionality.

Edges act as the ‘boundaries between two phases, linear breaks in continuity’. These ‘lateral elements’, as Lynch states, may act as a barrier between two regions, or may be perforated lines along which two regions are interrelated. They have, in many cases, a particular role of holding together the separated areas (1960: 47). As Ankara is not a coastal city, a distinct edge concept is not developed. There are edges, but they are not functional. According to Baykan and Selman, AKM area integrating to AOÇ land seems to be the main edge. Other than this main edge, embassies can be defined as edge, although they are not that strong.

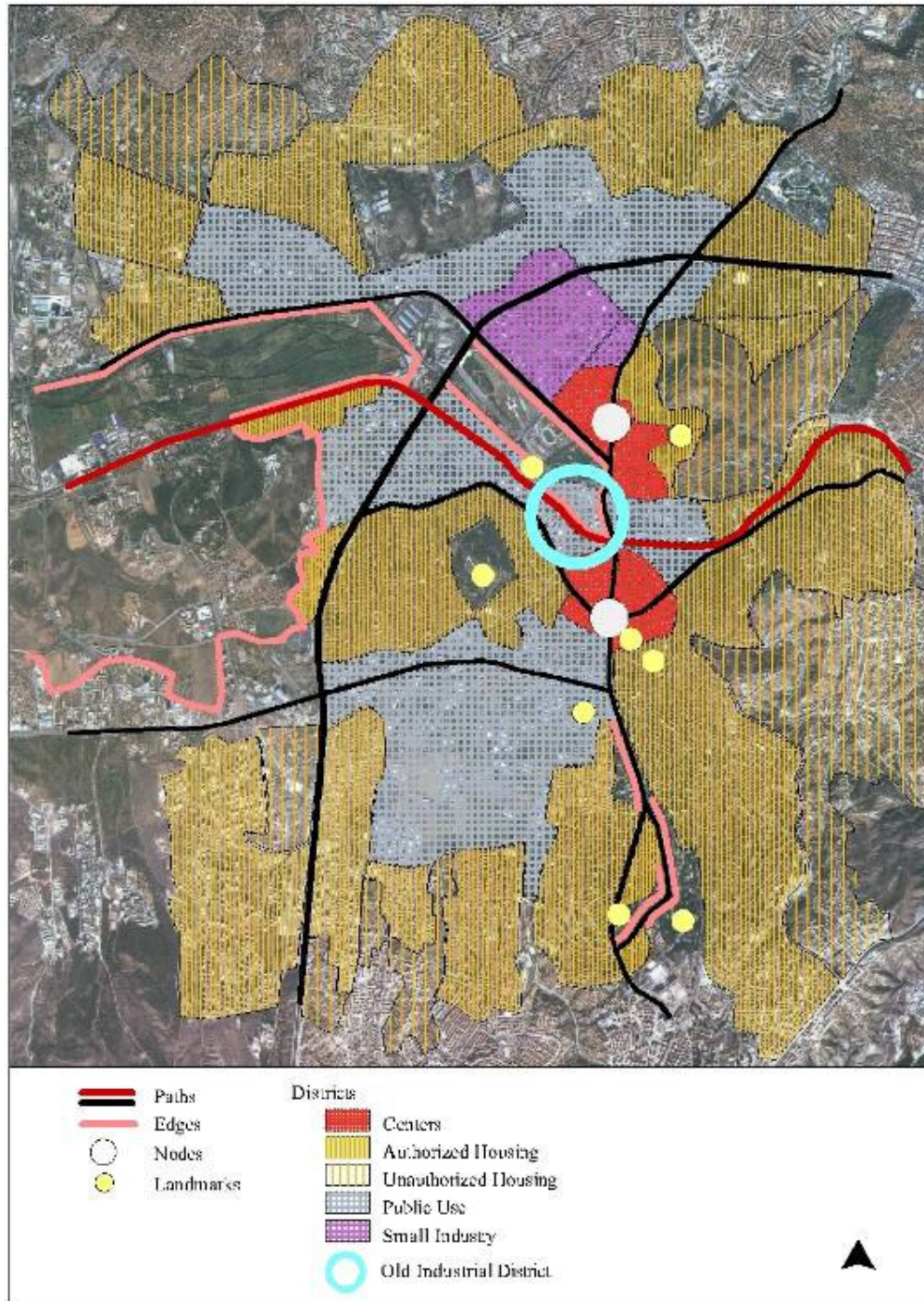


Figure 5.3. The map of 'city image' of Ankara.

Nodes are ‘strategic spots’ that constitute ‘junctions, places of break in transportation, moments of shift from one structure to another’. Or, the nodes may be focus points, which gain importance as a result of the ‘condensation of some use or physical character’, such as an enclosed square. They may be the center of a district, over which the concentration node radiates its influences (Lynch, 1960: 47). As Lynch argues that the concept of node is related with the concepts of path and district, because the nodes are the ‘convergence of paths’ and the ‘polarizing center of districts’ (1960: 48). The two distinct examples in Ankara which are close to this definition are Kızılay and Ulus. Ulus is dominant with its square mainly for pedestrians.

Landmarks are ‘the external point-references’, which are usually ‘simply defined physical objects’, such as building, sign, mountain etc. They symbolize a constant direction, and they may be within the city or at a distance. There are also local landmarks, which are ‘visible only in restricted localities’. The local landmarks, for example urban details such as storefronts, trees, provide the ‘clues of identity, or structure’ (Lynch, 1960: 48). Landmarks in this study are in urban scale. Examples in the city which are appropriate for the definition are; Ankara Citadel, Ankara Station, Atatürk’s Mausoleum (Anıtkabir), Skyscraper in Kızılay Square, The Building of Parliament, Kocatepe Mosque, old İş Bank building now used as BDDK building, Atakule and Presidential Palace.

Districts Lynch states that are the sections of the city having a two-dimensional extent, and can be distinguishable as ‘having some common, identifying character’. The observer can identify the district from the inside, and there are also some exterior references if the district is visible from outside (1960: 47). Main districts of Ankara in this context are ‘legal housing, squatter housing, public service areas and centers’.

After creating an ‘image scheme’ of Ankara City considering five elements of Lynch, we can explain where and how first industrial district of Ankara is located in it.

- The area developed around railway has borders to two main *paths* carrying inner city traffic, Atatürk Boulevard and Bahçelievler-Cebeci axis.
- The north part of the area is a part of so called *edge* of Ankara (AOÇ-AKM line)
- The area is on a quite near location to the two main *nodes*, Kızılay and Ulus, of Ankara.

- The area constitutes a border to Ankara Railway Station, which is an important *landmark* of the city. The area has a historical relation with the station. Furthermore, the area has a potential to create new *landmarks* for Ankara.
- The area is a part of extensive land strip, laid on east-west direction between two centers, which is called as public service areas. The area creates two distinct *districts* in public service area with its functional and physical features.

5.3. Accessibility of the Area

The term ‘access’ signifies the way or means to reach, to pass to or from, to enter or to communicate with. The ‘accessibility’ of a site implies the capability of being reached and entered, or ability of being communicated (Webster’s Ninth New Collegiate Dictionary). The accessibility of such an urban environment can be in two forms: *physical* and *visual* (Gedikli, 2000).

An accessibility map can be obtained for the study area in Figure 5.4, considering the elements of physical and visual access.

When urban environment is in question, transportation is the physical accessibility tool. There are two ways of physical access to reach the study area, roads and railways.

Three avenues on east-west direction and one on north-south direction are main roads to reach the study area. Three avenues on east-west direction are; Talatpaşa Boulevard forming north border of the area, Celal Bayar Boulevard dividing the area into two and GMK Boulevard forming the south border. Atatürk Boulevard lays on north-south direction. Atatürk Boulevard and GMK Boulevard, out of these four main roads for access, are two important spines carrying inner city traffic.

It cannot be claimed that access to such an area, which is in the middle of a road network which has a very important role in inner city transportation, is provided properly from these roads. Access to the area from Atatürk and Talatpaşa Boulevards are provided by Altınsoy Avenue, which connects these two boulevards. The access is only limited with the district that is described as the 4th division of AKM area. Whereas old industrial production area is the only place that is accessible with Celal Bayar Boulevard, which separates the area into two.

Access to the area with rail system is possible in three ways: railways, heavy rail system (subway) and light rail system (Ankaray). Accession from railways, which separates the area into two, is from central station and Sıhhiye station. These stations are on the border of 500-

meter walking distance zoning centered from the middle of the area. Kızılay-Batıkent subway route follows Atatürk Boulevard until Opera District, it follows İstanbul Avenue, which lays parallel to Talatpaşa Boulevard after this point and leaves the city center. Sıhhiye station of the subway is within 500-meter walking distance zone, Ulus is between 500-meter and 1 kilometer zone and Kızılay is on the border of 1 kilometer zone. AŞTİ-Dikimevi Ankaray light rail system line is laid on Bahçelievler-Cebeci axis, which is one of the most important spines carrying inner city traffic. This line decreasing the amount of inner city traffic considerably has 11 stations. The most important accession point of these stations to the area is Demirtepe Station which is on the border of the area where there are old factories. Another station that can be considered important is Maltepe Station. This station is within 500-meter walking distance zone; however, there is no access to the old industrial service area although it is quite near to the area. Strong border formed by Celal Bayar Boulevard and the railways restricts this access. Tandoğan and Kızılay stations of this line are also on the border of 1 kilometer walking distance zone.

Visual access to the area is only provided from the railway route. North and south parts of old industrial area can establish a direct visual relation with the railway and different locations of these two areas can be observed visually.

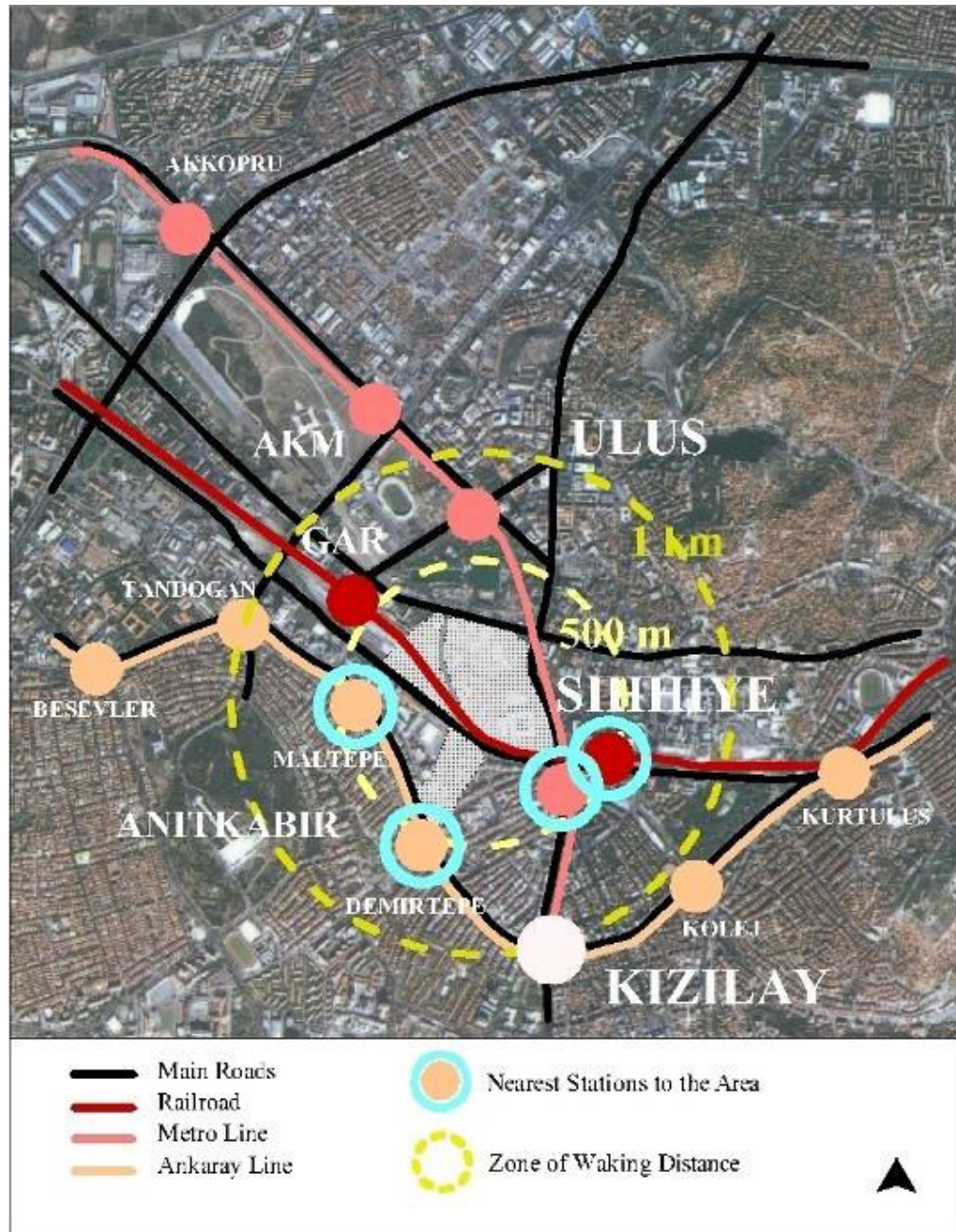


Figure 5.4. Accessibility map of the study area.

5.4. Borders of the Area

The term ‘border’ means the place or line where an area ends or begins (Webster’s Ninth New Collegiate Dictionary). The bordering elements are those, which define the boundaries of the site. The borders can be classified into two groups: *spatial borders* and *visual borders*. Spatial borders are those, which define the exact boundaries of the area by their existence. Visual borders, on the other hand, are those, which prevent to perceive the site or help to perceive the site as a distinct area.

Urban elements that are separating spaces by forming borders between spaces should be described in border analysis for urban environment and the effects of these elements on visual and spatial relations of urban spaces with their surroundings should be revealed. This border study is mainly focused on how these elements affect the relations between urban areas one by one or together, rather than where these elements are.

Spatial borders are divided into two groups: natural borders and artificial borders. Natural borders are such geographic formations like costs, hills and rivers. Artificial borders are such separators like roads, railways, walls, fences, and bridges created by human beings for specific purposes. Borders are also can be classified as permeable and impermeable ones. Both natural and artificial borders might have permeable and impermeable characteristics. Water is permeable, steep hills are impermeable natural borders. However, roads, railways according to their location in the city, bridges are permeable artificial borders. Such separators like walls, fences and wire fences are impermeable borders unless there are controlled trespasses.

Due to geographical features of the study area there is no natural borders on it. Therefore, artificial borders will be discussed as spatial borders in this study. Border elements observed in the area are roads, railways, walls, wire fence and railings. These elements have negative effects on relationships of the area within and with its environment.

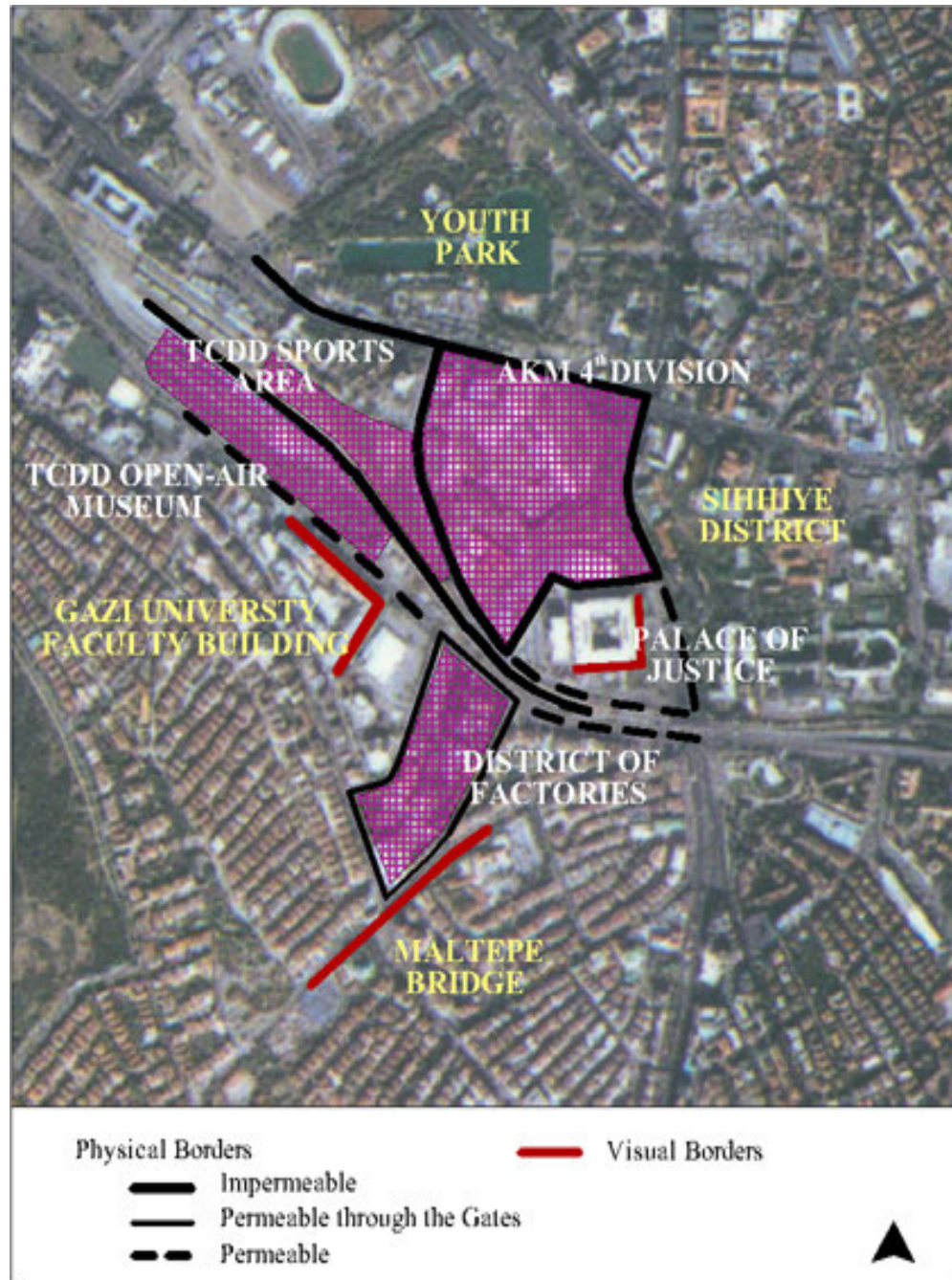


Figure 5.5. The borders of the study area.

The 4th division of AKM area in the north part of the study area has no spatial relation with Youth Park determined as 3rd division of AKM area. It is railings surrounding Talatpaşa Boulevard border of Youth Park that hinder this relation. There is no entrance to the park on this boulevard (Figure 5.6). New concert hall construction site, which is surrounded by wire fences, is a part of the area that is separated from public usage areas on its east side by Atatürk Boulevard. Altınsoy Avenue that links Atatürk Boulevard and Talatpaşa Boulevard constitutes an impermeable border between two sub-regions of the study area. The avenue comes down with a slope from Talatpaşa Boulevard to Atatürk Boulevard between 4th division of AKM area and sports area of TCDD, which are at the same altitude, creating retaining walls which make relation between these two areas impossible (Figure 5.7-8).



Figure 5.6. Physical border between the two divisions of AKM area.



Figure 5.7. Altınsoy Avenue



Figure 5.8. Altınsoy Avenue

The most considerable border element affecting the relations of the area within and with its surroundings is the railway. Railway lines separate the most important parts of the area one of which is the area where there are old factories and the second is 4th division of AKM area in a way that prevents any kind of spatial relation with wire fences, its level difference with Celal Bayar Boulevard at some parts, the boulevard and fences on it (Figure 5.9). The railway also prevents access to open air museum area of TCDD from the north side. It is not only the railway line but also the power transmission lines that prevent this access. It is only possible to enter the museum area from Celal Bayar Boulevard.



Figure 5.9. Physical borders between the factory area and AKM area 4th division where there are Cer Ateliers.

Finally, walls, railings and wire fences surrounding land of EGO and TEDAŞ, where there are old factories, and EGO service buildings (Figure 5.10) on the east gives only possibility of control access with two entrances from west and one entrance from east to the area.



Figure 5.10. Physical border: EGO service buildings.

It can be mentioned two visual borders working in opposite functions for an urban environment; visual borders that leads an observation of the area as a different district within the city and visual borders that makes observation of the area difficult within the city. It is impossible to talk about a visual border that makes observation of the study area easier in its environment. However, we can observe four important visual borders working in an opposite function in surroundings of the area. The Palace of Justice, being a huge building, prevents visibility of the 4th division of AKM area (Figure 5.11).



Figure 5.11. The Palace of Justice.

On the other side, Gazi University Architecture and Engineering Faculty building (Figure 5.12), Maletpe multistorey car park building and Maltepe Bridge (Figure 5.13) intersecting GMK Boulevard vertically constitute visual borders preventing visibility of old factory area.



Figure 5.12. Gazi University faculty building.



Figure 5.13. Maltepe car park and bridge

5.5. The Opportunities and Constraints of the Area

The Opportunities

- The study area is on a central location between two important centers (Ulus and Kızılay). This location gives opportunity to the area to serve equally to whole city.
- The area has a past for more than hundred years. It is a symbol of the city with its historical and cultural values as an important part of collective memory. This feature of the area is important for its contribution to urban life by changing existing condition of the area and strengthening its identity.
- The area covers a land of 27 hectares. Ownership of the area is hold by public institutions. This situation gives chance to prepare important projects on such a big area that would create effective changes on city.
- Ministry of Tourism and Culture owned part of the area is the 4th zone of AKM. Transformation of this area is completed on paper. New concert hall and modern arts museum projects are in implementation stage on this area. These projects, which are not completed due to financial reasons and which are about to loose validity, would be important opportunities for redevelopment of the area and positive contributions to their surroundings.
- Old industrial districts are re-used for various purposes (museum, shopping mall, housing, etc.) in the world. Existence of these examples is an opportunity for redevelopment of the area where there are old factories.
- Districts in the neighborhood of the area (Ulus, Sıhhiye, Kızılay, Maltepe) are the ones where there are dense commercial, cultural, sports, recreational, administrative and educational activities. This creates a multi-dimensional service demand that would be utilized for redevelopment of the area, located in a region where there is multi-dimensional urban usage.

The Constraints

- The main problem of redevelopment of the area is negative affects of the political actors responsible for on this process. EGO and TEDAŞ, which are responsible for redevelopment of the area where there are old factories, show no effort for this change. On the other side, National Committee, which is responsible for the area which is an important part of old industrial service area and 4th division of AKM

area, do not have a structure to contribute dynamism to redevelopment process of the area. Transformation which is completed on paper is not conducted in practice. Furthermore, political actors who are in charge of managing this old industrial area cannot prepare policies and plans in coordination, and this is an important problem in redevelopment process.

- Physical boundaries around the area have negative affects on location of it within the city. These boundaries, restricting physical relations among sub-regions of the area and with its surroundings, stands as an obstacle for redevelopment of the area, which would contribute urban life at the highest level with new functions.
- Important public or private investments are required for re-arrangement projects of preserved old factories in the area due to their architectural features and for the implementation of these projects. Absence of financial resources for such kind of redevelopment projects is a constraint for integration of these factories to urban life with different functions.
- Movement of central business districts functions out of city centers in the city scale decreases the usage of such important centers like Ulus and Kızılay. As these two centers loose their importance, it would threat redevelopment of the area which is a transition zone between the two centers.

CHAPTER 6

CONCLUSION

The transformation of the old industrial district could not be realized due to the decisions made and implementations carried out by political actors in different periods. In planned urban transformation, when the transformation requirements come into existence and the pressure and resistance met, the political authorities did not direct the process of transformation constructively and they did not concluded the process.

The incompleteness of the transformation of the industrial district can be explained with the missteps within the process. For the industrial production area, the first step of the transformation was missing: there was not an extensive research at the beginning. The lack of researches prevented the possible difficulties to be foreseen, and these difficulties generated resisting mechanism to the transformation at the implementation stage. In the second step, the plan (1957 Yücel-Uybadin Plan and 1965 implementation plan) was obtained but there were only piecemeal transformation decisions for the area. These piecemeal decisions and resistance mechanism resulted in final step; the incomplete implementation of the plan. For the industrial service area, there was not an extensive research at the beginning. The relevant strategies could not be developed since the report prepared by the municipality was not depending on extensive research. Moreover, there were no decisions for the transformation of the area at all. The transformation process restarted by AMANPB since it was not even initiated by Yücel-Uybadin Plan. At the first step, the Bureau made necessary researches. The possible difficulties were found out and precautions were taken to prevent them to turn into resistance factors at the following stages of the process. However, the second and third steps of the process, approving the plan and implementation, were not totally within the authority of AMANPB. In this period the confrontations occurred between the Bureau and the municipality and caused the process to remain incomplete. When the National Committee was assigned to undertake the process, there was the research of AMANPB, the proposals and projects of AMANPB and the municipality, but there was not an approved plan, or project. The Committee lacked an operational unit to realize any proposal. Finally, after approved

architectural projects had been obtained according to the decision of the National Committee, the implementation of these projects could not be realized because of financial problems.

As an under-utilized urban space, the old industrial district which is a subject of such transformation process does not contribute to urban life and environment. The district that locates between the two centers of Ankara is owned by public institutions. There are four main requirements for the redevelopment of the district. The most important of them is the decisiveness of the political actors who are responsible for the redevelopment process. The second important requirement is the establishment of an organization that manages the redevelopment process beginning with the preparation of the redevelopment projects and ending with the completion of these projects. This organization structure should include representatives of all stakeholders involved in the process. The other important requirement is that essential financial resources to be created for the redevelopment of the district by public or private sectors. And developing appropriate urban design principles that direct the planned development of the district in integrity with its surroundings is the fourth requirement. Taking planning decisions into consideration, proper uses should be determined at metropolitan scale and these uses should be combined with the correct urban design principles.

The thesis aims to contribute to the production of appropriate urban design principles within the four requirements mentioned above. The redevelopment of the old industrial district is a many-sided urban design problem. Historical character and spatial peculiarities of the area and its location in the city necessitate many-sided evaluation of the area to develop correct urban design approach. Firstly, the old industrial district is the first industrial district which actively continued to function between 1892 and 1990, and has the *traces of historical development of the industry* in Ankara. Transformation process started in 1957 and caused the loss of the historical traces on the area. Therefore, a sensible approach is required for the conservation of its cultural and historical values. Secondly, the old industrial district necessitates to be treated as an *industrial archeological site*. The redevelopment process should be evaluated within the framework that comprises the understanding of the industrial fabric, re-evaluation of the values and formulating the principles. Thirdly, the area should be analyzed as an *under-utilized space redevelopment project*. The urban design principles for redevelopment of the area physically, socially, culturally, and environmentally should be formulated. And finally, the old industrial district should be evaluated within the *urban context*. The redevelopment process of the old industrial district located between old and new city centers should be handled as a part of interrelated urban problems.

This many-sided position of the old industrial district appears as a positive value to create a unique composition that can integrate past and present if the potentials of the area are used

with correct urban design principles. Parallel to this approach, and with the help of contextual, conceptual and spatial analyses of the area, the following urban design principles are developed.

Urban Design Principles for the Redevelopment of the Area

The aim of the study is not to propose a particular redevelopment project to re-evaluate the district. Yet, some design principles for the redevelopment of the district can be developed. In this stage of the study, urban scenarios produced during the last 30 years should be taken into consideration. Also, sub-areas of the old industrial district, which underwent different transformation process, should be evaluated as a part of a whole. Considering the determination of new functions for the future use of the district as an integral part of urban design approach, urban design principles for the redevelopment of the district are developed under five titles: redefinition with new functions, conservation of historical values, spatial development, relations with surroundings and integration into urban context.

A) Re-definition of the old industrial district with new functions

The old industrial district can be utilized for cultural and recreational functions, representing its value as a cultural and historical property. The district has potentials for this type of development. In the past, some portion of the area had been evaluated within urban scenarios developed for the area with cultural functions. But the projects prepared according to these scenarios were not realized. The redevelopment of the area with cultural and recreational functions means not only the integration of a district into the city but also it can be a catalyst in the process of re-gaining the other under-utilized spaces with new functions, and can be a meaningful step in achieving a contextual whole.

The redevelopment of the old industrial district for cultural and recreational uses should be supported by the decision of opening the whole area to public. With this decision, the relation between past and present can be re-established through public participation.

In conclusion, the old industrial district composed of three distinct areas, the factory area, AKM area 4th division and the area owned by TCDD, should be re-defined as an integral part of the ‘**culture-recreation**’ zone of Ankara.

Factory Area

The area is the portion which represents industrial character of the old industrial district. The coal gas and electricity factories constructed in 1929-30 had functioned until 1990. The all structures of coal gas factory and some parts of electricity factory were preserved on their

original locations by the Conservation Board decision in 1991. The factories that have not been redeveloped until present time and their historical location form an 'industrial archeological site' in the center of the city.

Industrial archaeology, and the studies and conservation policies developed within this field offer a proper framework for studying the area. Industrial archaeology deals with the conservation of declined industrial areas, buildings, machines, infrastructure systems, and working-class house, or re-use criteria of those as witnesses of the industrial age (Gedikli, 2002: 11). Neaverson (2001) makes the generally accepted current definition of industrial archaeology as 'the systematic study of structures and artifacts as a means of enlarging our understanding of the industrial past.

The industrial areas are important parts of the historical environment and constitute an important cultural value. Worth (2000) states that it is essential to formulate the understanding of industrial areas before deciding on the policies affecting its future. Otherwise, the place would face with the danger of being totally lost, or becoming only a poor interpretation of the place may be obtained. The critical point in the conservation studies of the site of industrial archaeology is to preserve the 'fabric' not only the individual buildings, to understand the way places work, to allocate the individual elements into context of the site; rather than to retain only the 'shell' of the existing structures. Worth (2000) criticizes some re-use projects proposed for buildings in the industrial archaeology sites, as they are only to represent the aesthetical value, not to give any information about the context that holds the site together. He emphasized that it is required to articulate the values assigned to that place. Cultural values help to define the sense of place and identity.

The industrial heritage has also educational value in terms of demonstrating how things work and affect the lives of communities. The industrial archaeology can create good environments by re-using the old structures more economically than rebuilding them. Industrial sites have the potential to be catalysts for regeneration of an area. However, it requires a critical awareness that a regeneration projects can lead to the loss of the 'fabric'. It is critical to understand the 'place', to articulate values and issues that might affects these values, and after that, to formulate conservation policies, allowing for sustainability not only, of the historical environment, but also of the fabric of the industrial heritage (Worth, 2000).

The industrial archaeology sites encourage cities to re-use them, because these decayed buildings and sites have become available in the post-industrial period. Moreover, the buildings of industry are architecturally flexible and adaptable for re-use, and they offer a

potential of uses in large range. The flexibility and adaptability of those buildings stimulate the city to search for new expressions or a new identity (Mancuso, 1999).

The re-definition process of factory district should be evaluated within the framework of industrial archeology that comprises the understanding of the ‘fabric’, and articulation of the ‘values’ as Gedikli stated in her research (2002: 14). The interpretation of the values of the area should be done regarding its historical evolution and the present urban context.

There are similar redevelopment examples in the world, such as the Docklands in London, Golden Horn in Istanbul, and the Simmering in Vienna. These examples give an idea about the re-definition of the abandoned industrial districts in downtowns. They aim to recall the public to the old industrial sites, creating new public spaces, as well as to conserve the cultural properties within the area, re-using them with new functions.

Amongst them, the Gasometers in Vienna-Simmering and the Bankside Power Station in London-Docklands are very similar to the old industrial structures in Ankara with regard to their functions, spatial characteristics and historical value. The redevelopment project of Vienna Gasometers was completed in 2001. The gasometers were restored for three functions; residential, commercial and cultural (Appendix A-I). On the other hand, the Bankside Power Station in London-Docklands was transformed into Tate Modern opened to public in 2000 (Appendix A-II).

The old coal gas and electricity factories preserved under the Conservation Law#2863 as ‘cultural heritage’ have potentials for such a cultural use. The main structures of factories can be restored for cultural facilities such as museum, exhibition center, concert hall, cinema, theatre, workshops, etc..., while certain structures (crane and cooling tower) can be restored as open air museum keeping and representing their peculiarities as demonstrators of the history of industrial production. And the surrounding area of the factory complex should be redeveloped with recreational functions in harmony with the new functions of the factories.

Atatürk Cultural Center Area 4th Division

The decisions of redevelopment of the area, defined as the 4th division of AKM area, was taken in early 1990s, and the projects were prepared for cultural purposes. Also implementation of these projects was started immediately. But they were abandoned in implementation due to political and financial reasons.

The projects developed in order to re-gain the area as a culture zone are important not only for the future of the old industrial district but for the city center and thus for Ankara. The most

important among them is the Presidency of Republic Symphony Orchestra Concert Hall and Chorus Buildings. Next project is the transformation of the railways maintenance ateliers (Cer Ateliers), which is the only industrial structure that remained on the area, into the Ankara Modern Arts Museum and Fine Arts Gallery (Appendix B).

The aim was to develop, within a plan, cultural, sportive, and recreational areas that the capital city needs with AKM area in the center of the city. These projects that were abandoned in the implementation stage would have supported the vision proposed for the whole district. The new concert hall and the art museum and gallery could have created a culture zone in the city center. Therefore, this opportunity should be re-evaluated and the implementation of the projects should be continued with full decisiveness.

The Area Owned by TCDD

The area was composed of two sub-areas. One of them was designed as TCDD Open-Air Steam Locomotives Museum and the other as a sports area, to be used especially by the Demirspor football team. The areas did not attract citizens as an urban public space with their existing functions. They should be re-functioned to support the redevelopment of the old industrial district as a cultural and recreational focus of the city.

In the open-air museum on Celal Bayar Boulevard historical steam locomotives which have served for many years in Turkey are exhibited. But the museum is not known well to citizens. It is visited mostly in the spring and summer seasons by a small number of populations, especially by primary school students. These types of museums are needed to be diversified with different functions that attract more visitors. There are model practices to make these museums more attractive places in the world and our country. TCDD Open-Air Stem Locomotives Museum in İzmir-Çamlık was diversified with different functions to attract more visitors and to entertain them. Some locomotives were re-designed as lodgings, and one locomotive was transformed into a restaurant. These innovations are the first step taken towards creating a bridge of culture between the past and the future.

The museum located the site of old industrial district has similar characteristics with the museum in İzmir-Çamlık, so it may be re-designed with new functions like the museum in İzmir-Çamlık. The locomotives can be exhibited in a park. Some of them can be designed as restaurant or cafe. Exterior spaces can be provided for these uses by changing the exhibition order of the museum. This arrangement could help to attract more visitors especially in spring and summer seasons. Taking the fact into consideration that mostly primary schools visit the museum, a mini train line can be established around the locomotives to fascinate this age group. Also, a part of the museum can be designed as a playground. Moreover, some

arrangements can be made at the museum to benefit the proximity to Gazi University Engineering and Architecture Faculty. Workshops and exhibition ateliers can be established at the museum.

As for the TCDD sports area, this space can be re-functioned for recreational purposes. It can be re-designed as a park in relation to the other functions. The area can be a transition zone between the TCDD open-air museum and the AKM area 4th division. It can also be a gathering place in the middle of the three redeveloped area of old industrial district; the re-functioned TCDD museum, art museum-gallery and new concert hall, and the district of factories could be integrated into the city with cultural and recreational functions.

B) Conservation of the historical value of the area

In 1991, The Conservation Board of the Ministry of Culture and Tourism declared most of the coal gas factory complex and the three chimneys and two depots of the electricity factory to be conserved in their original location (Decree 1679, 19.03.1991). In a later decree of 4027 on 19.06.1995, the board decided to conserve the railways maintenance ateliers (Cer ateliers) situated on AKM area 4th division.

- The all historical values on the old industrial district should be conserved as ‘cultural heritage’. The electricity factory constructed together with the coal gas factory in 1929-30 had played an important role in development of Maltepe as the first industrial district of Ankara. Today these two factories constitute the only ‘industrial archeological site’ of the city. Therefore, conservation of the all structures of the electricity factory rather than a partial conservation is important in conservation of the area as a whole. Besides, TCDD open-air museum housing a century old steam locomotives should be conserved.

- Factory area has the value of an industrial archeological site. Therefore, conservation criteria have to be developed not only for the old factories but also for the whole area. This is also important to understand the historical importance of the area housing a great factory complex. In consequence, the interventions to be carried out along with the conservation work have to cover the entire site, not just single historical elements.

- Restoration projects have to be prepared for the historical industrial structures, which are under danger of loosing their distinctiveness. All industrial structures situated on the factory district have to be restored. It is important to represent the contexts in which they are positioned, as well as their architectural quality, and this also necessitates the conservation of the area as a whole.

- The conservation of the industrial context of the area should not be handled with a misplaced understanding such as imitating the past experiences for the tourist-related activities. The aim of the redevelopment should neither create the impressions of the earlier times, nor eliminate all indications about the area's industrial history. Yet, the project to be developed along with the principles of the industrial archaeology will inevitably be based on the re-interpretation of the technological and social history of the area.

C) Spatial development of the area

Regarding the spatial development of the area the following design principles are developed;

- Spatial relations between the sub-areas of the district should be provided. The borders that separate these sub-areas as barriers and prevent the relations among the areas should be removed or crossed. The pedestrian circulation should be provided among the areas by designing the pedestrian connections.

- The existing situation of the district of factories prevents the redevelopment of the area with cultural and recreational functions. The service buildings which belong to EGO General Directorate and TEDAŞ are surrounding the factories and this high-density building group acts as a barrier that prevents the area's representation of its historical character and the integration of the area into its surroundings. Therefore, the buildings owned by these institutions should be removed from the area and the area left empty should be re-designed for recreational uses, such as parks, shopping, gastronomic and entertainment units, in harmony with the new functions of the district.

- Scale and density of the buildings in the district of factories should be taken into consideration in the new construction. The original density of the area that resulted from the industrial production function and which represents the characteristics of the area should be preserved. New elements that will be placed in the area should not compete with the existing buildings and structures in terms of scale.

- The factories, the most important cultural heritages of the old industrial district, are valuable landmarks. With a suitable urban design approach they can become a symbol of Ankara. This potential should be taken into consideration in providing spatial and visual relations of the factories with their surroundings and in the restoration process of them. The restoration should represent the contexts in which the factories are positioned, as well as their architectural quality.

- The revitalization and restoration of the Cer Ateliers, which is to become a museum, and its additional constructions should be completed on the AKM area 4th division. Also, the Incesu Stream creating a flood problem should be controlled and the construction of new concert hall be completed. The interrelation between this new cultural complex and the existing buildings on the area should be established.

- The physical development of the TCDD open-air museum and TCDD sports area should be handled with together. The spatial connection between the areas should be established absolutely. This connection will provide to access the museum from the north of the area. Therefore, the accessibility problem will be solved, and thus, the visitors of the museum will increase considerably.

D) Relations with surroundings

Concerning the relationship of the area with its surroundings the following design principles are developed;

- The relations between the portion of the district defined as AKM area 4th division and the AKM area 3rd division located at north of this portion should be established physically or visually. The pedestrian connection should be designed between the areas. It is important not only to create continuity and wholeness of AKM area, but also to ease the integration of the old industrial district into the most important culture/recreation/sport axis of Ankara.

- Sıhhiye district, east of the district: At the present, Sıhhiye district is housing a number of historical buildings that belong to cultural, educational and health institutions which were founded in the early Republican Period. The integration of these two district, old industrial district and Sıhhiye district, that have cultural and historical values of Ankara should be established spatially and contextually.

- The old industrial district is surrounded by Sıhhiye-Maltepe business district at south. The stations of Ankaray and Metro lines that provide access to the old industrial district should be evaluated as main components in establishing relations between the study area and the business district. Metro station at the Sıhhiye district and Maltepe and Demirtepe stations at Maltepe district are within 500-meter walking distance to the old industrial district. The connections to the area from Maltepe and Sıhhiye districts should be designed by taking these stations as focus points. Although the distance of Ankaray Maltepe station to the area is 150-200 meters, a strong connection between them does not exist. Therefore, an access from the station to the sub-areas or the district should be established effectively.

- The main railway station is placed west of the district. There is no direct relationship between the area, some portion of which is situated on station area, and the station and its surrounding. The access between the station and the open-air museum can not be provided because of the existing railways and power lines. The connection between the museum and the station and thus AKM area should be established in order to make the museum a living urban place. This relation prevented by railways and power lines can be provided by taking the power lines underground and constructing an aesthetic pedestrian bridge. On the other hand, the relationship between the sports area and its surrounding should be strengthened by taking the historical dwelling units that belong to TCDD into consideration.

E) Integration of the area into the urban context

- The old industrial district is a part of extensive public land strip extending in the east-west direction and dividing the city into north and south parts. This strip has been created to serve the city equally with social and cultural functions. But the cultural dimension has been ignored. The old industrial district should be integrated into both the extensive public land strip and the city center with cultural and recreational functions.

- The district becomes as a barrier between the two centers (Ulus and Kızılay) of Ankara. It should, on the contrary, provide a transition between these areas.

- Ulus, Sıhhiye, Kızılay, Maltepe, Tandoğan, Ankara Station and an important segment of AKM area are situated within 1 km-radius circle drawn from the center of old industrial district. The district, so close to the most important districts of the city that represent the past and the present of Ankara, should be evaluated within the urban center scenario dealing with all of these areas as a whole.

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APPENDIX A

EXAMPLES FOR THE CONTEMPRARY USES OF OLD INDUSTRIAL STRUCTURES

1. Transformation of Vienna Gasometers into Apartments, Dormitories, Bureaus, and a Large Entertainment Center

Vienna, an historic Central European metropolis, with approximately 1.6 million inhabitants, is a city whose development can be traced back over a period of 2,000 years. This historical development is still clearly visible in the urban texture, whose identity it defines. The decision to revitalise the four vacant Gasometers in Vienna-Simmering was taken in the mid-1990's; a development competition was organised in 1996 and won by the non-profit developers.

This complex, the largest gas depot in Europe when built between 1896 and 1899, was shut down in 1986. It is situated in an urban industrial zone that for many years had been languishing. In the course of time, numerous adjacent large-scale enterprises were closed down too.

The cultural importance of the Gasometers

The four monumental Gasometers have become an important symbol for the Simmering district of Vienna. They are a reminder of the nineteenth century tradition of architecturally elaborate industrial structures.

Along with a few other Viennese industrial structures, the Simmering Gasometers symbolize the arrival of Vienna in the industrial age. Not least due to the fact that they are a group of four, the Gasometers are internationally unique in their appearance. In terms of size and external expression there are only two other remaining Gasometers in Europe which are comparable with those at Vienna Simmering.

The building protection order

The group of Gasometers is of great historical value in social and technological terms, and is therefore under a building protection order. The Gasometers are not just a symbol of Simmering, but also the whole city silhouette of Vienna. By virtue of their size, they are true monuments and landmarks in the cityscape. They are the first large structures which the visitor to Vienna sees on the journey from the airport to the city. The need for the preservation of their historical external appearance is not disputed.

The Gasometers are "monuments of work". The restoration of the buildings attempts to preserve evidence of this working past. The aim is to avoid the restoration of the building to a "new" state. New bricks for example will try to pick up nuances of colour of the existing brickwork, but will not be artificially coloured to match exactly. The restoration should act as a documentary record. It will itself form part of the history of the buildings, and the restoration work ought to be clearly identifiable to future observers.

Context

The location of the Gasometers is extremely favourable: next to the intersection of the urban motorways, which leads to Vienna-Schwechat Airport. Moreover, the Vienna Underground line was extended to Simmering in autumn 2000, for which a separate station was built near the Gasometers to link the Gasometers with the city centre by only eight minutes' journey time. This area was thus ideally suited for targeted urban development.

From the beginning, it was the objective of this project, despite the extremely complex refurbishment required, to construct flats in these fine examples of protected industrial architecture that would meet high quality standards while being affordable for the average citizen. As this objective could only be met by the Viennese system of housing construction subsidies, the overall construction costs of 181,7 million Euro were subsidised by the municipal administration by 22,5 million Euro. However, at the same time, the gasometer project is an important element of a new strategy adopted by the city of Vienna. When the lack of housing became too acute in the 1990's in Vienna, action had to be taken very quickly: the new construction volume was increased to approximately 10.000 subsidised flats per year - the projects were largely implemented in peripheral areas that were easily available. In the mid-1990's, the situation had steadied down sufficiently to permit a rethinking of this approach. The historic building stock, substantial parts of which have been preserved, is a key element of Vienna's urban appearance and of the identity derived there from. Earlier than many other European cities, Vienna took steps to protect its architectural heritage, and this architectural heritage remains an important economic factor for cultural tourism. Nevertheless

the city of Vienna is very interested in providing sufficient space for the 'new', i.e. contemporary uses and architecture. In recent years, several large-scale historic objects have been rehabilitated and adapted for contemporary use and design. One of those revitalised objects are the Gasometers.

The refurbishment of the Gasometers constituted a very demanding challenge for the architects: while the external appearance of these striking brick structures was to be preserved, their interiors were to house innovative flats and offices including extensive infrastructure to meet the state-of-the-art requirements of contemporary forms of housing and employment. With this, the changes in the historic building volume were to be kept as small as possible.

The project

The big challenge of the project not only lay in creating adequate housing space inside the brick structures but - and primarily - in providing a balanced mixed-use concept that will offer the new residents a full range of shops and services.

For this reason, the flats located in the former Gasometers only start at a height of approximately 30 metres; the infrastructure facilities are situated below. These include the two-storey shopping mall that extends across all four Gasometers. Approximately 20.200 square metres of retail space were created - in addition to shops and a supermarket, these premises will also house restaurants and a bank.

A combination of housing and workplaces, too, is provided for: the Gasometers will offer a total of 11.000 square metres of office space. In addition, the Vienna Municipal and Provincial Archives formerly beset by space problems will find a new home in the Gasometers.

An important complement to the combination of housing and work is provided by the 600-square-metre day-care nursery designed by Wilhelm Holzbauer. In addition to the excellent connection to the public transport system by means of the underground station, more than 1.000 parking spaces were created as well.

A wealth of entertainment options is furthermore available for the leisure activities of the residents: the bottom section of Gasometer B contains the 7.450-square-metre Bank Austria multifunctional hall which holds more than 4.000 people. This multifunctional event centre was designed as totally soundproof. As a result, the hall is a suitable venue, not only for

conferences, fairs and exhibitions, but also for rock concerts, raves, clubbings or balls without creating even minimal noise disturbance for the residents above.

Moreover, the so-called 'skywalk' leads from the shopping mall level in Gasometer C directly to an entertainment centre designed by architect Rüdiger Lainer as a 'Pleasure-Dome': a façade of multicoloured glass envelops a multiple entertainment complex that includes e.g. 15 cinemas stacked one above the other as 'rocks' with lobbies and access zones stretching between them. Above, we find an entertainment mall featuring theme restaurants and shops on three levels.

The results

When the plans for the revitalisation of the Gasometers were presented, some scepticism was encountered about whether the strategy adopted would actually work. However, both the population and the economic sector were definitely in favour of this approach: already one year before completion, all the retail space in the shopping mall had been leased. And when the tenants moved into their flats in early summer 2001, practically all the units had been sold or leased as well.



Figure A.1. The four Gasometers.

However, the revitalisation of the four Gasometers is no isolated event in an otherwise unused environment, rather, the investment was intended to deliberately trigger the emergence of a new neighbourhood that is to take shape within the next ten years. And the success of this strategy, too, can be regarded as great. Intensive construction activities began in the immediate surroundings of the Gasometers already during the refurbishment works. Before completion of the central project, not only the entertainment centre 'Pleasure-Dome', but also the office project 'Eagle + Ant' had been completed. This combination alone made the location Europe's biggest construction site at the time - in all, the Gasometers and their environment took up a total of 220.000 square metres of space, compared, for instance, to a total of 200.000 square metres in Berlin's Potsdamer Platz.

The renewed Gasometers can be now seen as a kind of urban landmarks, each of them designed by a different architectural team internationally well-known. The vast surroundings of the Gasometers are expected to be filled soon with other office and housing projects. In all, approximately 200 hectares are available in the so-called Erdberger Mais area - a development zone for a city quarter that is primarily aimed at satisfying the demands of the new economy. In the near future, roughly 10,000 new workplaces will be created here; the overall potential is estimated at approximately 50,000 jobs.

2. Transformation of Bankside Power Station into Tate Modern

Built in two phases between 1947 and 1963, Bankside Power Station, situated on the south site of the River Thames, opposite St Paul's Cathedral. The western half of the structure, which included the chimney, replaced an earlier coal-fired power station, in 1952. The eastern half of the building was brought into commission in 1963. In 1981 Bankside Power Station closed due to increased oil prices, making other methods of generating electricity more efficient. Between 1981 and 1994 when the Tate Gallery acquired an option on the site, the building remained unoccupied apart from an operational London Electricity sub-station that still remains.

In the late 1980s it became clear to Tate that its collection had outgrown its home on Millbank. It was decided to create a new gallery to house Tate's international modern art, and a search began for a suitable site to build on, or a building that could be converted.

The redundant Bankside Power Station proved an astonishing discovery; a building of enormous size, great architectural distinction, superbly sited opposite St Paul's Cathedral and in a fascinating and historic, if neglected area, next to the rebuilt Globe Theatre. An international architectural competition was held, which over seventy architects entered,

including some of the world's most distinguished. The final choice was the young Swiss practice, Jacques Herzog and Pierre de Meuron.

Construction

The transformation of Bankside Power Station into Tate Modern began 1995 with the removal of all the power station machinery ('de-planting') by the previous owners. This left the building as a brick shell supported by a steel skeleton. During 1996 and 1997 further demolition and enabling works took place which prepared the building for the construction programme to produce a world class art gallery from a disused industrial building. This work included the removal of the roofs of both the old Boiler House and the Turbine Hall, the demolition of a number of out buildings and sandblasting and repainting of the remaining steelwork.

In December 1996 the Swiss architects Herzog & de Meuron opened a UK office at Bankside Power Station staffed by a team of fourteen working full time on the project.

In order to build the new gallery the Construction Management method was employed. This process is now widely used for large complex building projects in preference to the traditional practice of employing a main contractor and sub-contractors. The building work is split into distinct packages, each of which is carried out by specialist Trade Contractors. The Construction Manager was responsible for the entire construction programme and co-ordination of the Trade Contractors who were in turn employed and paid by Tate.

Work on the first piece of construction, a vast concrete raft, forming a foundation on which the museum sits, commenced during October 1997. At this point, a Time Capsule containing plans, photographs and videos relating to the project along with drawings by local schoolchildren and a piece of Swiss Mountain crystal provided by the architects were buried in the foundations.

This was followed by the fabrication of the structural steel framework in the former boiler house, creating the seven floors and effectively forming a new building within the walls of the old. This was followed by the creation of the seven gallery floors. During this process the original boiler house trusses were removed, allowing the new floors to fully support the existing brick façade. In May 1998, the steelwork for the new two storey glass roof structure, known as 'the lightbeam' began. Once the glass of the lightbeam was in place and the roof to the Turbine Hall replaced in the autumn of 1998, the building was watertight, which allowed more detailed fit-out of the space to commence.

In early 1999, escalators and stairs were located in their final positions and work began on fitting out the auditorium. The galleries were fitted with environmental controls and the timber floors on all levels were installed. By August 1999, there was permanent lighting on in most areas of the building and the basic building works were completed.

By the end of 1999, Tate Modern staff had moved into their permanent offices on the eastern wing of the building and many areas of the building were complete. In January 2000, the site was officially handed over to the Tate Gallery from construction managers, and the installation of the displays of the Tate Collection began. Tate Modern opened to the public on 12 May 2000.

The results

Bankside Power Station

- Situated on a 3,43 hectare site on the south side of the River Thames opposite St Paul's Cathedral
- The northern frontage of the building is over 200 m long
- The chimney is 99 m high, specifically built to be lower than the dome of St Paul's Cathedral at 114 m
- The building is made up of approximately 4,2 million bricks



Figure A.2. Bankside Power Station.

Tate Modern

Tate Modern has a total internal floor area of 34,500 sq m including:

- gallery suites for display and exhibitions of 7,827 sq m

- the former Turbine Hall as a 'covered street' of 3.300 sq m where works of art may also be shown
- a special exhibition suite of 1.300 sq m
- a 240 seat auditorium
- two cafés to seat 240 and to seat 170 plus 30 in the bar area
- three shops: Level 1: 500 sq m; Level 2: 300 sq m; Level 4 Exhibition Shop: 150 sq m
- an education area of 390 sq m
- a Members Room of 150 sq m
- 1.350 sq m of offices
- a support services/art handling area of 1.500 sq m
- 9 passenger lifts of which 4 are for public use (capacity of each 16 people)
- 6 escalators



Figure A.3. Tate Museum.



Figure A.4. The former turbine hall.

APPENDIX B

PROJECTS FOR THE REDEVELOPMENT OF AKM AREA 4TH DIVISION

The projects of concert hall and art museum were prepared to create the most important 'culture and art center' of Ankara and also of Turkey. This center, which can house the international music festivals and the international exhibitions, will be a focus of world's cultural activities.

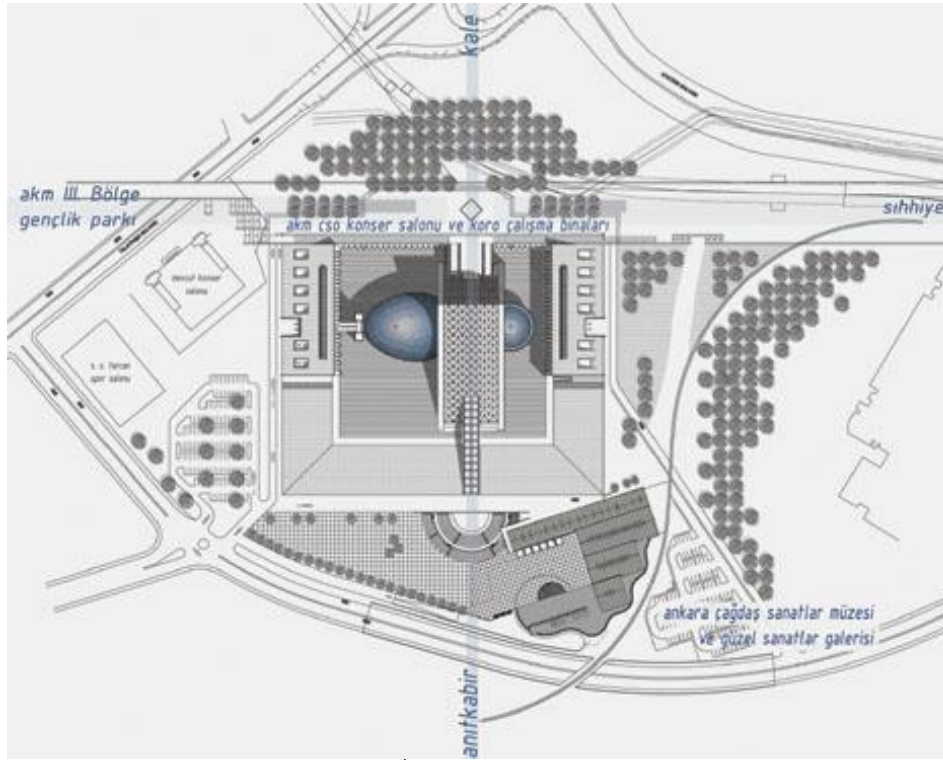


Figure B.1. The plan of AKM Area 4th Division.

Presidency of Republic Symphony Orchestra New Concert Hall

In the 5th meeting of the National Committee, it was decided that the new concert hall of Presidency of Republic Symphony Orchestra would be constructed on the empty area on AKM area 4th division, together with its additional functions. It was reminded that the outstanding examples of such buildings abroad must be utilized as models of the new concert hall.

The project

The architectural project of the concert hall was obtained via a competition resulted on October 9, 1992; the project of Semra and Özcan Uygur was selected among 46 proposals. The construction of the new concert hall was started in 1993 on 100.500 sq m area between current concert hall and Palace of Justice. The concert hall is composed of four blocks designed for different functions; A block is for chorus building, B block is for 2.000-seat concert hall, 500-seat chamber music hall, cafe, foyers, exhibition and cocktail hall, C block is for artist works and D block is for car park.

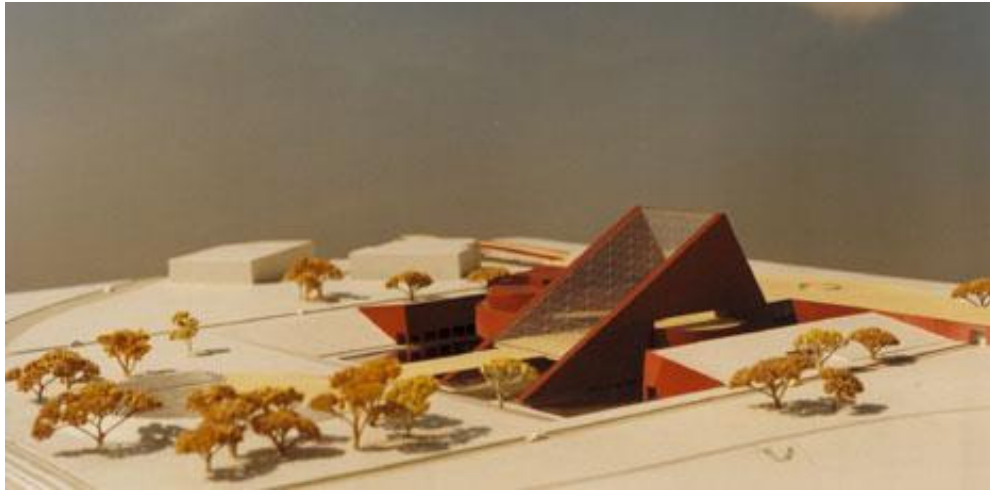


Figure B.2. The model of the new concert hall.

Ankara Museum of Modern Arts and Fine Arts Gallery

The *Cer Ateliers* (railways maintenance ateliers) situated on AKM area 4th division was preserved as cultural value by Conservation Board in 1995. The ateliers are one of the two industrial structures that constitute the industrial archeology of Ankara. In the meeting of

National Committee on 04.08.2000 it was agreed to restore the ateliers for the purpose of Ankara Museum of Modern Arts and Fine Arts Gallery.

The project

The restoration project of the ateliers was prepared by Semra Uygur and Özcan Uygur. Ankara Museum of Modern Arts and Fine Arts Galley obtained by the restoration of the Cer Ateliers will be the first modern arts museum and gallery of Turkey. The building obtained by additional new 9.300 sq m-building has a total internal floor area of 13.000 sq m including;

- exhibition areas
- foyer
- multifunctional hall
- administrative units
- working ateliers
- library
- archives
- selling units
- work of art maintenance ateliers
- technical services.



Figure B.3. The model of the museum.



Figure B.4. The model of the museum.