REGENERATION PROBLEM OF THE MALTEPE GAS AND ELECTRIC FACTORY LANDSCAPE WITHIN THE CONTEXT OF CONSERVING THE INDUSTRIAL ARCHAEOLOGICAL HERITAGE

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Approval of the Graduate School of Natural and Applied Sciences

Prof. Dr. Canan Özgen
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science in Urban Design

Prof. Dr. Ali Türel
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science in Urban Design.

Assist. Prof. Dr. Adnan Barlas
Supervisor

Examining Committee Members

Prof. Dr. Sevgi Aktüre (METU, CRP) _____

Assist. Prof. Dr. Adnan Barlas (METU, CRP) _____

Assoc. Prof. Dr. Baykan Günay (METU, CRP) _____

Assoc. Prof. Dr. Ali Cengizkan (METU, ARCH) _____

Assoc. Prof. Dr. Güven A. Sargın (METU, ARCH) _____

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Yücel Can Severcan

ABSTRACT

REGENERATION PROBLEM OF THE MALTEPE GAS AND ELECTRIC FACTORY LANDSCAPE WITHIN THE CONTEXT OF CONSERVING THE INDUSTRIAL ARCHAEOLOGICAL HERITAGE

SEVERCAN, Yücel Can
M.S. in Urban Design, Department of City and Regional Planning
Supervisor: Assist. Prof. Adnan BARLAS
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For long, industrial archaeological buildings were perceived as unaesthetic objects abandoned at the core of cities, inhibiting spatial and economic development. Much of the industrial heritage were demolished under the “modernization” discourses of the governments, and as the effects of urbanization and globalization movements. However, especially after the mid-20th century, the issue of conserving the industrial heritage, which was initiated as a disciplinary movement, caused to a change of the mentality in developed societies, which aimed the demolishment of these buildings. In these societies many developments occurred for conserving the industrial heritage. Today, many nations perceive this heritage as a tool of social, spatial and economic development of cities.

On the other hand, Maltepe Gas and Electric Factory, which was listed in 1991, still cannot be regenerated since this date. The main aim of this thesis is to clarify the problems that lie behind the conservation problem of Maltepe Gas and Electric

Factory landscape, and to propose solutions for the regeneration of the site. The thesis, also aims to put forth the industrial archaeological history of Ankara, to emphasize the significance of this industrial complex. In doing so, after designationg the industrialization history of the city, industrial-spatial evolution of the Maltepe Gas and Electric Factory had been discussed. Then, after clarifying the problems that threaten the regeneration of the landscape, solutions were seeked from the experiences of post-industrial countries. At the end of the thesis, based on the local context, a solution is proposed for the regeneration of the landscape in the framework of conserving the industrial archaeological heritage.

Key words: conservation of the industrial archaeological heritage, regeneration of the industrial landscapes, downtown regeneration/revitalization, process design

ÖZ

SANAYİ ARKEOLOJİSİ MİRASININ KORUNMASI KAPSAMINDA MALTEPE HAVAGAZI VE ELEKTRİK FABRİKASI ALANININ DÖNÜŞÜM SORUNSALI

SEVERCAN, Yücel Can
Yüksek Lisans, Şehir ve Bölge Planlama-Kentsel Tasarım
Tez Yöneticisi: Yrd. Doç. Dr. Adnan BARLAS
Ocak 2006, 244 sayfa

Uzun yıllar boyu, sanayi arkeolojisi yapıları kentlerin merkezinde terkedilmiş, estetik görüntüsü olmayan, mekansal ve ekonomik gelişimi engelleyen nesneler olarak görülmüştür. Pek çok sanayi mirası, küreselleşme ve kentleşme hareketlerinin sonucu olarak, ve de hükümetlerin "modernite" söylemleri altında yıkıldı. Fakat, özellikle 20. yüzyıl ortalarında bir disiplin olarak başlayan sanayi mirasının korunması konusu, yine özellikle gelişmiş sanayi-sonrası toplumlardaki yıkıcı zihniyetin değişimine neden oldu. Bu toplumlarda sanayi mirasının korunmasına işikin pek çok adım atıldı. Bugün pek çok ülke kentlerdeki sosyal, mekansal ve ekonomik dönüşümünün aracı olara bu mirası görüyor.

Maltepe Havagazı ve Elektrik Fabrikası ise tescil kararının alındığı 1991 senesinden bu yana hala dönüşemeyen bir alan niteliğindedir. Bu tezin ana amacı

Maltepe Havagazı ve Elektrik Fabrikası alanının dönüşememesinin altında yatan nedenleri saptamak, ve alanın dönüşümü için çözüm önerileri getirmektir. Tez aynı zamanda Ankara'nın endüstri tarihini ve bu alanın önemini ortaya koymayı amaçlar. Bu kapsamda, tezde Ankara'nın endüstrileşme tarihinden sonra Maltepe Havagazı ve Elektrik Fabrikasının endüstriyel-mekansal gelişimi tartışıldı. Daha sonra, alanın dönüşümünü engelleyen sorunlar araştırıldı ve bu problemlere çözüm önerileri getirmek amacıyla sanayi-sonrası ülkelerin deneyimleri belirtildi. Tez sonunda, yerel koşullar bağlamında ve sanayi arkeolojisi mirasının korunması çerçevesinde alanın dönüşümü için çözüm önerileri geliştirildi.

Anahtar kelimeler: sanayi arkeolojisi mirasının korunması, sanayi alanlarının dönüşümü, kent merkezlerinin dönüşümü/canlandırılması, süreç tasarımı

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TABLE OF CONTENTS

LIST OF TABLES

TABLES

LIST OF FIGURES

FIGURES

CHAPTER 1

1. INTRODUCTION

Space is not a "reflection of the society", it is society...[1] It represents the society, which created and consumed it. In addition to being a consumption commodity, space organizes and guides the society. Unfortunately, safeguarding the symbols, which give the educative and guiding character of spaces, becomes more difficult than ever. The consumers and creators of this rational world, who become the captives of the consumption patterns and ideologies, and aim to create the most profitable, prestigious and image making commodity,[2] begin to de-individualize. Consequently, they start to herd the tragic aim of destroying the old, which they deem needless and unaesthetic.[3] Many spaces helping to the individuation of rationalizing individuals are demolished during the urbanization and modernization processes of cities. City walls, traditional housings, waterfront areas, streets and squares, all symbols that belong to the public individual and his/her memories begin to atrophy. Once cities were the stages upon which the drama of communal life unfolded[4], and where public and private rituals were performed, while today, unfortunately, they have become spaces of consumption, which isolate the individuals from their "self". Industrial heritage is one of the victims of these consumption patterns.

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[1] Castells, M. (1983), **The City and the Grass Roots**, University of California Press, Berkeley and Los Angeles, pp. 4 (Cited in Soja, E. W. (2000), "Postmetropolis: Critical Studies of Cities and Regions", Blackwell Publishers, Massachusetts, pp. 95)

[2] Baudrillard, J. (1996), **The System of Objects**, Verso, London; Yirtici, H. (2002), **Tüketimin Mekansal Örgütlenmesinin İdeolojisi**, in *Mimarlık ve Tüketim*, Boyut Yayınları, İstanbul

[3] Erder, C. (1986), **Our Architectural Heritage: from Consciousness to Conservation**, UNESCO, Paris

[4] Carr, S., Francis, M, Rivlin, L. G., and Stone, A. M. (1992), **Public Space**, Cambridge University Press, New York, pp. 3)

For long, industrial landscapes were perceived as wastelands and slum areas, located at the cores of cities. Like any other modern's heritage, due to their unaesthetic visual vocabulary, high conservation costs and, by and large, due to their remarkably short age value, a majority of them were transformed into recreational, amenity, residential, commercial and business spaces.

However, after the mid-20th century, first with an increase in the awareness of cultural objects, and then of the industrial archaeological heritages, sympathy for the necessity to preserve industrial buildings, structures and landscapes eventually developed. It was soon perceived that industrial heritages could be crucial tools for regenerating societies, socio-economic conditions and urban spaces. Many developments in the issue of conserving the industrial heritage occurred in the legal, finance and management areas. Hence, while awaiting their destinies, especially in conscious societies, they started to be seen as a remedy to urban problems, and as a catalyst, that could regenerate their degenerated socio-spatial environment.

Today, the destruction of industrial heritages continues. Especially in underdeveloped countries, where an awareness for conserving the "shared" heritage of societies has not yet generated, many industrial remnants are being destroyed for the sake of opening up fresh room for the accumulation of capital. The Maltepe Gas and Electric Factory in the Maltepe District of Ankara is one of the last survivals that is in danger of being destroyed by modern society.

1.1. Definition of the Problem

Because it has industrial archaeological, architectural, technological, historical and cultural values, the landscape of the Maltepe Gas and Electric Factory has a unique importance. The buildings within the site represent the construction techniques and architectural vocabulary of the machine age dominating a period of human history. Besides their architectural-historical value, with their symbolic and monumental appearance, they not only help the city make legible, but also help generate a collective memory among the citizens. Indeed, the Maltepe Gas and Electric Factory,

for long, was the image of the city. With its cranes, chimneys, gasholders and furnaces, the factories could be perceived from great distances. An important part of the society's life took place in these factories. The landscape was one of the most concrete forms of the rationalizing and modernizing society. It was a symbol of the capitalistic life style. Furthermore, the development of the landscape played a leading role in the industrial history and the urbanization of the city. Most important of all, the site is one of the last witnesses to the Early Republic Period, which achieved to survive. The factories were a symbol of the modernization policies of the new government. Their presence signified social, spatial and economic development.

After the closure of the Electric Factory in 1983, and the Gas Factory in 1989, the landscape of the Maltepe Gas and Electric Factory was subjected to various regeneration decisions. Some aimed to demolish the industrial remnants and make prestigious new spaces of consumption, while some, on the other hand, emphasized the industrial archaeological importance of the site. Consequently, the Board of Preservation of Ankara eventually, in the year 1991, listed part of the buildings in the landscape.

However, from the listing decision of the Board until today, neither any regeneration in the landscape nor any conservation of the buildings and structures has occurred. Thus, today, the Maltepe Gas and Electric Factory site is perceived as an industrial slum, located in the downtown area of the city. This thesis deals with the regeneration problem of the Maltepe Gas and Electric Factory landscape.

1.2. Scope, Objective and the Configuration of the Thesis

The main aim of this thesis is to clarify the issues that lie behind the regeneration problem of the Maltepe Gas and Electric Factory landscape, and to propose solutions to these problems.

This thesis approaches the problem from the framework of the "industrial archaeology" discipline. This discipline aims to study the material culture of the

industrial production processes of the past, including the products of human ingenuity, enterprises, compassion or greed as physical expressions of human behaviors such as factories, manufactories, workshops, houses and machines of previous civilizations.[5] Therefore, this thesis will approach the problem area as a heritage that should be conserved.

In order to reach a conclusion for the regeneration of the landscape, and thus to evaluate the urban dynamics and patterns of Ankara, this thesis further approaches the problem from an urban design perspective. This perspective assists the evaluation of the landscape as part of an organic structure, the city, and as a part of a broader system, which is comprised of legal, historical, social, cultural, spatial and economic patterns. It will also help the constitution of a process design scheme, which would initiate the starting of a planned conservation process within the landscape of the Maltepe Gas and Electric Factory.

The thesis begins with a definition of the problem area. Then, within the framework of the industrial archaeology discipline, a comprehensive industrial history of the city, and an extensive documentation of the industrial heritage of Ankara will be outlined, starting from the 16th century to the mid 20th century. This research aims to signify the industrial-historical and industrial-archaeological position of the landscape of the Maltepe Gas and Electric Factory, and therefore, is important for examining the site from an historical perspective. Furthermore, in order to reach a sustainable conservation solution, besides the present position of the problem area with respect to other industrial survivals of Ankara, major opportunities for and threats to the conservation of industrial heritages will also be discussed from an urban design perspective. Thus, based on the land values and important urban functions positioned near the problem area, a contextual socio-spatial and economic analysis will try to be made.

[5] Palmer, M. and Neaverson, P. (1998), Palmer, M. and Neaverson Peter (1998), "**Industrial Archaeology: Principles and** Practice", Routledge, London and New York; Smith, D. (1965), "**Industrial Archaeology of the East Midlands**", Dawlish: David & Charles (Cited in Palmer, M. and Neaverson, P. (1998): 14)

In Chapter 3, a comprehensive story of the industrialization and degeneration of the Maltepe Gas and Electric Factories will be introduced. The chapter starts with a comprehensive evaluation of the site in terms of its industrial-historical and industrial-spatial features. The aim of this section is not only to emphasize the industrial and historical importance of the site, but also to emphasize the identity of gas and electric factories, which would be an important aspect of the conservation process. In this context, a comprehensive documentation of the buildings and structures is provided within this chapter. Furthermore, after clarifying the industrial importance and the spatial evolution of the site, in order to clarify the factors that led to the formation of the regeneration problem of the landscape, the reasons behind the closure and abandonment of the industrial production spaces will be discussed. As well, the time interval between the closure of the factories and the decision for listing some of the industrial buildings and structures within the site will be examined. In this section, in addition to the spatial and functional transformations that occurred within the problem site, the participation of different actors in the regeneration process and their motives concerning the future state of the site will be outlined. Finally, the chapter ends with a discussion of the period, beginning with the listing of some buildings in 1991 until today, in which no attempt for the conservation of the landscape was made. The main aim of this section is to outline every development related to the regeneration of the landscape step by step, and thus to define the major reasons which lie behind the regeneration problem of the Maltepe Gas and Electric Factory landscape, in order to find remedies to this problem.

The next chapter deals with the present situation of the site from a spatial perspective. This chapter aims to examine the Maltepe Gas and Electric Factory landscape from an urban design context. It aims to state the last situation of the listed buildings, which have been decaying since the factories stopped operating. In this context, within this chapter, the whole landscape will be evaluated in terms of its borders, accessibility, solids and voids and building typology. Furthermore, in order to understand the potentials for and threats to the conservation of the landscape, the technical analysis and the last situation of the site in terms of its survived industrial heritage will be stated, based on the official commission reports. The consideration

of these points during the preparation process of a conservation plan is not only essential for the sustainability of the landscape, but also essential for considering a proper function, management and funding model for the site.

In Chapter 5, the approaches of western post-industrial countries to industrial survivals will be discussed. The main aim of this chapter is to define different methods, models and tools that may be used for the salvation of industrial heritages, and in this way to constitute a guideline for the conservation of the industrial landscape of the Maltepe Gas and Electric Factory.

Finally, in Chapter 6, after a brief clarification of the main factors which lie behind the conservation problem of the Maltepe Gas and Electric Factory, a solution for the regeneration of the site will be proposed, based on the experiences of the western post-industrial countries and on the local context of the focused problem area.

CHAPTER 2

2. DEFINITION AND SPATIAL CONTEXT OF THE PROBLEM AREA

2.1. Definition of the Problem Area

Maltepe Gas and Electric Factory landscape is located in the Maltepe District of Ankara, specifically within the area called "Atölyeler Arkası"[6]. Due to its' position, Atölyeler Arkası has a strategic importance within the urban macro-form. It is located in the northern side of the district, on the Gazi Mustafa Kemal Boulevard, and surrounded by Konya Highway in the West, Sıhhiye Bridge in the East, and Ankara Railway Station, its maintenance workshops and the railway lines in the North. The area provides recreational, social and cultural uses between important zones of the city such as Gençlik Parkı, Atatürk Orman Çiftiliği, which are the two most important public open spaces of the city, Kızılay square and Ankara Railway Station. Furthermore, the area has a special importance within the industrialization history of the city. It involves several industrial survivals that are perceived as an important potential for triggering social, cultural, economic and physical regeneration among the neighborhood, and even for the whole city.

Maltepe Gas and Electric Factory landscape is located within Atölyeler Arkası. It is comprised of an electric and gas factory, an their related industrial archaeological buildings and structures. Since the origin of the factories date back to the end of the 1920s during which a new life style and a new hope for a

[6] Atölyeler Arkası is commonly known as the "backyard" of the Maltepe district

better future was projected within the nation with the foundation of the Republic in 1923, the site can be denoted as an "industrial archaeological landscape".

Fig. 1: Maltepe Gas and Electric Factory landscape. Shaded region represents the problem area, which is the focus of this thesis
Source: Greater Ankara City Municipality Archives, 7369-1

Maltepe Gas and Electric Factory landscape is surrounded by Gazi Mustafa Kemal Boulevard in the South, Tok Sokak in the West, Celal Bayar Boulevard in the North, and Toros Sokak in the East. The site, today, is 58,270 m^2 in area and contains buildings that were once specially built for serving the gas and electricity need of the town. The site includes not only production spaces, but also other participants of this history such as warehouses, administrative and labor's housing units. This thesis aims to focus on the whole landscape, within an industrial archaeological perspective, due to the close spatial, functional and social relationship of Electric Factory and Gas Factory areas. On the other hand, the area that is located at the disjunction point of Gazi Mustafa Kemal Boulevard and Toros Street, which is used

as a multi-storey car park and subscription department of EGO at present, is not the focus of this thesis due the fact that this area has never been part of the industrial history of the Maltepe Gas and Electric Factory landscape.

2.2. Industrial Context Gas and Electric Factories

2.2.1. Industrial Developments before the Foundation of the Republic

From the 16th to the 18th century, Ankara was the most important industrial and trade center of the region. This importance came not only from its' being an important Ahi center, but also from its central location of being on the major crossroads and caravan roads of the province.[7] During this period, the industrial production of the city was mainly dependent on stockbreeding. Stockbreeding industry had two major outcomes on the city in terms of trade and industrial production. One of these outcomes was the "soft wool" (soft) and "shawl" weaving, and the other was leather trade.

Ankara with its "soft wool" and "shawl" weaving had a global reputation within this period and was the monopoly power in the globe. The reputation of these items was based on two important factors: the uniqueness of the raw material used, and the environmental factors. In fact, the Angora goat, or as usually called mohair, was merely specific to this region. Both Şimşir (1988)[8] and French (1992)[9], in their publications emphasized the specialty and uniqueness of the Angora goat, which made Ankara favorable for the merchants within this period. They marked that the perfectness of the mohair breeding in Ankara, was the result of the city's unique vegetation and atmospheric conditions (Fig. 2). Thus, based on the statements of

[7] A further causality expressed by Tekeli was that, Ankara was in a geographically and climatically advantageous position when compared with the other cities within the region. According to Tekeli, rich water resources, defense opportunities and climatic features due to its topographical characteristics made the city favorable for being an industrial and trade center in addition to its road network opportunities (Cited in Tekeli, İ. (1982), "**Başkent Ankara'nın Öyküsü**", in "Türkiye'de Kentleşme Yazıları", Turhan Kitabevi Yayınları, Ankara, pp. 50)

[8] Şimşir, B. N. (1988), "**Ankara... Ankara: Bir Başkentin Doğuşu**", Bilgi Yayınevi, Ankara, pp.23-24

[9] French, D. H. (1992), "**Yün Ticareti ve Ankara'da İngiliz Tüccarlar**", Ankara Dergisi, Ocak 1992, Cilt:1, Sayı:3, pp.29-31

Cuinet (1890-1895) and Yavuz (2000), in 1590 there were 621 units, and until the 17th century, there were approximately 1000 units of looms in Ankara that were used in "soft" production.[10] Since the wool and textiles produced in these looms were high in amount, the British, Venetian, French and Dutch merchants generally imported them to Western Europe until the 18th century.[11]

Fig. 2: An old picture of Ankara drawen by Semavi Eyice, showing the traditional industrial production process of soft wool. Soft wool production begins within a household-scale and continues within the looms. The basic tool for weaving the mohair was a spindle machine. This weaving process was generally done in houses by the woman labor, which was later sold out to the market by the male-members of the household.
Source: Aktüre, S.: Archives; Aktüre, S. (1978), "**19. Yüzyıl Sonunda Anadolu Kenti Mekansal Yapı Çözümlemesi**", ODTÜ Mimarlık Fakültesi Baskı Atölyesi, Ankara, pp. 114, 124

The industrial relations within the city during this period also reflected on the cityscape. In contrast to the assumptions of some industrial historians, the spatial

[10] Cuinet, V. (1890-1895), "**La Turquie d'Asie**", E. Leroux, Paris (Cited in Aktüre, S. (1978), "19. Yüzyıl Sonunda Anadolu Kenti Mekansal Yapı Çözümlemesi", ODTÜ Mimarlık Fakültesi Baskı Atölyesi, Ankara, pp.114) Yavuz, E. (2000), "**19. Yüzyıl Ankara'sında Ekonomik Hayatın Örgütlenmesi ve Kentiçi Sosyal Yapı**", in Yavuz, Y. (ed.) (2000), "Tarih İçinde Ankara I", Proceedings of the seminar held in 1981, ODTÜ Mimarlık Fakültesi Yayınları, pp.197)
[11] French, D. H. (1992): 29-31; Yavuz, E. (2000): 196

allocation of the traditional industry in Ankara between the 16th and mid-19th century was not dispersed within the urban space, but instead were well organized. Aktüre (1978) revealed that: "at the time, there were many different types of industrial production activities that were located around Bentderesi"[12], and supported in terms of labor force by the residential areas surrounding them.[13] Aktüre (1978) suggested that, while leather production spaces were clustered in the northern side of the city and adjacent to the river, within the Debbağlar (Tannery) District, soft wool production was concentrated in the northwest side and facing the river, within the Avancıklar District (Fig. 3).

In the 19th century, there was an enormous decline in textile trade in the city. According to Aktüre (1978), the number of looms in 1827 within the city dropped to 546, which was 621 in 1590, and at the end of the century this number made a further exalted drop, during which the total number of looms was only 1 or 2 units.[14] One of the most obvious reasons of this decline was the global changes in trade arena. The development of the cotton and wool weaving industry in Britain after the 18th century had an important role in this decline.[15] Furthermore, according to Yavuz (2000), the inner disorder and the authority gap within the country had negatively affected the trade relations in the Anatolia region. Consequently, the importance of the city in the trade arena diminished and European merchants started to leave the city.[16] As a conclusion, although Armenians and Greeks initially filled the production gap of mohair, Hamilton states that the monopoly of goat production was later transferred to Muslims in the 1820s, causing a decrease in the production rate of goat and mohair in the end.[17]

[12] A river passing through Ankara
[13] Aktüre, S. (1978), "**19. Yüzyıl Sonunda Anadolu Kenti Mekansal Yapı Çözümlemesi**", ODTÜ Mimarlık Fakültesi Baskı Atölyesi, Ankara, pp. 114
[14] Aktüre, S. (1978): 122-123
[15] Yavuz, E. (2000): 197
[16] Yavuz, E. (2000): 197
[17] Hamilton, W. (1842), **Researches in Asia Minor, Pontus and Armenia**", John Murray, London, pp.418 (Cited Yavuz, E. (2000): 197)

Fig. 3: The map showing the distribution of urban function within Ankara in the 16th century. According to this map, which was drawn by Aktüre (1978), the area denoted with wide cross hatches in the northern side of the city shows the Debbağlar (Tannery) District, where leather production was made, and the area denoted with dense cross hatches shows the Avancıklar District, where soft wool production was made.

Source: Aktüre, S. (1978), "**19. Yüzyıl Sonunda Anadolu Kenti Mekansal Yapı Çözümlemesi**", ODTÜ Mimarlık Fakültesi Baskı Atölyesi, Ankara, pp. 119

Until the end of the 19th century, Ankara' s industrial production was mostly dependent on traditional techniques functioning with organic power. In this sense, the only factory using machinery production was the printing house, constructed in 1869. Nevertheless, due to the wide usage of machinery in the industrial production in western countries, the local production spaces that used conventional techniques

could not compete with the modern ones. Furthermore, the development within the cotton and wool industry in USA, and especially in Britain, caused a surplus in industrial production. This surplus forced western industrially developed countries to enter the Ottoman Empire's bazaar. As a result, since the costs of imported textile products were much cheaper than the locally produced ones, the number of looms in Ankara started to drop.

Another stroke to the local wool production came with the Trade Agreement signed in 1838.[18] This agreement stipulates the export of the mohair directly to foreign countries. Until the 1890s, the Angora goat was exported to many countries including France, America, Australia and South Africa. Although the undertakings in goat production resulted in negative results in America, Australia and France, studies carried out in South Africa showed that a similar production rate and quality with that of Ankara could be achieved.[19] Unfortunately, this achievement of South Africa, not only demolished the monopoly of the city in mohair production, but also for this reason had devastating effects on the inner market mechanism. According to Yavuz (2000) the exporting of mohair to the European countries in more favorable conditions and in more growing numbers made its usage within the inner market more expensive, and thus resulted in the closure of looms.[20] Indeed, British consolers during those years reported that the industrial production and craft-making industry were very scarce in quantity, the guild of tradesmen were disappeared, and the city was insufficient even for producing its own cloths.[21]

Despite the decline in the wool production of the city, in the end of the 1800s, an important event occurred and shaped the industrial history of Ankara. Istanbul, which was the capital of the Ottoman Empire at the period, was suffering from locally produced agricultural products. The economic relations of the city were weak with

[18] Yavuz, E. (2000): 197
[19] Yavuz, E. (2000): 199
[20] In 1827, there were 565 shawl and broadcloth seller (Cited in Ongan, H. (1957), "**Ankara'nın Eski Esnafını Açıklayan Bir Vesika**", Türk Etnografya Dergisi, Sayı 2, pp.58), and in 1890s only one loom remained within Ankara (Cited in Cuinet, V. (1982), "**La Turquie d'Asie, Geographie administrative statistique, descriptive et raissonne de chaque province de I'asic Mineure**", Ernest Leroux, Paris, Vol. I, pp.283)
[21] British Parliamentary Papers, (Papers and Accounts), "**Consular Reports from Angora for the year 1891 and 1893**", pp.8 (Cited in Ortaylı, İ. (2000): 210)

Anatolia. For this reason, most of the grain was imported from Russia, Romania and Bulgaria at high levels of cost.[22] These economic circumstances, finally led to a political shift for the encouragement of the development of locally produced agricultural crops, and thus maintaining the grain demand from the inner market instead of importing them.

Fig. 4: Railway network system within the nation at the beginning of the 20th century. The map shows foreign initiatives that were responsible for the construction process.

Source: Ortaylı, İ. (2000), "**19. Yüzyıl Ankara'sında Ekonomik Hayatın Örgütlenmesi ve Kentiçi Sosyal Yapı**", in Yavuz, Y. (ed.) (2000), "Tarih İçinde Ankara I", Proceedings of the seminar held in 1981, ODTÜ Mimarlık Fakültesi Yayınları, pp. 218

However, the infrastructure and transportation services within Anatolia to foster agricultural production, was very poor in condition. The only way of transporting the goods at the time was by using organic power on the poor quality road networks. This primitive transportation process hindered the industrial development of the city for many centuries. The Ottoman Government, on the other hand, knew that agricultural production within Anatolia could be increased if and only if transportation and infrastructure services were provided to the region.[23] Therefore, in

[22] Yavuz, E. (2000): 201

[23] The Newspaper of Ankara Province published in October 20, 1885, contained a petition, which was written by the citizens of Ankara to the ruler of the Empire (called as padişah) and to the Dahiliye Nezareti. According to this petition, the citizens marked that the economic development of the city and Empire can only be achieved by the arrival of the railway to the city (Ankara, Nr. 641,3 1885, pp.1-2, Cited in Ortaylı, İ. (2000): 207)

1888 a special privilege was given to Alfred Kaulla for expanding the railway lines from Izmit to Ankara, as part of the Railway project that aimed to connect Istanbul to the Basra Gulf. In the end, in 1892, the first stage of the Project was completed, and the railroad eventually reached Ankara. The railway line, which was 485 km in length and consisted from 16 tunnels and many bridges, was the product of German initiative and technique.[24]

Fig. 5: The first railway station of Ankara. The building was built in 1892 and demolished in 1935. Source: Berggren, G., İDAI (R29.266) (Cited in Cengizkan, A. (2004), "**Ankara'nın İlk Planı 1924-25 Lörcher Planı**", Ankara Enstitüsü Vakfı, pp. 17)

The first impact of the railway connection to Ankara is the extension of agricultural production areas (Fig. 6). Indeed, at the beginning, while only 34,000 tons of grains were transported to other regions from Ankara by the railway connection, ten years later, this amount was increased to 187,000 tons.[25] However, in contrast to the initial expectations about the beneficial results of the railway project on the city, Yavuz, Ortaylı and Tekeli stated that besides the increase in agricultural production, the

[24] Ortaylı, İ. (2000): 207
[25] Yavuz, E. (2000): 202

impact of the railway on the city was very weak.[26] According to Ortaylı (2000), one of the basic reasons of this weakness came from the project itself. She stated that, due to the feeble connection of Basra with the important harbors and production centers of the Empire, Ankara could not become an important trade and industrial center, and remained as a collection node.[27] Furthermore, according to Ortaylı (2000), the quality, flexibility and the bearing capacity of the railway lines were insufficient for heavy transportations.[28] This caused the continuation of camel usage as a transportation vehicle, and thus, the limitation of the development of trade and industrial landscapes within the cityscape.[29] As a consequence, Ankara, besides its railway connection, had only a flour factory, which was obtaining its energy from a mill working with steam power.[30]

On the other hand, the arrival of the railway to Ankara was a cornerstone in the development of industrial production activities, and of the usage of machinery for industrial production. Yıldırım (2001) states that at the beginning of the 1900's, in addition to many new printing houses, there were 4 flour factories, 9 tile factories and 7 oil factories in Ankara.[31] However, he suggested that the starting point of the industrial production era within Ankara was not the arrival of the railway, but the move of the plants established for the munition need of the army from Eskişehir to the barracks located in the western part of the Ankara Railway Station area in 1921.[32] Indeed, arrival of the railway to Ankara never had drastic socio-economical, spatial and environmental consequences on the city like the ones that occurred in Great Britain in the same century. Even after the foundation of the Republic, as will be mentioned in the following chapter, when the industrial developments were encouraged by the new government, the city had not been exposed to the outcomes

[26] Yavuz, E. (2000): 202; Ortaylı, İ. (2000): 208; Tekeli, İ. (1973), "**Evolution of Spatial Organisation in the Ottoman Empire and Turkish Republic**" (Cited in Brown, C. L. (ed.), "From Medina to Metropolis", The Darwin Press, Princeton, New Jersey, pp.244-277)
[27] Ortaylı, İ. (2000): 208-217
[28] Ortaylı, İ. (2000): 208-217
[29] Ortaylı, İ. (2000): 208-217
[30] This flour factory was located within the Railway Station area and had been the only factory of the city until the First World War (Ortaylı, İ. (2000): 213)
[31] Yıldırım, H. (2001), "**Ankara Sanayiinin Gelişimi ve Mevcut Potansiyeli**", in Yavuz, Y. (ed.) (2001), "Tarih İçinde Ankara II", Proceedings of the seminar held in 1998, ODTÜ Mimarlık Fakültesi Yayınları, pp.3)
[32] Yıldırım, H (2001): 3

of industrialization seen in those western countries. Although the city attracted many labor force from all over the country with the industrial and agricultural developments, there never occurred an environmental and social problem until the foundation of the Republic.[33]

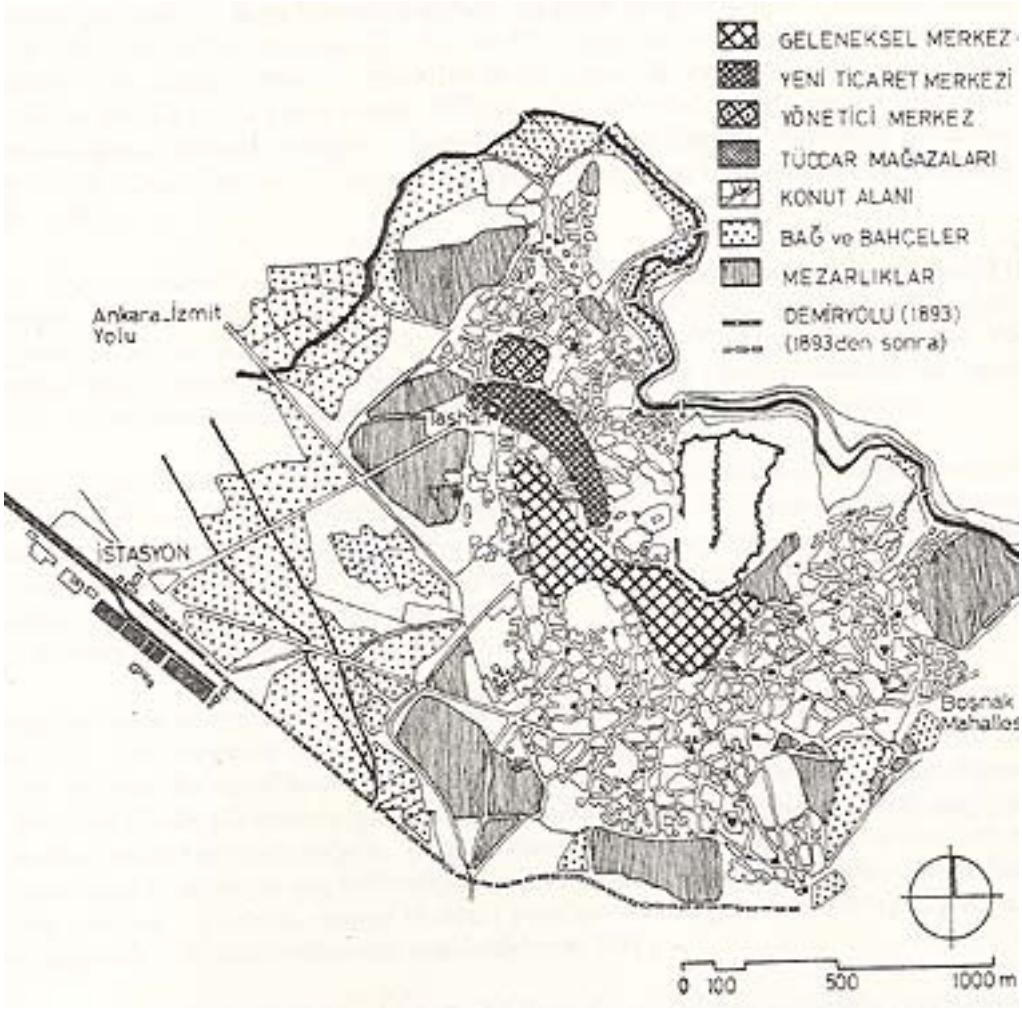

Fig. 6: The map showing the change in the macro-form of the city and the re-allocation of urban functions within the cityscape after the arrival of the railway system. According to this map, which was drawn by Aktüre (1978), the soft wool and leather production spaces within the northern and north-west part of the city were totally vanished, and instead agricultural production lands were emerged at the southern part of the city, at around the new Station area. Source: Aktüre, S. (1978): 126

[33] One of the best expressions, which demonstrate the socio-economic changes that occurred within the city after the arrival of railway to Ankara, came from Ortaylı (2000). She stated that after the arrival of the railway to the city, the upper class society within the city and its environment remained unchanged. In other words, as expressed by Ortaylı: "*the city was perpetuating its life with its*

It should be noted, however, that the site choosing criteria of the industrial production spaces after the arrival of the railway to the city changed significantly. In order to allow the transportation of raw materials and industrial outputs, many factories constructed after 1892 started to be built around the railway lines and close to the railway station, like the bones of a spine.

Fig. 7: A plant established in Ankara for the munition need of the army (1921)
Source: Özel, M. (ed.) (1991), "**Ankara Album**", Ministry of Culture, General Directorate of Fine Arts

Fig. 8: A view inside of the plant established for the munition need of the army (1921)
Source: Özel, M. (ed.) (1991), "**Ankara Album**", Ministry of Culture, General Directorate

When considering all of the essential factors that affected the site choosing criteria of the industrial establishments, however, it would be misleading to state that the railway was the only factor. The old trade road connecting the old city center, Ulus, to the Station, and the rivers, which supplied the energy required for the functioning of the mills, were the other important factors for a site choosing process. However, until the beginning of the 20th century, since the city was deprived of a comprehensive plan designating the development areas for industrial uses, besides their clustering tendency around the main energy, transportation and labor sources, factories were located randomly within the urban macro-form.

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traditional structure, traditions, and with its same wealthy and poor social classes" (Cited in Ortaylı, İ. (2000): 216-217)

2.2.2. Industrial Developments after the Foundation of the Republic (1923-1950s)

Ankara had never become an industrial city.[34] Even, thirty years after the arrival of the railway to the city, besides a few attempts of industrial developments, Ankara could not manage to industrialize at a sufficient level. According to Manisalı (1982), there were four basic reasons that threatened the development of industrial activities within the Empire at the beginning of the 1920s:[35]

- Economic, governmental and technical impossibilities of the Empire
- Foreign domination in the economic arena
- Capitulations, which cause the prevention of an implementation for a foreign commerce policy, forcing the Empire to be as the open-market of industrialized western countries
- Existence of the Balkan War, First World War and War of Independence, which caused the ceasing of industrial activities.

During this period, generally, political forces shaped the industrial initiatives in Ankara. The function of İstanbul as a government center of the Ottoman Empire was weak at the time. The country was under military occupation and the co-operation within the nation was poor. Worst of all, the İstanbul government was working as a collaborator with the foreign forces and threatening the sustainability of the nation. Under these circumstances, in which the destiny of the country was obscure, a new government assembly was informally constructed in Ankara in April 1920. The first aim of the new government was to save the native country from the foreign domination. In this sense, during the 1920-22 period, the allocation of economic resources was organized according to the demand of the army.[36] Therefore, first a cannon munition factory was constructed in Kırıkkale, a city that is 77 km away from

[34] Bademli, R. (1985), "**Sanayinin Yerseçimi Süreçleri**" (Cited in ODTÜ Şehir ve Bölge Planlama Çalışma Grubu, Ankara: 1985'den 2015'e, Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü)
[35] Manisalı, E. (1982), "**Gelişme Ekonomisi**", Ar Yayın Dağıtım, İstanbul, pp.212
[36] İnan, A. (1972), "**Devletçilik İlkesi ve Türkiye Cumhuriyetinin Birinci Sanayi Planı**", Türk Tarih Kurumu Basınevi, Ankara, pp.8

Ankara, in the year 1923. Afterwards, a cartridge factory was constructed in the same year within the western part of the İstasyon region.[37]

When the salvation of the native country after the War of Independence was concluded with success, the domination of the Ottoman Empire was ended. As a consequence, a new nation was founded on October 29, 1923 under the name of the Republic of Turkey.

The first accomplishment of this new government was to choose a new capital that will represent the nation within the global arena. With this capital, the government aimed to symbolize its modern policies by designing a modern city, and to control the whole country from an advantageous geographical position (Fig. 9).[38] Therefore, with a strategic decision Ankara was declared as the new capital of the Republic in October 13, 1923. Hence, the modern industrial history of Ankara was also started with this important declaration.

Fig. 9: Railway network system within the nation in 1938. According to the map, while the dotted lines show the railway lines, which were constructed before the foundation of the Republic, the continuous lines denote the railway lines, which were newly managed.

Source: İnan, A. (1972), "**Devletçilik İlkesi ve Türkiye Cumhuriyetinin Birinci Sanayi Planı: 1933**", Türk Tarih Kurumu Basımevi, Ankara

[37] Cengizkan, A. (2001): 101

[38] Both Tekeli (1983) and Tankut (1993) put forth that Ankara was the optimum place for not only defensive, but also governmental purposes with its geographical position within the country and existing infrastructure services such as railway and telegraph

At the beginning of the 20th century, Ankara had a population of 20,000. Most of its housing stock was destroyed with fires that emerged in the First World War period. However, the intention of the new government was to reconstruct Ankara, in such a way that it will be able to compete with İstanbul's high population, rich history and cosmopolitan life style.[39] In other words, when the construction activities were completed, Ankara would be the most concrete phase of Atatürk's modernization reforms, and would symbolize the new modern and democratic life within the country (See Fig. 10 and 11).[40]

Following the declaration of Ankara as the capital, the urbanization speed of the city increased dramatically. In order to foster the planned development of the city, the government of Ankara decided to adapt the same municipality structure in İstanbul, the İstanbul Şehremaneti. Following this restructuring, first Mehmet Ali Bey charged as the head of the Ankara Şehremaneti department in February 16, 1924. However, after four months, due to Mehmet Ali Bey's passivity in his duty,[41] Haydar Bey charged as the head of the same department in June 14, 1924. With the assignment of Haydar Bey to Ankara Şehramaneti, the foundation of the industrialization of Ankara was formally started.

Fig. 10: A view from the castle and the city in 1880
Source: Repro. from the G. Berggren, in İstanbul Alman Arkeolojisi Enstitüsü Harita ve Fotoğraf Arşivleri (Cited in Cengizkan, A. (2004): 16)

Fig. 11: New modern face of Ankara
Source: Özel, M. (ed.) (1991), "**Ankara Album**", Ministry of Culture, General Directorate of Fine Arts

[39] Tekeli, İ. (1982): 54
[40] Tankut, G. (1993): 15-22
[41] Ergin, N. (1927-8; 1996), "**İstanbul Şehreminleri**", pp.579 (Cited in Cengizkan A. (2004), "Ankara'nın İlk Planı: 1924-25 Lörcher Planı", Ankara Enstitüsü Vakfı, pp.97)

The government of Ankara was aware that economic independence could only be achieved by using and managing the local resources of the country. For the development of the country, this economic independence was as important as the political independence of the country [42]. The first attempt in succeeding economic independence was managed in the period of Haydar Bey. The urbanization speed was high and in the first stage of action, construction factories had to be built. In order to learn whether the production of cement, brick and tile could be possible by using Ankara's own soil resources, Haydar Bey went to Europe with several professionals.[43] When Haydar Bey returned to the city with the ordered machines and technicians from Europe, many brick, cement, tile, timber, lime, and electric factories, and housings for laborers were constructed on a wide hectare land.[44]

The development of the industrial initiatives within this period was not only encouraged by the attempts of individuals, but also by private enterprises. Indeed, the economic policy of the period aimed to give important positions to the private initiatives within the national economy and thus, allow them to handle the tasks that cannot be performed by the public sector.[45] Therefore, in order to foster the development of industrial activities several funding and management institutions were founded. Some of these institutions were: İş Bankası, which was founded in 1924 for providing loans to private initiatives, and Sanayi ve Maadin Bankası, which was founded in 1925 for giving credits to the private sector and for managing the factories. Moreover, in order to increase private initiative in the industrial sector and to increase funding opportunities in 1927 Teşvik-i Sanayi Yasası[46] was declared. As a consequence, many factories were built first in the Güvercinlik district[47], and then in the Maltepe district.[48]

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[42] İnan, A. (1972): 1
[43] Tekeli, İ (1982): 57
[44] Aslanoğlu, İ. (2001): 92-93; Tekeli, İ (1982): 57
[45] Aslanoğlu, İ. (2001): 18; see also Cengizkan A. (2004): 97-101. He states that Şehremaneti was in dept at the time, and for this reason large-scaled and costly projects could not be managed by using the State's budget only.
[46] A law published for providing public land to the private initiatives
[47] Güvercinlik District, which was also called as the 'kilometer 8', was decided to be the first industrial zone of the city
[48] Tekeli, İ. (1994), "**Ankara'da Tarih İçinde Sanayinin Gelişimi ve Mekansal Farklılaşması**" (Cited in Batur, E. (ed.) (1994), "Ankara Ankara", Yapı Kredi Yayınları, İstanbul, pp.178); EGO (1973): 9

In contrast to the initial attempts for encouraging the development of the industrial sector, it was observed that the government followed a doubtful policy to foreign investment in the 1920s.[49] However, this policy of the government soon ended. Foreign initiative constructed and managed many industrial establishments after 1927 with the Teşvik-i Sanayi Law, which was, according to Tekeli (1982), a cornerstone law for putting into existence the foreign initiatives.[50]

Several construction factories were built in the city due to the high urbanization rate.[51] However, housing was not the only problem of the government at the time. Ankara, as a capital city, needed a more modern and efficient Railway Station that would help the transportation of human and raw materials for industrial purposes. As a result, in 1926, a new station was constructed in Atatürk Orman Çiftiliği, which was commonly called the 'Gazi Çiftiliği İstasyon Binası' at the time (See Fig. 12).[52] Furthermore, in order to develop a modern capital, in addition to upper structures, the infrastructure needs of the city also required solving. For this aim, as a first step, Ankara Municipality built a small electric station in 1925 at Bentderesi, working with 50 HP (horse power).[53]

Unfortunately, the electric plant constructed at Bentderesi could only supply the energy need of the street lighting, the national assembly building and some government and municipality buildings. In other words, this initial plant was insufficient for supplying the demand of the whole city. As the population and macro-form of the city grew over time, a new electric plant was decided to be constructed in the Güvercinlik District.[54] For this aim, 3 units of 200 HP and 1 unit of 120 HP diesel electrode groups were ordered from a German firm called Deutz.

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[49] In order to solve the housing and infrastructure service problematique of the city, the government firstly contacted an American firm called "Ulen" in 1924. However, the aim of the government was to give only construction rights to the company, rather than giving the management rights as well. Thus, the doubtful approach of the government to foreign investment blocked the consultation with Ulen Company. (Archive Records of the Foreign Affairs of the United States of America, March 8, 1924, No: 1101, Cited in Tekeli, İ. (1982): 59)
[50] Tekeli, İ (1982): 59-60
[51] In 1928, with the cooperation of a French Firm with the Ankara Şehremaneti a Cement Factory was constructed (Aslanoğlu, İ. (2001): 93)
[52] Aslanoğlu, İ. (2001): 225
[53] Tekeli, İ. (1982): 59
[54] EGO (1973): 9

Fig. 12: The new Railroad Station and its surrounding in 1930
Source: VEKAM Archives (Cited in Ankara Chamber of Commerce (1998), "Ankara: From Past to the Present")

After the opening of one of these plants in the October of 1925, it was decided to abandon the functioning electric plant located at Bentderesi.[55] Furthermore, a second diesel group working with 200 HP, a third diesel group working with 200 HP, and finally a forth diesel group working with 120 HP started to function in the Güvercinlik District in March, April and June 1926, respectively.[56] Although the government had some further attempts for increasing the supply of electricity, including the allocation of a diesel group working with 650 HP to a temporary building in the Hipodrom area in June 1927, soon it was perceived that producing and distributing electric energy was yet a crucial problem of the city.[57] As a consequence, after the dehumidification of the southern lands of Ulus, which was a swamp area at the time, a new power station was built in 1928 within the Maltepe District.

[55] EGO (1973): 9
[56] EGO (1973): 9
[57] EGO (1973): 10

The electric plants constructed in Ankara were distinct from the ones constructed in Istanbul. In Istanbul, the electricity, gas and transportation power demand of the city were supplied from one plant called Gazhane. According to Cengizkan (2004), this type of plant, however, could not be constructed in Ankara because they required a lot of water for functioning. In this sense, Cengizkan (2004) asserted that the Tabakhane River, which supplied the water demand of the mill built in Maltepe District at the time, was insufficient to supply a further water demand that would come from an additional plant constructed in the region.[58] Therefore, separate plants were constructed in Ankara: one for supplying the electricity, and the other for supplying the gas demand of the city.

Apart from the electric and gas needs of the city, the water and sewage system of the city also needed to be solved. There was not a sewage system within the city before the declaration of Ankara as a capital city. Moreover, the water resources of the city had become scarce when compared with the increasing population. However, in order to create a modern capital, a healthy and aesthetic urban environment had to be constructed. For this reason, especially within the Asaf Bey period (11.27.1906-?), who was the third Şehremin of the Ankara Şehremaneti, first a sewage system was designed by the Reconnaissance company and then, in order to supply new water resources to the city the capacity of the water shafts were improved and a water dam was constructed in the Çubuk stream.[59]

The foundations of the Maltepe District becoming an industrial zone of the city were laid in the first ten years after the declaration of Ankara as the capital. In fact, besides the existence of electric plants, the Güvercinlik District had never developed properly as an Industrial Zone. The power plant, except for fostering the development of a cement factory built in 1926, and supplying a partial demand of the city's electricity need, had become useless in the development of the district as an industrial zone. The Maltepe district, on the other hand, in contrast to the Güvercinlik district, played the leading role in the industrial history of the city. This leading role comes from the fact that the district was the first planned industrial zone of Ankara,

[58] Cengizkan, A. (2004): 22
[59] Cengizkan, A. (2004): 100

designated first by Lörcher.[60] Lörcher, within the plans prepared for the old city Ulus in 1924, designed a plain land of 3 km long and 400 m wide within the Station area, in order to channel the future industrial developments.[61] Due to the closeness to the railway road, the old center and the urban growth area, according to Lörcher, the district was located in an advantageous area in terms of accessibility and storage purposes. These three reasons had also played important roles in the site choosing criteria of the district.[62] As a consequence, the district, once being designated in Lörcher's plan as an industrial zone, was first transformed from a swamp area into an industrial development zone in 1925 by Haydar Bey,[63] and later, with the continuance of the industrial allocation dynamics with the Jansen's plan, many factories were built within the Maltepe District (See Fig. 13 and 14).[64]

Jansen's proposals for the new industrial development zone showed great similarities with Lörcher's plan. However, different then Lörcher, Jansen evaluated environmental factors such as the north and east winds, the existing energy resources; such as the energy that would be distributed by the electric and gas factories at the district; and the accessibility, while choosing a place for industrial uses.[65] According to Jansen, the new industrial establishments should be located at the western side of the railway road, and at the southern part of the existing railway station, in the area, which was designated as a cargo station by both Lörcher and himself.[66]

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[60] According to Cengizkan (2004), Lörcher was the first planner of the city (Cengizkan, A. (2004): 36) His plans were valid between 1924-29 period in the city before H. Jansen won the competition of urban planning for the city of Ankara in 1929.

[61] Vardar, A. (1989), "**Başkentin İlk Planları**", Planlama (1989/2-3-4), pp.38-50

[62] Cengizkan, A. (2002), "**Modernin Saati: 20 Yüzyılda Modernleşme ve Demokratikleşme Pratiğinde Mimarlar, Kamusal Mekan ve Konut Mimarlığı**", Boyut Yayın Grubu, pp. 239

[63] For the development of the new residential areas and for dehumidifying the swamp areas, on March 13, 1925, a law was published for allowing the transfer of private lands into public lands with the act no. 583 (Section XI, Law 2) (Cengizkan, A. (2004): 31).

[64] Before the competition project, which was organized by the Şehremaneti in 1927, a requirement list was prepared for the competitors. According to the 14th clause of this list, the location of the industrial development zone was designated as the periphery of the Station Area (See Tankut, G. (1993): 63). In this sense, the decision of the site allocated for new industrial uses seemed to be highly influenced by the plans of Lörcher.

[65] Jansen, H. (1937), "**Ankara İmar Planı Raporu**", Trans. Yenen, M., Aleaddin Kıral Basımevi, İstanbul, pp. 20-21; Tankut, G. (1993): 79

[66] Similar to Lörcher, Jansen tried to separate the cargo station from the passenger station. Jansen allocated the existing station for industrial uses due to its closeness and easy access opportunity to the

Fig. 13: Lörcher Plan (1924-25) that was prepared for the development of the old city in 1924
Source: T.C. Başbakanlık Cumhuriyet Arşivi (Cited in Cengizkan, A. (2004): 41)

Although the plans of the city guided the development of the Maltepe district for industrial processes, what attracted the industrial activities into the district were not only the plans, but also the electricity and gas factory constructed in 1928. Since heat and electricity were the key sources for a production unit to keep working, and since the infrastructure network was covering a small portion of the city at the time (first Ulus, and then Yenişehir), many factories were constructed in the Maltepe District. Some of these industrial establishments were: a flour mill, a flour factory, a model bakery, a fumigator and a gas depot. These industrial buildings and structures were supplying their heat and electricity demands from the power plant constructed in the Maltepe District along the railroad, and were using the railway lines for the transportation of raw materials and products (See Fig. 15).[67]

industrial production spaces and the new station, which would be built in the city center (at the area where there is the Sıhhiye Bridge today) as the main passenger station (Jansen, H. (1937): 22-23)

[67] Ziyaoğlu, R. (1971), "**İstanbul Kadıları, Şehreminleri Belediye Reisleri ve Partileri Tarihi**", İstanbul, pp. 29 (Cited in Tekeli, İ. (1982): 57)

Fig. 14: Zoning plan of Ankara proposed by Jansen for the city in 1928. According to this plan, the industrial district of Ankara lies at the southwest of the city, between the proposed airport area and new residential district.

Source: Cengizkan, A. (2004): 67

Due to the rapid expansion of the urban macro-form, in addition to the infrastructure related industries and food industry a second cement factory was constructed in the Güvercinlik district on May 16, 1928.[68] Afterwards, many lumber workshops and printing houses, and a textile factory were constructed in the city.

[68] From the BKK (TCBCA 030.18.1.1/29.32.9(1) and its attachment, May 16, 1928, Issue No: 6634 (Cited in Cengizkan, A. (2004): 101)

The development of the food industry was not limited with the construction of flourmills and factories. The government gave special importance after the foundation of the Republic, for increasing agricultural production areas.[69] In this context, the development of the Atatürk Orman Çiftliği in 1925 started the initiation of a planned agricultural production within the city. Consequently, many food-related industrial establishments were constructed within this area. Among these industrial structures there were grain silos, which were constructed in 1933,[70] a milk factory, and workshops and warehouses of Tekel, which were constructed in 1937-39 and contained tobacco warehouses, bottle cleaning units, production spaces, warehouses and wineries.[71]

As a consequence, in the year 1954, there were; 8 flour mills, 3 spaghetti and crushed wheat, 2 biscuit, 7 soda pop, 3 milk and butter, 6 wineries and beer, 3 cement, clay and stone, 5 marble, 1 oxygen factories, and 10 cold iron processing units.[72] Furthermore, there were 7 casting, 20 lumber and woodwork and 9 rubber workshops, as well as uncounted electric and gas, mask, cartridge, car and carpenter factories within Ankara (See Appendix A).[73]

The importance given to the industrialization of the city caused a significant change in the social structure of the city, an increase in the number of factories and a spatial change within the macro-form of the city. The number of workers increased each time new factories were constructed within the city and new policies were implemented.[74] Many laborers housing were established within the city including the units provided by the Turkish Republic National Railway Institution[75] and Ankara

[69] İnan, A. (1972): 7
[70] Aslanoğlu, İ. (2001): 279
[71] Aslanoğlu, İ. (2001): 280
[72] Ankara Belediyesi (1954), "**Ankara Şehri Yeni İmar Planına Ait İmar Komisyonu Raporu**", Doğuş Matbaası, Ankara, pp. 71-72
[73] Ankara Belediyesi (1954): 71-72
[74] "There were 130 factories before 1927. With the encouragement of industrialization activities by the government, the number of factories increased to 2200 by 1932" (Cited in Aslanoğlu, İ. (2001): 22). There were 16.975 workers employed in the industrial sector in 1913, 76.216 in 1921, 256.655 in 1927, and in the year 1933, it is assumed that, this number reached to three times of the number attained at the year 1927 (Cited in Tarih IV (1933), Devlet Matbaası, pp.297, in Aslanoğlu, İ. (2001): 22)
[75] Aslanoğlu, İ. (2001): 391-392

Elektrik Havagazı ve Otobüs İşletme Müessesesi (EGO). The industrial development of the city never ceased. However, after a time Ankara started to lose its modern heritage, including its public open spaces, recreational areas, and government and industrial buildings. Thus, the industrial archaeological history of the city continued until the late 1950s.

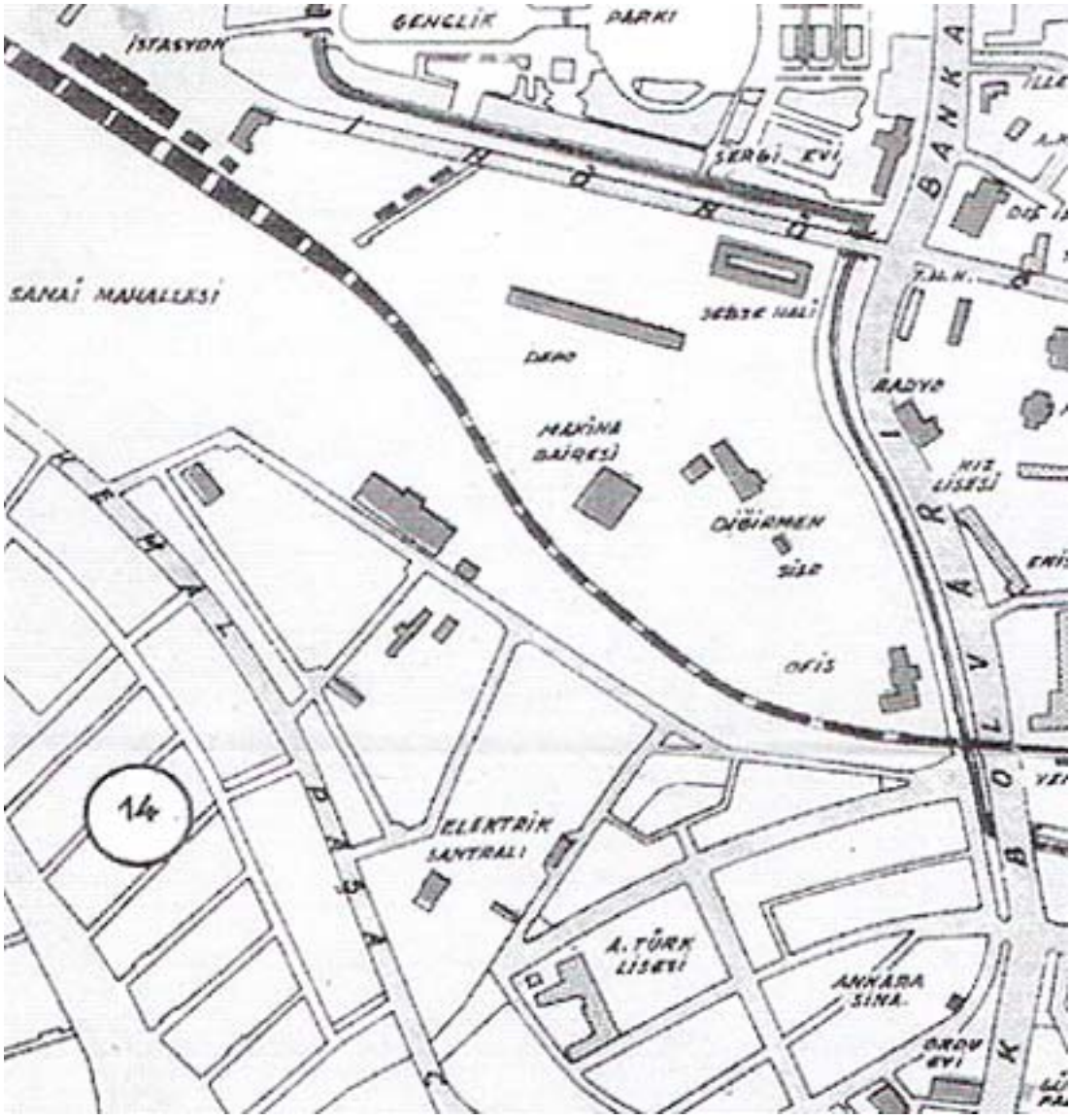

Fig. 15: The "tourist plan", which was published in 1946, showing industrial developments around the İstasyon Region.

Source: Orak (1946) (Cited in Cengizkan, A. (2004): 114)

2.2.3. End of the Modern Industrial Archaeological History of Ankara (1960s-1990s)

Ankara experienced its industrial archaeological history in a much shorter and weaker way in terms of the effects felt on the socio-spatial and economical environment when compared to the western post-industrial cities. Although the city witnessed the construction of some industrial heritages,[76] most of these industrial establishments soon became abandoned, and denoted as urban 'waste lands'.

There were many reasons that played role in the ending of the industrial history of Ankara. However, the increasing urbanization processes and the influences of the consumption patterns on urban spaces were probably the most influential factors.

The development of Maltepe as an industrial district was continued until the late 1950s. However, after this time, the implementation of the Yücel-Uybadin Plan (1957-1965) had started to control the future development of the city. The most important proposal of this plan was the decision of creating a new 'modern' downtown at Yeni Şehir, Kızılay[77]. According to this plan, due to its closeness, the Maltepe District would function as a segment of this new city center. The new industrial establishments on the other hand, would be developed in the organized industrial sites, which would be located in the periphery of the city.

After the approval of the plan, the land rents within Maltepe District reached the tops. In 1965, the government approved the floor area act (Kat Mülkiyeti Kanunu). Consequently, in 1968, many maps showing the new densities of urban developments were prepared and approved by the Municipality of Ankara. According to Gökçe (2004), one of the most disastrous attempts in the urbanization

[76] Mantoux (1961) differentiates a factory from a manufactory according to the resources used in the production process. According to Mantoux, in this context, while a manufactory uses traditional techniques in the production process, factories uses machine power. (See Mantoux, P. (1961), "**The Industrial Revolution in the Eighteenth Century: An Outline of the Beginnings of the Modern Factory System in England**", Harper & Row Publishers, New York)

[77] Today, this area is known as Kızılay District, or the CBD

history of Ankara and on the witnesses of the Republic Period, were these plans.[78] These plans enabled "high rise" development along the GMK Boulevard, and thus, soon caused to the abandonment of the industrial landscapes (Fig. 16). Furthermore, in order to obtain more empty spaces for the development of the residential areas and public services within the district, the Municipality Directorate of Development of Ankara (Ankara İmar Müdürlüğü) of the time started to demolish the old industrial buildings.

Fig. 16: The plan showing the height density codes of the zones along the GMK Boulevard. This plan was approved in 1968.

Source: Greater Ankara City Municipality Archives

[78] Gökçe, B. (2004), "**Planlı Gelişme Sürecinde Ulaşım Politikaları-Yaya İlişkileri Bağlamında Kızılay**", in TMMOB Mimarlar Odası and TMMOB Şehir Plancıları Odası (2004), "Kızılay'da yayalar ve yaya ulaşımı: sorunlar, sebepler ve süreçler", Ankara, pp. 10

Another disastrous attempt, which caused to the abandonment of the industrial spaces from the Maltepe District, was the construction of the Celal Bayar Boulevard, passing through the core of the Maltepe district in the east-to-west direction. Although this road was initially constructed for the development of the new modern city center, soon the central functions extended, and Maltepe became the new focus of the government.

The drawbacks of the construction of this new boulevard were high. One of these negative feedbacks was the detachment of the industrial relations and activities from the landscape.[79] This detachment not only hindered the relationship of factories with the railroad system, but also detached the warehousing units from the production spaces. Furthermore, in order to support the main road networks many lateral roads were constructed within the district. The construction of lateral roads, in this sense not only divided industrial landscapes, but also demolished several industrial heritages, including the warehouse buildings, to open up new room for the new roads. Moreover, during these construction processes, potential development areas of the industrial landscapes decreased. This diminishment of the industrial lands had devastating effects on the industrial developments in the following years, especially when the demand of the city for industrial products exceeded the amount produced.

According to the Chamber of Architects in Ankara, the most important blow for the development of the industrial functions within the district started with the construction of the Palace of Justice building in 1986.[80] The Chamber states that the establishment of this building fostered the development of office related functions within the surrounding area.[81] Furthermore, many industrial structures were demolished during the construction process of this building. Among these buildings there were: the silo building (Ankara Hububat Silosu), which was constructed between 1933-1937 by a German firm called Miag (See Fig. 17), the warehouses of

[79] TMMOB Mimarlar Odası Ankara Şubesi (1990), "**EGO Maltepe Havagazı Tesislerinin Sökülmesi İşlemlerine Niçin Karşı Çıkıyoruz?**", Doğal ve Kentsel Çevre Komisyonu Raporu, October 1990, pp. 6
[80] TMMOB Mimarlar Odası Ankara Şubesi (1990): 6
[81] TMMOB Mimarlar Odası Ankara Şubesi (1990): 6

Devlet Demir Yolları (State Railways), which were constructed in 1890s by the German initiatives, and lastly the warehouses and workshops of Tekel, which were constructed in 1937-1939 (See Fig. 18).[82]

Fig. 17: The silo building, which was constructed between 1933-1937. The building was constructed by a German firm called Miag, and was demolished with the construction of the Palace of Justice building in 1986.
Source: Aslanoğlu, İ. (2001): 279

Fig. 18: Tekel warehouses and workshops, which were constructed in 1937-1939. These buildings were constructed by a Turkish architect called Ahsen Yapaner, and were demolished with the construction of the Palace of Justice building in 1986
Source: Aslanoğlu, İ. (2001): 280-282

Based on the proposals of the municipality, the abandonment of the industrial sites within the Maltepe District had started approximately thirty years before the foundation of the Palace of Justice building. The implementation plan prepared by the Municipality Directorate of Development of Ankara in 1965 proposed to remove industrial buildings within the district. The plan, in this sense, designated the construction of new road systems, housing units, a private school and a kinder-garden in the place of the flour and macaroni factories, an industrial landscape situated adjacent to the Maltepe Gas and Electric Factories (See Fig. 19). This proposal of the municipality never came true due to the ownerships of these properties, which were private enterprises. Unfortunately, their owners demolished both of the factories, after they fulfilled their technological operation life-spans. As a consequence, a hypermarket (MMM Migros) was constructed by the KOÇ Group in 1993 within the old macaroni factory area, and an education building was

[82] Cengizkan, A. (2002): 243; Aslanoğlu, İ. (2001): 279-282

constructed in 1973 within the area where the warehouses were once located. On the other hand, the flour factory, which was abandoned and demolished in May, 1993, still remains as an urban waste land with only a surviving industrial structure, in the ownership of Türkiye İş Bankası (See Fig. 20).

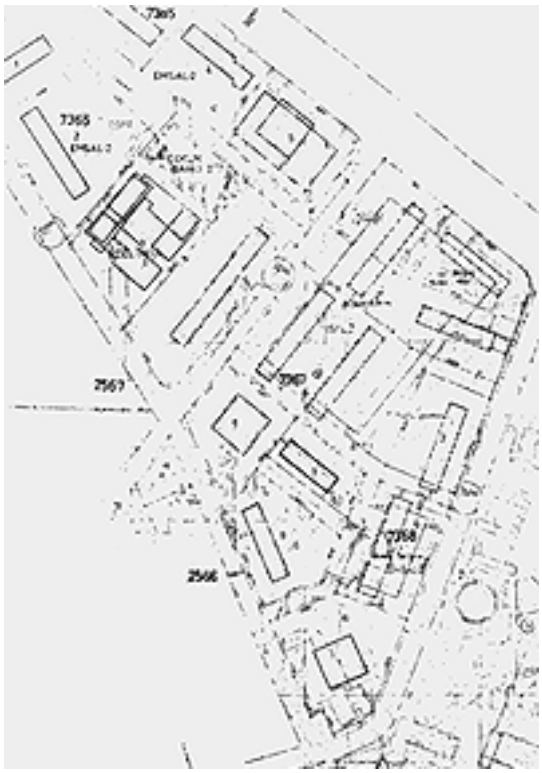

Fig. 19: Plan of macaroni and flour factory sites. The plan was prepared by the Municipality Directorate of Development of Ankara in 1965
Source: T.C. Ankara Belediyesi İmar Müdürlüğü, Evrak No: 5563/65, Dosya No: 2569-14, Plan No: 55950, Pafta No: C-6, C-6, C-7, M-124, N-124, O-124

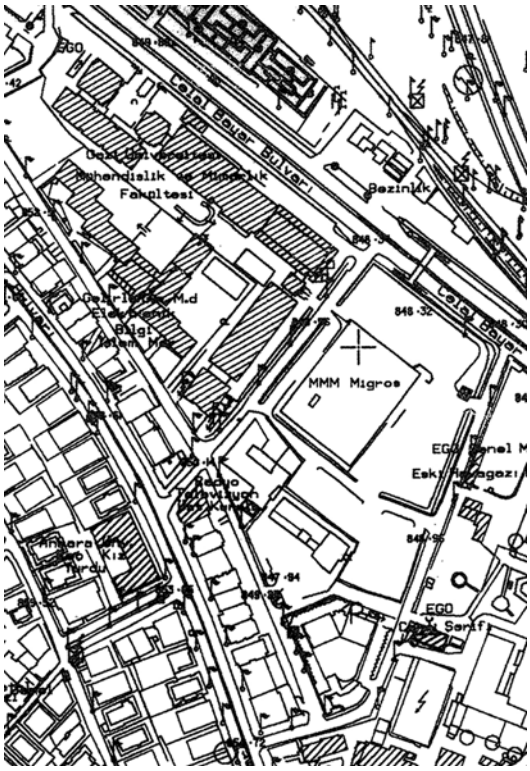

Fig. 20: Plan of macaroni and flour factory sites. The plan was prepared by the Greater Ankara City Municipality in 1995
Source: Greater Ankara City Municipality Archives

Another important factor, which played an important role in the abandonment of the industrial landscapes, were the environmental pressures. Maltepe Gas and Electric Factory and the brick and stone factories polluted the rivers and air of Ankara for decades. Especially in the end of the 1970s, this event attracted the reaction of environmentalists and the public, and thus, led to the abandonment of many hazardous industrial landscapes.

Finally, one of the most influential factors for the closing of the factories was the change in technology. Industries use new energy sources as the previous one becomes scarce. To use these new energy sources and to increase their production sizes, they change their technologies. These changes, however, require the renewal of production spaces. There are two ways of renewing the industrial production areas. One of these is to demolish the old industrial buildings that were using an old technology, and to construct a new industrial plant functioning with modern machines and production techniques. The second way to meet the demand of technological changes, on the other hand, is to build a new industrial building in the industrial growth areas. However, in the case of Maltepe, the high urbanization rate, which conveyed the cityscape in the forms of commercial developments, removed this chance for further development. As a consequence, many industrial production landscapes were abandoned.

2.2.4. Spatial Context of the Maltepe Gas and Electric Factory with Respect to Survived Industrial Archaeological Heritage of Ankara: Present Situation

After the arrival of the railway and declaration of Ankara as a capital city, many industrial buildings were built within the city. Until 1960s these buildings, by and large, were established in the Maltepe District. There were two major reasons that played an important role in the site choosing criteria of these industrial establishments. The fist one is related with technical reasons. The pipes of the Gas and Electric Factory, which were supporting the fuel and heat demand of the other factories, were not enriching all the way to the edge of the city in the early years. As a result, most of the factories were located around this power plant due to their energy requirements. The second reason is related with the planned development of the city. After the declaration of the district as an “industrial zone”, until the late 1960s, many industrial buildings were built within the Maltepe District. Among these industrial establishments, there were not only factories, but also warehouses, worker’s housings, mills, etc. Spatially, all of these industrial buildings were located

around the railway lines and around the river that was passing through the district for transportation, distribution and waste disposal reasons.

However, the development of Maltepe as an industrial district did not last long. With the designation of the district as a segment of Kızılay, which was determined to be the new city center according to the plans of Yücel-Uybadin (1957-1965), heralded the demolishment of factories. The sustainability of many industrial establishments were threatened by the development pressures on the district after this time, due to the regeneration attempts of the Greater Ankara City Municipality under the so called 'modernization' discourses. As a consequence, many industrial buildings, including mills, warehouses and factories, were demolished. The Maltepe Gas Factory site, in this context, is one of the rare old industrial landscapes that has managed to survive within the district until this time.

Beside the gas and electric factories, the Railway Station building with its casino structure, were the other two industrial archaeological survivals, both of which have been conserved in a well manner, and are still operating their functions today. Furthermore, Devlet Demiryolları İşletmesi (State Railway System Administrators) regenerated an area of its property into an industrial museum. Within this museum locomotives, old railway lines and some machinery that were used by the institution are exhibited. In addition to these survived industrial structures within the district, there is a remnant of the flour factory that tries to survive without any preservation decision for its conservation (Fig. 21). However, the property of this factory site is in private ownership, and for this reason, the sustainability of this last remnant is under great danger.

The industrial archaeological heritage is not limited with the Maltepe District. The internal pattern of the urban macro-form dragged many urban services, including the industrial functions, as it grew in size. For this reason, the traces of this heritage now can be seen in many different places within the hinterland of the city from Çubuk to Atartürk Orman Çiftiği and Güvercinlik. Among these survived industrial heritages there were a water filter station, which was constructed by a German firm called

Hochtief in 1935-1936 in the Aydınlıkevler District (behind the Agriculture Faculty of Ankara University), a sugar factory, which was constructed in 1958 at Etimesgut, a cement factory, which was constructed in 1953 at Güvercinlik District, a cartridge factory, a gunpowder factory, which was re-functioned into a government building serving as the Industrial Institute of Machine and Chemistry (Makine Kimya Endüstrisi Kurumu), a mask factory, and lastly the industrial establishments founded in Atatürk Orman Çifliği (AOÇ), including Tekel's Beer and Tobacco Factory, AOÇ Milk and Butter Factory and AOÇ Tractor Factory.

Fig. 21: The Flour Factory. The building was constructed after 1890s by Seyfi Arkan
Source: Personal Archive (2005)

To sum up, although Ankara had never become an industrial city, in order to create a modern capital, many industrial production spaces were established especially along the rivers and the railway. Among those industrial spaces, on the other hand, only a few of them achieved to survive (Fig. 24). Most of these survivals today remain as industrial slum areas waiting to be conserved.

Fig. 22: Water Filter Station. The building was constructed in 1935-1936 by a German firm called Hochtief in Aydınlıkevler District
Source: La Turquie Kemaliste, No. 15 (October 1936) pp. 26 (Cited in Aslanoğlu, İ. (2001): 284)

Fig. 23: AOÇ Milk Factory. The building was constructed in 1957
Source: Personal Archive (2005)

Fig. 24: Industrial survivals of Ankara located between Maltepe and AOÇ District
Source: Personal Archive

2.3. Context of the Gas and Electric Factory within the District and its Near Environment from a Spatial and Economic Perspective

Maltepe Gas and Electric Factory site is situated in an advantageous position in the urban macro-form of Ankara. This advantageous position comes not only from its spatial but also from its economic position.

In the past, Atölyeler Arkası was positioned at the edge of the city. There were many industrial structures, including factories, mills and warehouses. After the 1960s, on the other hand, this area started to become part of the congested inner city, as an extension of the downtown. Today Maltepe Gas and Electric Factory landscape enjoys its location at the heart of the city and being close in distance to the major

open spaces of the city. These spaces are; the Maltepe Bazaar and urban park at the south (approximately 3-5 minutes in walking distance), Gençlik Parkı, which is one of the witnesses of the foundation years of the Republic, the Ankara Railway Station and Railway Museum at the north, Ulus at the north-east, and the Kızılay square (downtown) and the urban park located at this center, Güvenpark, at the east (approximately 10 minutes in walking distance). Furthermore, due to the existence of a metro system, which stops just in front of the factory site, facing the GMK Boulevard, and a bus stop at this same location, the opportunities for accessing to the Factory site from all over the city is tremendously high.

However, the environmental quality of the District of Maltepe is very low. This is because, after the declaration of the district as an extension of Kızılay, for many decades the Maltepe Gas and Electric Factory landscape was exposed to speculative attempts of the society that aimed its regeneration into a consumption space. Unfortunately, the increase of the floor area coding within the district, and the atrophy and privatization of the public spaces, the demolishment of many industrial heritages for the sake of creating consumption-oriented projects, decreased the "livability" of the area. Thus, today, it is observed that while business functions have a tendency to re-allocate within this area, housing functions leave the area for the sake of living in areas, where the environmental standards are better.[83] Furthermore, despite the bypassers, residents and workers of the district, due to the large amount of privatized spaces, today, the district generally serves a specific user group; the consumers. Indeed, especially along the Boulevards, it is observed that while the first floors of the buildings are used by and large for commercial purposes, the upper floors of these buildings are assigned to mixed-private uses. In other words, despite the railway museum, bazaar and park area of Maltepe, there is no public space in the district, which could gather the society for the creation of a public realm. Today, citizens of Ankara are suffering from the non-existence of public spaces and the destruction of their collective memories.

[83] According to the information obtained in July 10, 2005 from REMAX, which is a real estate firm, rents for empty flats that were attributed to housing purposes within the Maltepe District is very low, when compared with the ones situated in the districts surrounding Maltepe, such as Bahçelievler and Çankaya. On the other hand, according to the same source, rents for flats, which were attributed to commercial and business purposes are tremendously high.

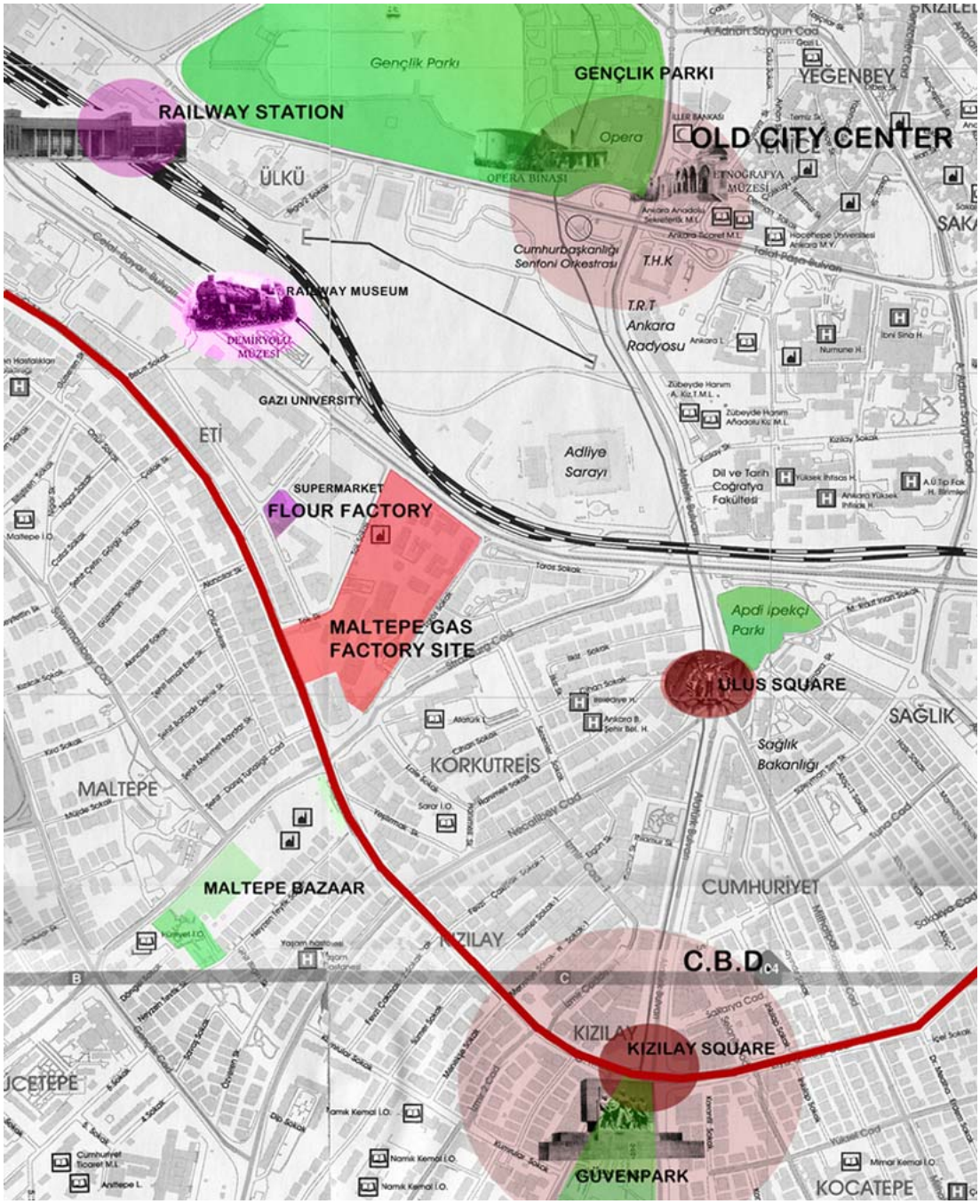

Fig. 25: Context of the Maltepe Gas Factory site with respect to its near environment

Source: Personal Archive

CHAPTER 3

3. THE STORY OF THE MALTEPE GAS FACTORY

3.1. Establishment and Development of the Site

The foundation of the Maltepe Gas and Electric factory is one of the most important cornerstones in the urbanization and industrialization history of Ankara. Its establishment and development shows not only great similarities with the urbanization and industrialization process of the city, but also helps us to understand the economical, political and the physical conditions in which the formation of a new capital was under way. In fact, the establishment of these two factories was the main reason of the presence of the industrial development that took place within the district, and of the development of the southern part of the city: Yeni Şehir. To summarize, it can be denoted that the industrial and the urbanization history of Ankara is greatly dependent on the foundation and the development of these factories in a greater extend.

After the declaration of Ankara as a capital city in 1923, the city faced with an immense migration movement. Due to becoming an attraction point, the macro-form of the city extended each day and thus heralded the development of new residential, commercial, business, recreational and industrial areas. Beside these developments, however, the city had a poor infrastructure system. There was not any electric, gas, sewage and water system within the city at the beginning of the 1920s. For this reason the infrastructure services was seen as an immense hindrance for the development of Ankara. Thus, in order to foster the development of the city under the creation of a “modern capital” concept, first, infrastructure problem of the city had to be solved.

There were two electric plants supplying the electricity requirement of the city until 1928. One of these plants was located at the Bentderesi, and the other one was located at the Güvercinlik District. However, Ankara was growing continuously at the time. Therefore, a new electric plant that will supply the whole demand of the city was needed.

The first step for the establishment of a new plant came within the Asaf Bey period (27.11.1926-), which was the third şehremin of the Ankara city. Due to the close political, economical and architectural relationships with Germany at the time, which was further increased after 1927's, the privilege of building and operating rights of the electric and gas factories were given to a German firm called Didier in April 1928 for 60 years. This firm was established after the consortium of two German companies called Stettiren Chamote-Fabrik Actien Gesellschaft and Electricitats-Lieferangs-Gesellschaft.[84] In this context, while Stettiren Chamote-Fabrik Actien would be responsible from producing, distributing and selling of the gas need of the city, Electricitats-Lieferangs-Gesellschaft would be responsible of the same tasks for supplying the electricity need of the city.

Following this initial process, Ankara Electric and Gas Company was founded in October 10, 1928.[85] As a consequence, after the submission of the plans and projects of the complex within the same month (Fig. 26 and Fig. 27),[86] the new electric and gas factories of the city were finally constructed in 1928 in the Maltepe district.

[84] Ministry of Public Affairs, No. 06E6, 25 April 1928 (TCBCA 230/4.14.1(140)) (Cited in Cengizkan, A. (2004): 100); Tekeli (1982) on the other hand, referring to Ökçün, A. G. (1971), "**1929-1930 Yılları arasında Kurulan Türk Anonim Şirketlerinde Yabancı Sermaye**", Ankara Siyasi Bilgiler Fakültesi, and to "**Cumhuriyetimizin 50. Yılında Ankara Elektrik, Havagazı ve Otobüs İşletme Müessesesi**" (1973), Ankara, pp.9, 25, 27, states that the privilege to Didier company was given by the state in March 1927 (Cited in Tekeli, İ. (1982): 59)

[85] 10 Ekim 1928 tarihli, 7216 sayılı, "Merkezi Ankara olmak üzere Ankara Elektrik ve Ankara Havagazı T.A.Ş.leri kurulmasına izin verilmesi" konulu BKK. (TCBCA 030.18.1.1/30.61.10 (1) ve eki; 162-24) (Cited in Cengizkan, A. (2004): 100), Tekeli (1982) on the other hand, referring to Ökçün, A. G. (1971) and to "Cumhuriyetimizin 50. Yılında Ankara Elektrik, Havagazı ve Otobüs İşletme Müessesesi" (1973), states that Ankara Electric and Gas Company was founded in December 10, 1928 (Cited in Tekeli, İ. (1982): 59)

[86] 00.10.1928 tarihli, 06E15 sayılı BayBak yazısı. (TCBCA 230/5.17.1(80)) (Cited in Cengizkan, A. (2004): 100)

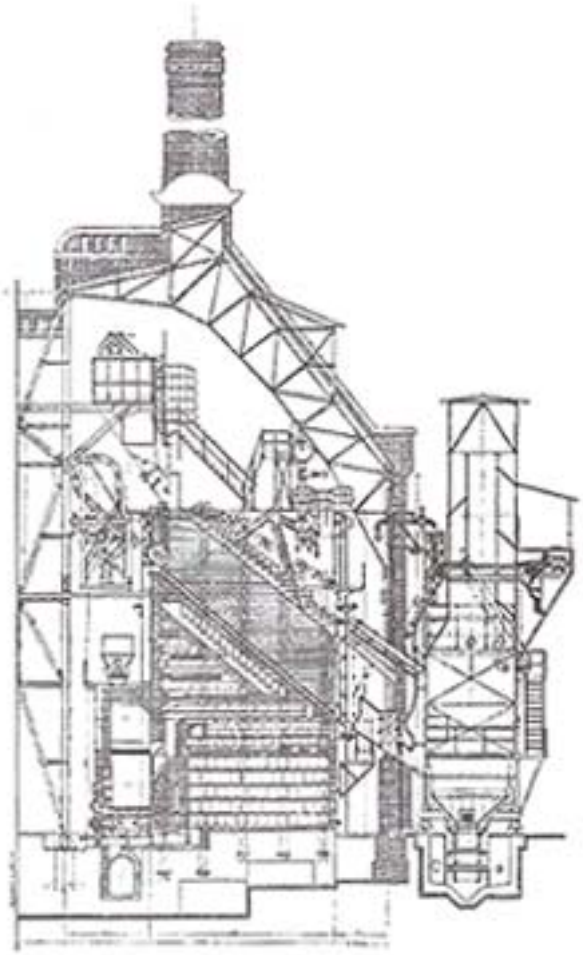

Fig. 26: A drawing of the furnaces, drawn by Didier Co.
Source: TCBCA (Cited in Cengizkan, A. (2004): 101

The industrial history of the Maltepe Gas Factory landscape started with the assembly of a 650 horse-powered electric plant on September 26, 1828. The making of this plant was given to a German firm called MAN, and it was constructed at the end of the lateral railway lines, which were extended from the main railway road for the distribution of goods and raw materials.[87] During the spatial evolution of the Maltepe Gas and Electric Factory, these lateral railway lines played an important role. Since they maintained the functioning of these plants by helping the flow of goods, raw materials and labor force in and out of the site, industrial production units were spatially allocated around them. Other industrial archaeological functions, which were not directly related with production activities, such as housing and

[87] EGO (1973): 11

administrative units, on the other hand, were located away from this tool of transportation.

Fig. 27: Lörcher Plan (1924-25), which was prepared for the development of old city in 1924. The area designated in red at the south of the scheme shows the site allocated for the construction of the Electric and Gas Factories. According to the written notes sited on this plan, the construction works will be carried out by the Didier Company.
Source: T. C. Başbakanlık Cumhuriyet Arşivi (Cited in Cengizkan, A. (2004): 247)

One year after the foundation of the electric factory, in order to increase the capacity of the power plant, Electricitats-Lieferangs-Gesellschaft assembled a further 1400 HP group to the existing plant.[88] The Company also re-located the diesel group generator working with 1400 HP in June 3, 1929, which was previously assembled to a building located in the Hipodrom area (Fig. 29).[89] In October 1929, Stettiren Chamote-Fabrik Actien Gesellschaft had constructed two furnaces for gas production purposes, which were able to produce 3000 m^3 gas a day.[90] Furthermore, in order to store the produced gas, a Klönne-type gasholder[91] that can hold up 6000 m^3; in order

[88] EGO (1973): 11
[89] EGO (1973): 11
[90] EGO (1973): 25
[91] Klönne-type gasholder was one of the several important innovations in the technology of gas production at the larger works in the 1920s and 1930s, which was first developed in Germany (Stratton, M. and Trinder, B. (2000), "**Twentieth Century Industrial Archaeology**", E&FN SPON, London, pp. 30)

to purify the gas, gas purification plants; and in order to clean unwanted chemicals during the production process, 3 sulphur cleaning units, which had a capacity of 3000 m^3, were constructed within the site, respectively (Fig. 28).[92] As a result, the total number of the gas subscribers of the Maltepe Gas and Electric Factory had eventually reached 484 in the year 1930 (Table 1)[93].

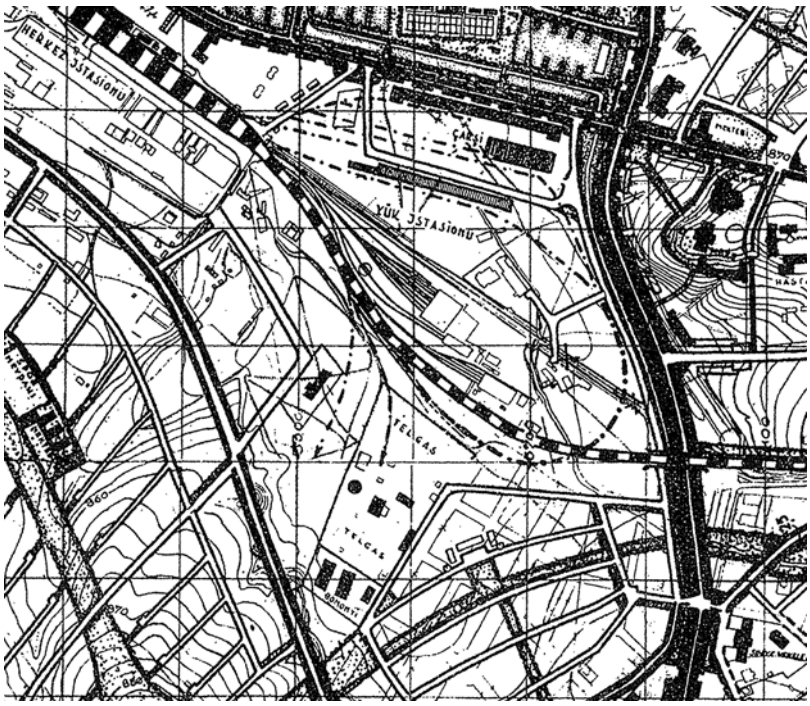

Fig. 28: The map of the Maltepe Gas And Electric Factory in 1932. The map was drawn by H. Jansen

Source: Ankara Greater City Municipality Archives, "**Ankara Şehri İmar Planı**" (drawn by Jansen, H. (1932))

The Maltepe Gas and Electric Factory landscape, continued to develop until its closure. There were two major factors, which played an important role in the evolution of the site. These factors were the changes in the technological arena, and the increasing gas and electricity demand of the city, which continuously grew because of the high urbanization rate (Table 1 and Table 2).[94]

[92] EGO (1973): 25

[93] Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960), "**Havagazı Tesisleri Hakkında Genel Bilgiler**", Sanat Matbaası, Ankara, pp.3; EGO (1973): 28

[94] The population of the city was increased to 122,720 in 1935 from approximately 20,000 in the end of the 1920s, and then, with the arrival of the 1950s the population of the city further increased to 288,000 (Tekeli, İ (1982): 54, 63, 68

Table 1: Number of gas subscribers and amount of gas sold
Source: EGO (1973): 28

YEARS	NUMBER OF SUBSCRIBERS	AMOUNT OF GAS SOLD (m^3)	AMOUNT OF COKE-COAL SOLD (TON)	AMOUNT OF TAR SOLD (TON)	YEARS	NUMBER OF SUBSCRIBERS	AMOUNT OF GAS SOLD (m^3)	AMOUNT OF COKE-COAL SOLD (TON)	AMOUNT OF TAR SOLD (TON)
1929	207	142.830	189	12	1951	13.696	9.331.459	12.617	689
1930	484	332.479	443	28	1952	15.386	11.186.547	14.516	878
1931	760	652.030	872	51	1953	17.276	12.665.433	15.938	899
1932	1027	605.930	807	47	1954	19.001	12.665.483	17.544	1059
1933	1548	922.981	2520	148	1955	20.015	13.982.356	20.228	1194
1934	1884	1.242.673	2193	130	1956	23.346	16.100.042	25.090	1652
1935	2350	1.560.218	2375	152	1957	25.333	18.746.310	28.166	1578
1936	2851	1.900.577	2611	168	1958	26.026	21.450.470	28.783	1755
1937	3489	2.315.050	3394	201	1959	26.532	22.436.638	30.889	2182
1938	4473	2.845.045	3900	233	1960	31.494	23.140.753	36.490	1890
1939	5399	3.422.283	4714	272	1961	35.330	24.420.129	43.131	2221
1940	5797	3.899.876	5331	316	1962	40.539	25.895.674	44.222	2601
1941	5802	3.868.566	5654	326	1963	46.606	29.425.605	50.193	2833
1942	6367	4.272.857	7008	394	1964	51.376	32.913.802	50.751	3111
1943	6675	4.814.713	7550	426	1965	56.579	36.454.675	52.624	3311
1944	7040	5.479.755	8403	470	1966	62.089	41.705.715	57.561	3687
1945	7324	5.291.382	8219	500	1967	67.102	47.590.171	64.632	3843
1946	8023	5.847.745	8175	474	1968	72.842	50.259.072	77.158	4257
1947	8553	6.403.876	8863	559	1969	78.150	56.715.578	78.205	4226
1948	9840	7.018.652	10.624	597	1970	81.120	56.789.287	77.589	4377
1949	11.258	7.634.561	11.717	644	1971	84.166	60.542.416	68.047	4458
1950	12.574	8.063.557	11.974	648	1972	85.498	63.692.309	74.278	5476

On February 5, 1931 and on March 31, 1931, to increase the capacity of the electric plant, two diesel electrogen groups which had 1575 HP each were assembled, (Table 2).[95] Thus, by the end of 1931, there was a plant functioning with a total of 5880 HP, two administrative buildings (the Directorship of the Gas Factory and the Chairmanship of the Gas Department), a pump station, gas production units (1-2 furnaces), cooling towers, a gasholder, a gas purification plant, three sulphur

[95] EGO (1973): 11

cleaning units, a repair service building, a lathe workshop, a guest house and worker's housings buildings within the site.[96]

One of the most important attempts for the development of the Maltepe Electric Factory was the decision of the Ministry of Public Works concerning the use of coke-coal by plants. This coal had been supplied from the Zonguldak coalmines during the 1930s because the use of diesel-oil as an energy source was too expensive for the operation of a plant. Thus, for the first time, a new thermal plant was considered to be built in the industrial landscape in the year 1933. Consequently, a turbine generator group working with a power of 5100 kW power was ordered from the German firm called AEG, and a steam cauldron was ordered from the Man Firm, respectively (Fig. 30).[97] On June 14, 1935, the construction process of the Cauldron-Flat Building; on June 1, 1936, the fitting process of the Cauldron's foundation, and finally, on July 22, 1936, the fitting process of the turbines had started.[98] Thus, the thermal plant finally opened in 1936 after the opening of the first cauldron on September 30, 1936, which was able to produce 17,000 ton steam an hour, and the opening of the second cauldron on October 14, 1936.

Table 2: Electricity and steam production capability of Maltepe Electric Factory
Source: EGO (1973): 14

MACHINE NO.	TYPE	TRADE-MARK	POWER		VOLTAGE (kV)	DATE OF OPENING INTO SERVICE
			KVA	kW		
DIESEL-ELECTROGENE GROUPS						
1	DIESEL-GENERATOR	MAN-AEG.	590	-	6,3	26.9.1928
2	DIESEL-GENERATOR	MAN-AEG.	590	-	6,3	3.6.1929
3	DIESEL-GENERATOR	MAN-AEG.	1200	-	6,3	20.1.1929

[96] Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, UPRS Dairesi Başkanlığı (1991), "**TEK ve EGO Maltepe Tesisleri Arazi Kullanım Haritası**" (Cited in Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu Büro Müdürlüğü, Kayıt No: 294, 21.22.1991, Dosya No. 06/06/72; Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960): 8)
[97] EGO (1973): 11
[98] EGO (1973): 11

4	DIESEL-GENERATOR	MAN-AEG.	1200	-	6,3	5.2.1931
5	DIESEL-GENERATOR	MAN-AEG.	1200	-	6,3	31.3.1931
TURBO-GENERATOR GROUPS						
1	TURBO-GENERATOR	AEG.	5625	4500	6/6,6	18.10.1936
2	TURBO-GENERATOR	AEG.	5660	4500	6/6,6	15.1.1943
3	TURBO-GENERATOR	OERLİKON	9375	7500	6/6,6	1.9.1948
4	TURBO-GENERATOR	B.B.C.	3125	2300	6/6,6	12.2.1953
5	TURBO-GENERATOR	B.B.C.	4000	3300	6/6,6	23.10.1952
STEAM CAULDRONS						
1	REVOLVING GRID WITH CROOKED WATER PIPE	MAN		30 Kq/cm^2	13-45/16,8 t/h	18.10.1936
2	REVOLVING GRID WITH CROOKED WATER PIPE	MAN		30 Kq/cm^2	13-45/16,8 t/h	27.11.1936
3	REVOLVING GRID WITH PRECIPITOUS WATER PIPE	FOSTER-WHEELER		30 Kq/cm^2	27/34 t/h	-.5.1948
4	REVOLVING GRID WITH CROOKED WATER PIPE	MAN		30 Kq/cm^2	40/50 t/h	25.4.1952

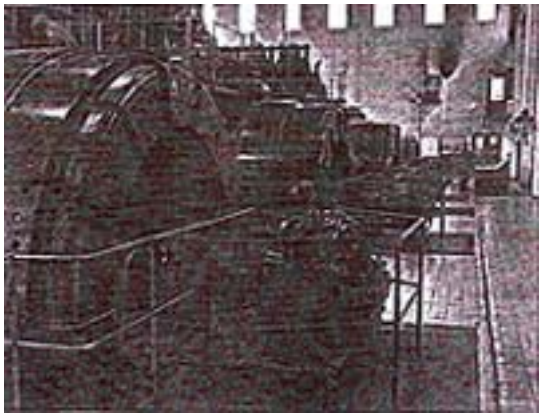

Fig. 29: A view from the inside of the power plant showing the diesel electrogen groups
Source: EGO (1973): 12

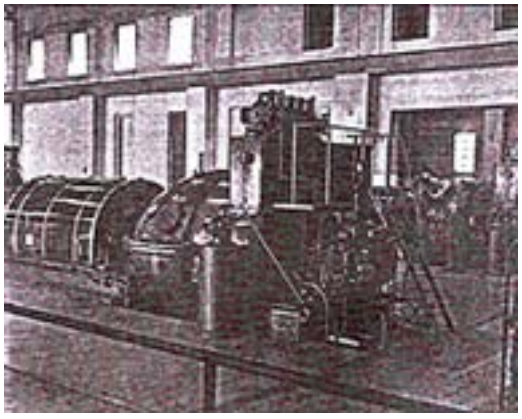

Fig. 30: A view from the inside of the power plant showing the turbine-generator

After the construction of a new gas furnace building with five cameras in January 1935, the capacity of the existing gasholder increased to 9000 m^3 in November,

1938.[99] During the same year, due to the increasing demand in gas consumption, Stettiren Chamote-Fabrik Actien wanted Didier to construct a new furnace, which would include eight cameras when it was completed.[100] In addition, the capacity of the sulphur cleaning units increased to 12,000 m^3 in May, 1939.[101]

In 1939, the nationalization policies of the State had drastic effects on the development of the landscape. On July 5, 1939, with Act No. 3688, the government decided to transfer the privileges given to Didier in 1927 to itself concerning the operation of gas and electric factories.[102] Unfortunately, the transfer process of the rights was not concluded until 1942. Finally, with a final attempt, on December 16, 1942, the privileges of operating Electric and Gas Factories were given to a public institution called "Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi"(The Ankara Electricity, Gas and Bus Management Authority) - or EGO for short - with Act No. 4325.

Between the years 1939 and 1942, there was no remarkable development in the industrial landscape of the Maltepe Gas and Electric Factory. The reason of this stagnation was not only the interferences of public enterprise, but also issues related to the guarantees of the machines ordered from foreign countries. All transportation processes were obstructed due to the blocking of the roads according to the treaties of commerce signed between Turkey and Germany the same year the Second World War started.[103] However, despite these hard conditions, in order to meet the increasing gas and electricity demand of the city; by using the local resources, a new turbine alternator group, which had 5100 kW power, was assembled in the electric factory on August 18, 1941.[104] This same year, the capacity of the production units in the Gas Factory increased to 20,000 m^3 (17,000 Nm^3).[105]

[99] EGO (1973): 25
[100] EGO (1973): 25
[101] EGO (1973): 25
[102] Tekeli, İ. (1982): 63-64
[103] EGO (1973): 26
[104] This new turbine group opened into service in January 26, 1942 (Cited in EGO (1972): 13)
[105] EGO (1972): 26

Table 3: The table showing the amount of electricity sold, number of subscribers and street lightning

Source: EGO (1973): 19

YEARS	PRODUCED ELLECTRICITY (kWh)	AMOUNT SOLD (kWh)	PERCENTAGE OF THE AMOUNT SOLD WITH RESPECT TO AMOUNT PRODUCED (%)	AMOUNT USED BY HOUSING AND INDUSTRIES (kWh)	AMOUNT USED FOR STREET LIGHTINING (kWh)	NUMBER OF THE STREET LIGHTININGS	NUMBER OF THE SUBSCRIBERS
1925	52.500	41.618	79.27	4243	37.375	100	-
1926	350.000	280.525	80.15	70.175	210.350	546	-
1927	990.000	780.615	78.85	330.175	450.440	1207	-
1928	2.370.000	1.781.766	75.18	1.256.449	525.317	1408	-
1929	3.050.000	2.338.435	76.67	1.787.685	550.750	1476	-
1930	4.900.000	3.852.380	78.62	3.277.162	575.218	1542	-
1931	7.215.000	5.782.101	80.14	5.191.868	590.415	1582	4766
1932	8.016.020	6.545.492	81.65	5.945.180	600.312	1609	6166
1933	10.140.480	8.333.365	82.18	7.657.948	675.417*	1618	7451
1934	10.563.300	8.598.888	81.40	7.993.513	605.375	1623	8486
1935	11.909.695	9.680.093	81.28	9.065.068	615.025	1649	10.029
1936	10.749.320	8.487.861	78.96	7.857.561	630.300	1690	11.700
1937	13.407.600	9.667.536	72.10	9.016.966	650.570	1744	13.691
1938	17.092.790	13.945.623	76.32	12.360.273	685.350	1837	15.855
1939	21.310.610	16.951.720	79.54	16.221.180	730.540	1958	18.239
1940	22.400.843	18.184.285	81.17	17.433.915	750.370	2011	19.591
1941	23.290.920	18.925.349	81.27	18.120.199	805.150	2158	20.617
1942	24.326.090	19.749.922	81.18	18.935.018	814.905	2185	21.569
1943	26.295.750	21.440.529	81.54	20.657.574	782.955	2387	22.143
1944	29.934.320	24.670.557	82.42	24.009.533	661.024	2497	24.338
1945	33.839.010	27.542.472	81.39	26.710.882	831.590	2562	25.583
1946	35.869.760	29.353.884	81.83	28.352.128	1.001.756	2727	27.703
1947	40.043.570	32.905.345	82.17	31.718.378	1.186.967	2873	29.387
1948	43.969.290	36.062.636	82.02	34.497.429	1.565.207	3000	32.986
1949	47.902.810	39.287.633	82.02	37.597.384	1.694.249	3082	37.595
1950	51.697.960	42.381.730	81.98	40.329.181	1.989.549	3772	43.413
1951	59.318.875	48.305.219	81.83	45.881.807	2.423.412	4347	50.983
1952	67.318.910	54.294.177	80.65	51.765.055	2.529.122	4776	59.666
1953	80.716.500	65.403.295	81.03	62.322.189	3.081.106	5292	68.831
1954	91.999.390	75.524.993	82.09	71.797.080	3.727.913	6547	78.946

1955	103.488.140	86.700.216	83.78	82.681.341	4.018.875	7142	88.052
1956	121.578.160	103.598.102	85.21	99.170.743	4.427.359	7773	95.997
1957	143.399.730	128.128.378	83.35	123.540.694	4.587.684	8552	100.313
1958	160.695.730	143.658.504	89.39	138.547.159	5.111.345	9306	107.493
1959	182.528.010	163.702.956	89.69	157.406.388	6.296.568	10.558	114.675
1960	203.309.800	180.269.219	88.67	172.388.011	7.881.208	13.079	123.486
1961	220.993.890	194.433.734	87.98	185.410.633	9.023.101	14.178	128.066
1962	243.079.850	212.774.881	87.53	202.708.947	10.065.934	15.766	135.315
1963	260.257.580	231.234.324	88.85	220.883.426	10.350.898	17.815	143.332
1964	284.674.987	254.501.284	89.41	243.014.515	11.486.769	20.952	152.175
1965	326.044.815	291.329.568	89.35	279.007.396	12.322.172	22.079	165.379
1966	366.161.177	330.339.842	90.21	316.198.477	14.141.365	25.329	177.420
1967	410.137.181	369.232.426	90.02	354.187.594	15.044.832	28.031	193.285
1968	475.147.835	431.397.311	90.79	414.487.269	16.910.042	28.962	208.319
1969	630.003.734	482.527.373	90.04	465.177.391	17.345.982	29.799	225.463
1970	571.321.047	507.131.751	88.76	492.754.826	14.376.925	30.602	240.850
1971	601.570.361	536.599.508	89.20	521.499.167	15.100.341	32.166	256.294
1972	695.801.271	583.288.515	83.83	566.135.277	17.153.238	33.248	275.835
(*) 10th Annual of the Foundation of the Republic							

In the end of the Second World War, the treaties between Turkey and Germany were canceled. As a consequence, the industrial landscape of the Maltepe Gas and Electric Factory continued to develop. By the end of 1945, in order to meet the gas demand of the city, it was decided that a new gas furnace be constructed. This furnace, which would produce 20.000 m^3 gas a day, was ordered from an English firm called Woodal Duckham in 1947, and was opened into service in the year 1949 (Table 2).[106] In terms of electricity on the other hand, in order to meet the increasing electricity demand of the city (Table 3), EGO ordered a new cauldron from an American firm called Foster Wheeler that would produce 34.000 ton steam an hour (Table 4).[107] Furthermore, a new turbine generator group with a power of 7500 kW was ordered from a Swiss firm called Oerlikon in 1947.[108] This group was put into use eventually in 1948.[109]

[106] EGO (1972): 26
[107] EGO (1972): 13
[108] EGO (1972): 13
[109] EGO (1972): 13

During the 1950s, the Gas Factory landscape was deprived of any construction activity. The only developments within the site were the construction of a heating center building, a new gasholder in 1950, which could store 15,000 m^3 of gas, and the construction of new gas production units (7-8 furnaces) in 1956, which was constructed by the Didier Werke firm. In contrast, some small attempts to increase the capacity of the Electric Factory were made during this period, such as the transfer of the two B.B.C. product turbine generator groups, which had a power of 3300 kW and 2300 kW each, from Etibank's Power Plant in Kozlu.[110] These groups were put into use on February 12, 1953.[111]

Unfortunately, in 1958, it was decided that the Interconnection System of Etibank could fulfill the electricity demand of the city. Therefore, it was decided to close the electric plant in the Güvercinlik District and sell the diesel groups of this plant to the Beypazarı Municipality and the land with its structures to the Cement Industry of Ankara. Furthermore, since enough power was obtained through this new system, EGO decided to stop the developments within the Maltepe Electric Factory in 1955.

Table 4: Gas furnaces built in Maltepe Gas Factory between 1929-1989
Source: EGO (1973): 26

CONSTRUCION NUMBER OF THE FURNACES	PRODUCTION CAPACITY (Nm^3/day)	DATE OF OPENING INTO SERVICE	NAME OF THE ESTABLISHER
1-2	5000	28.10.1929	Didier Werke (Germany)
3-4	12.000	30.1.1935	Didier Werke (Germany)
5-6	20.000	28.4.1949	Woodal Duckham (England)
7-8	25.000	27.11.1956	Didier Werke (Germany)
9-10	25.000	15.6.1960	Didier Werke (Germany)
11-12-13	67.000	9.12.1963	Didier Werke (Germany)

Although the developments in the Electric Factory side ended in 1955, the Gas Factory continued to develop. In fact, the most obvious spatial developments within

[110] EGO (1973): 13
[111] EGO (1973): 13

the Gas Factory area are seen in the 1960s. In the 1960s, the gas produced from the Maltepe Gas Factory could still not satisfy the demand of the increasing population of the city. Therefore, first of all, the working capacity of the factory was increased to 102,000 m^3 from 60.000 m^3 with the construction of new gas production units (9-10 furnaces) by the German firm Didier in May 1960.[112] These gas furnaces could comprise 3200 kg of coal, and consisted of two groups. Each group was established from 6 cameras made up of brick.[113] Then, with the construction of a central generator system by the German firm called Widekind on November 12, 1960, the capacity of the factory increased to 125,000 m^3.[114] Furthermore, within this same year, a third gasholder was constructed on the site, which could store 30,000 m^3 of gas.[115]

The new central gas generator system was made up of 540 ton steel structure and fire-bricks. It included subsidiary buildings such as, 4 generator groups, coke-coal crashing, eliminating and transferring units, gas and oxygen absorption units, cleaners, dust eliminators, a water settling pool, a pump station and a cooling tower.[116] The gas produced here, after burned within the furnaces' camera canals, was used in the production process of coke-gas, which was later piped to the city.[117] Furthermore, during the production process of coke-gas, many other auxiliary outputs were obtained such as ammoniacal liquors, iron sulphate and tar. These products were later distributed to various branches of the chemistry industry (Fig.

[112] According to a report of EGO it was stated that: "although new capacity improvements were made within the factory site, the population of the city demanded twice the gas supplied from the factories at the time". In this report, it was also estimated that this number would further increase by four in 1970. For this reason, in order to increase the working capacity of the gas factory to 220.000 m^3, new furnaces, which would have a 60.000 m^3 daily capacity, and new gas cleaning units, coal discharging, stocking, transferring and transportation units, which would have a 90,000 m^3 daily capacity, were ordered. These industrial buildings and structures were estimated to be constructed in 1962. Furthermore, the report suggests that in order to supply the required gas demand of the city, a new gas factory, which could be constructed at the edge of the city, was needed. (Cited in Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960): 3-10)

[113] Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960): 10; EGO Genel Müdürlüğü, "Maltepe Havagazı Hakkında Rapor"

[114] EGO (1960): 3-10

[115] EGO (1973): 27

[116] Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960): 5-8

[117] After September 20, 1961, gas production was made possible by using unfurnished techniques. As the furnish time of coal decreased to 14 hours, 231 tons of gas was produced from the coke-coal in 24 hours, in contrast to supplying 170 tons of gas under the same conditions and in the same time as previously done. (EGO (1973): 27)

37). For instance, the tar generated from this process, was used in the development of road networks within the city and for heating purposes for decades (Table 1).

Another important structure built on the site was the new gasholder building. The building was one of the most crucial structures within the factory complex. It stored the gas produced within the complex. Until May 1960, the total storage capacity of the gas factory was 24,000 m^3. However, with the establishment of the new gasholder in May 1960 by the German firm F. Koks, which could store 30,000 m^3 gas, the total storage capacity of the factory increased to 54,000 m^3.[118]

Fig. 31: Central Gas Generator Plant
Source: Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960)

In addition to the production spaces built in 1960, many other industrial spaces that were involved in the gas production were also built within the site in the 1960s. Among these industrial buildings there was a mosque, a sulfur purification plant, a

[118] According to the documents of EGO (1960), another gasholder, which would approximately contain 50,000 m^3 of gas, was needed at the time. However, within the document, it was stated that there was no way to construct this structure within the existing field due to unavailable empty land. Therefore, the document estimates that, in the following years, the new gasholder structure would be constructed within the near environment of the Maltepe Gas Factory (Cited in Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960): 8)

new administrative building and new workers' housing units. In addition, a compressor building was built in 1965 by a German firm called Klein Schanlin und Becker-Frankenthal, and a new lathe workshop was built in 1970 (Fig. 35 and 36).[119]

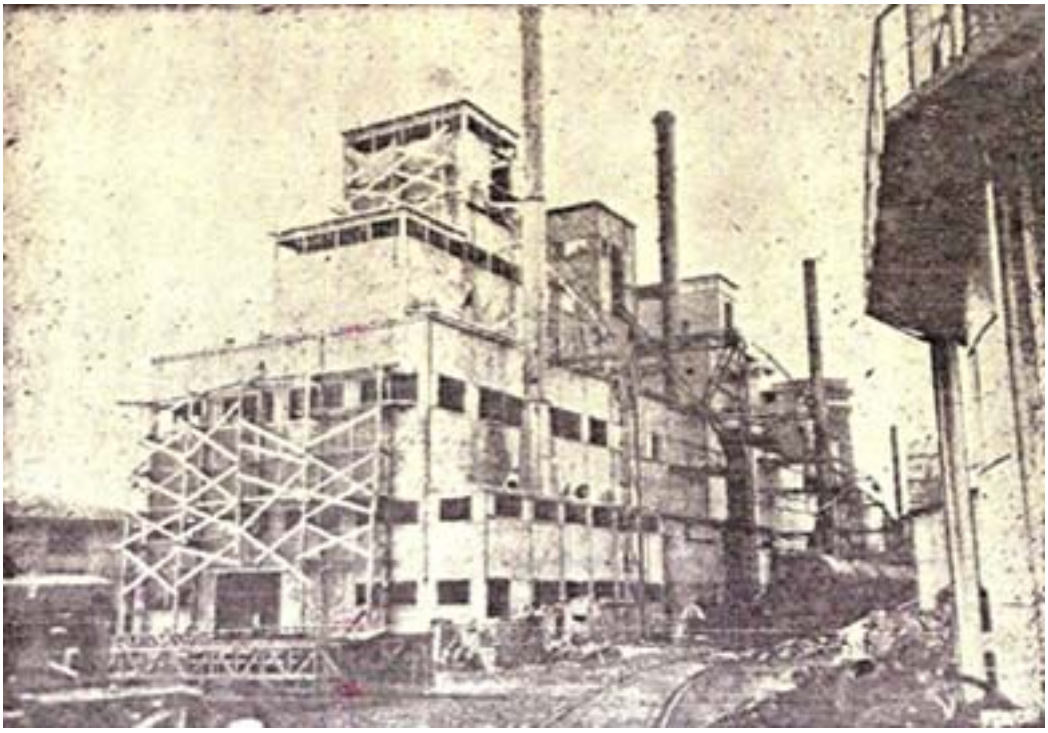

Fig. 32: Fitting of the Central Gas Generator Plant

Source: Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960)

In addition to the production spaces built in 1960, many other industrial spaces that were involved in the gas production were also built within the site in the 1960s. Among these industrial buildings there was a mosque, a sulfur purification plant, a new administrative building and new workers' housing units. In addition, a compressor building was built in 1965 by a German firm called Klein Schanlin und Becker-Frankenthal, and a new lathe workshop was built in 1970 (Fig. 35 and 36).[120]

[119] Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, UPRS Dairesi Başkanlığı (1991), "**TEK ve EGO Maltepe Tesisleri Arazi Kullanım Haritası**" (Cited in Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu Büro Müdürlüğü, Kayıt No: 294, 21.22.1991, Dosya No. 06/06/72; Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960): 11

[120] Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, UPRS Dairesi Başkanlığı (1991), "**TEK ve EGO Maltepe Tesisleri Arazi Kullanım Haritası**" (Cited in Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu Büro Müdürlüğü, Kayıt No: 294, 21.22.1991, Dosya No. 06/06/72; Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960): 11

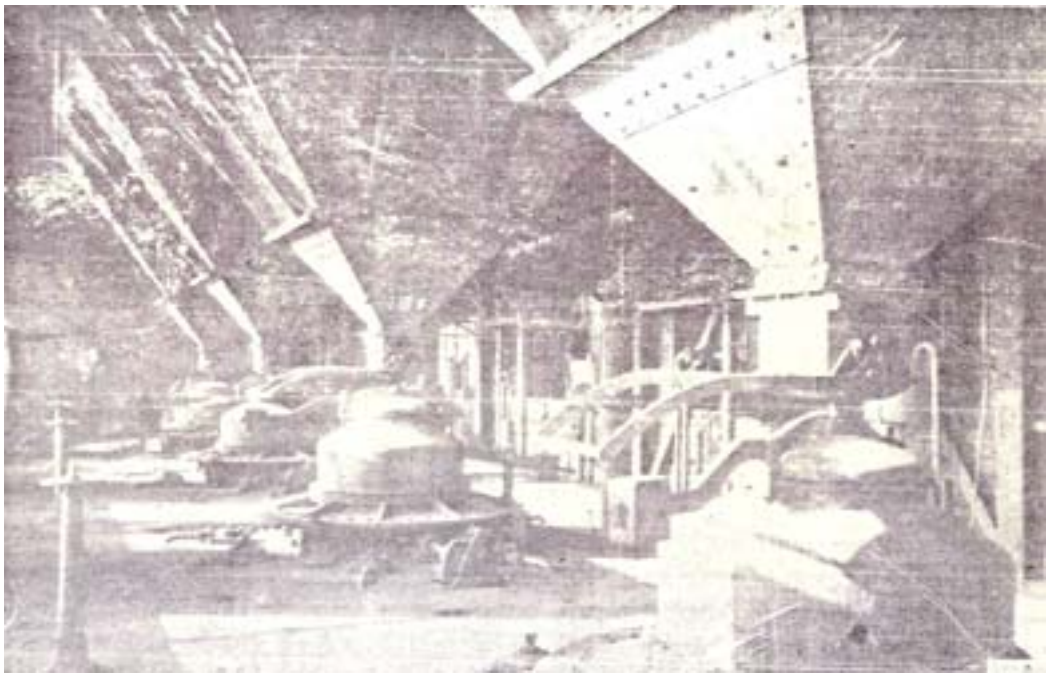

Fig. 33: Gas Generators – Loading and Operating Floor

Source: Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960)

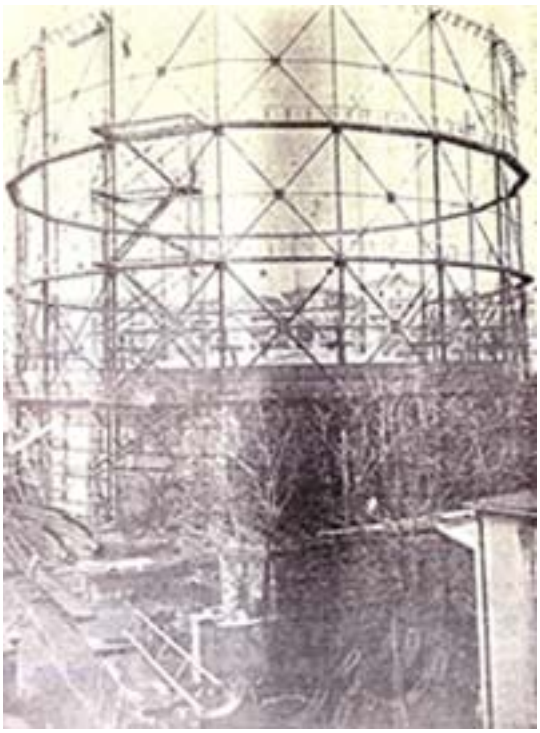

Fig. 34: The new Gasholder building constructed in 1960

Source: Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960)

In conclusion, starting from 1928 until the beginning of the 1980s, the Maltepe Gas and Electric Factory landscape continuously developed as Ankara's population continued to grow. The industrial buildings and structures that were built before the domination of EGO, not only witnessed the development of a modern capital, but also witnessed the development of the city. The allocation process of the industrial archaeological structures during this time interval was affected from two main factors. The first one is the political, social and economic movements. The second one is related to the nature of industrial production activities. During the evolution of the Maltepe Gas and Electric Factory landscape, it was observed that, the allocation pattern of the industrial buildings and structures, which was started in the 1930s continued. According to this pattern, industrial production spaces were allocated around the railway lines. The auxiliary buildings that were not directly involved in the industrial production activities, such as workers housing units, religious and administrative buildings, on the other hand, were allocated away from the railway lines.

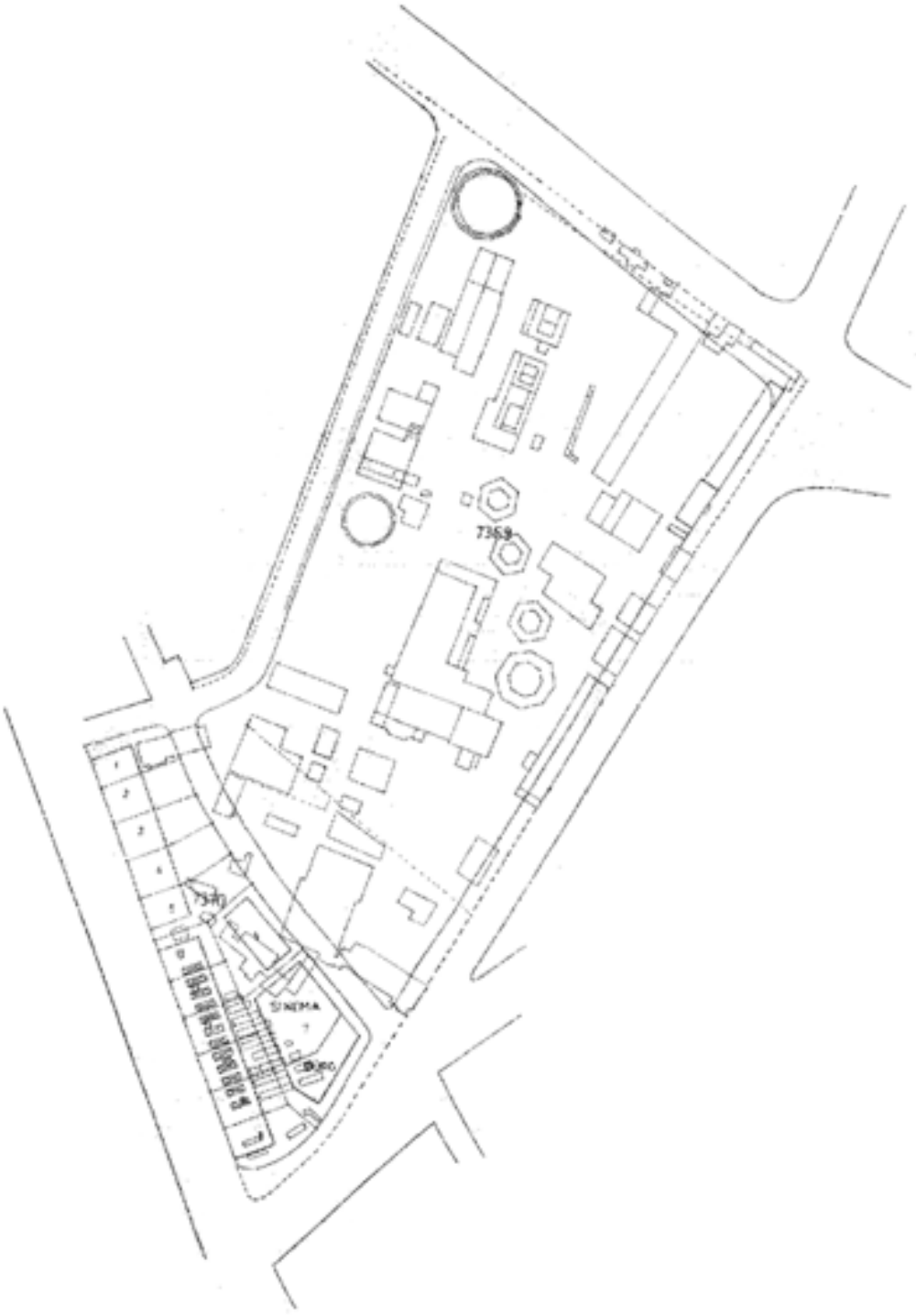

Fig. 35: Maltepe Gas Factory site in 1965 (Personal redrawing)

Source: T.C. Ankara Belediyesi İmar Müdürlüğü, Plan No: 55950, Evrak No: 5563/65, Dosya No: 2569, in the Ankara Greater City Municipality Archives

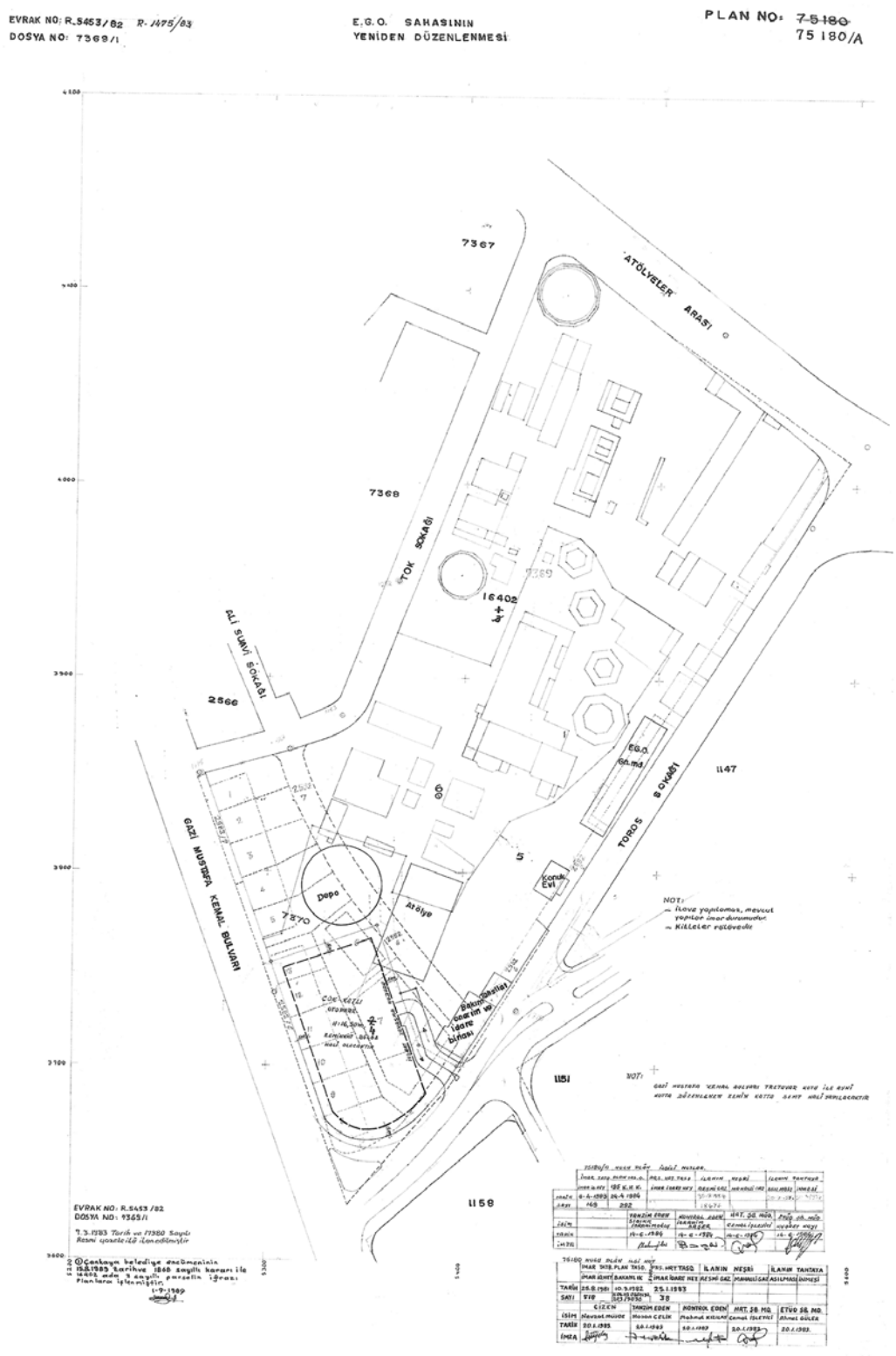

Fig. 36: Maltepe Gas Factory site in 1983

Source: T.C. Ankara Belediyesi İmar Müdürlüğü, "EGO Sahasının Yeniden Düzenlenmesi", Plan No: 75 180/A, Evrak No: R_5453/82, Dosya No: 7369/1, in the Ankara Greater City Municipality Archives

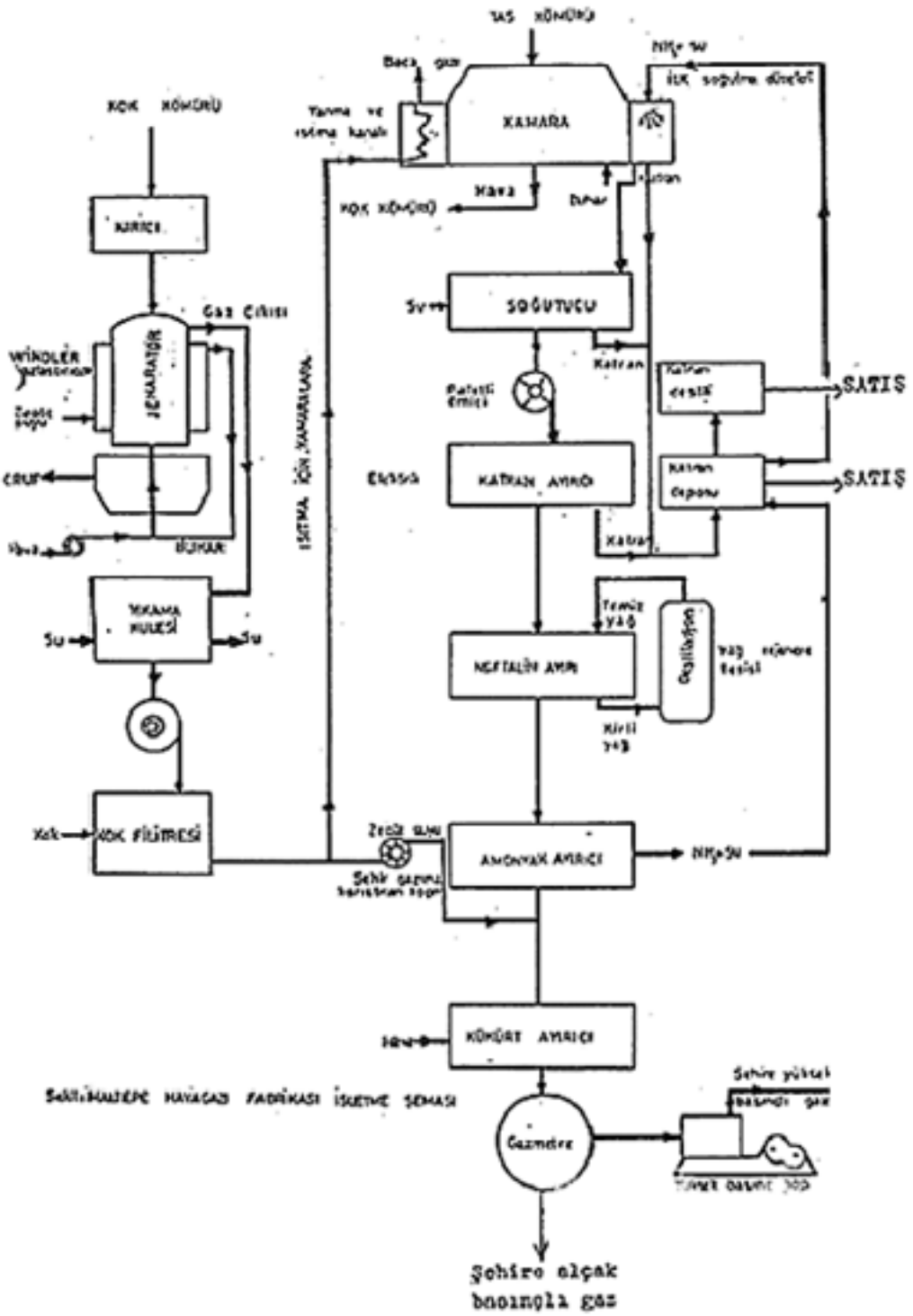

Fig. 37: A scheme showing the gas production phases

Source: Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi, "**Havagazı Fabrikası Hakkında Genel Bilgiler**", Unpublished Document, in the Archives of Nazmi Fındıkçıoğlu

3.2. The Decline and the Closure of the Factories

The spatial evolution of the Maltepe Gas and Electric Factory landscape from a modern industrial archaeology perspective continued until the 1960s. After the 1960s, on the other hand, the site started to decline suddenly. This decline soon led to the abandonment of the factory buildings and structures.

The 1960s period was a stage full of threats for the sustainability of the Maltepe Gas and Electric factories. One of the most disastrous factors was the initiation of the implementation of the Yücel-Uybadin plan in 1957. After this time, first with the designation of the Maltepe District as a segment of the Central Business District (CBD), and then with the improvements in the road transportation networks, the spatial context of the Maltepe Gas and Electric Factory landscape suddenly started to change. Furthermore, the construction of the Celal Bayar Boulevard, which was designed to support a CBD in Kızılay, hindered the flow of raw materials and industrial outputs between the railroad and the industrial landscapes in the Maltepe District. As a result, the Maltepe Gas and Electric Factory landscape became the focus of attraction of the land speculators.[121] After this time, the landscape was subjected to various regeneration projects.

According to the 1957 Yücel-Uybadin Plan, the southern area of the Maltepe Gas and Electric Factory site, which was facing the GMK Boulevard, was detached from the industrial landscape with a new lateral road (Fig. 38)[122]. According to the plans of the municipality prepared in 1965, on the other hand, this detached area was divided into lots (Fig. 35). Within this last plan, a cinema, office and residential buildings were proposed in this detached area. However, none of these proposals were implemented. Until 1983, this site was used as the Maltepe Bazaar.

[121] The increase in the density of the urbanized area in Maltepe clearly demonstrates the speculative approaches to the district within this period.
[122] The new proposed road was the extension of Ali Suavi Street, which aimed to connect Toros Street with Tok Street, and its construction required the demolishment of the gasholder built in 1960, a workshop (construction date unknown), and the administrative building constructed in 1981.

In 1983, due to the urban development dynamics, a regional market-place and a multi storey car-park complex project was planned within the area used as the Maltepe Bazaar.[123] Thus, finally, this area took its last form in the mid-1980s. With the transfer of the bazaar function to the southern part of the District, a multi-storey car park building was eventually constructed within this site. Unfortunately, these implementations, caused the diminishment of the potential development area of the Maltepe Gas and Electric Factories. The atrophy of vacant lands, which could be used for further industrial-spatial developments, staged serious threats, especially after the 1960s, in terms of the sustainability of the landscape, as new technologies appeared and as the demand of the citizens for electricity and gas increased.

Besides the general threats that affected the sustainability of the industrial landscape of the Maltepe Gas and Electric Factory, there were some crucial events that lead to the closure of these Gas and Electric Factories. The decline process of the Maltepe Electric Factory was started in the late 1950s. In 1958, EGO decided to supply the additional electricity requirement of the city from the Interconnection System of Etibank. After this date, EGO officials found it needless to make further large-scaled improvements on the Maltepe Electric Factory, since the electricity received from the new system was sufficient for supplying the demand required by the city. Furthermore, since the Maltepe Electric Factory was dependent on coke-coal for generating electricity, and since this raw material was scarce in quantity and expensive, EGO decided not to purchase additional power plant units for increasing the capacity of the Electric Factory. However, the machinery and equipment within the Maltepe Electric Factory was very old, and for this reason they had fulfilled their life spans years ago. As a result, the life capacity of the existing plants started to decline. The electricity supplied from the Etibank's new power sources, on the other hand, became insufficient to meet the required demand of electricity. Therefore, EGO officials constructed several new power plants in the landscape of the Maltepe Gas and Electric Factory in order to increase the capacity. In this context, there were some noteworthy developments within the site such as the new workshops

[123] The plan was approved and declared in the official newspaper No. 17980 in March 7, 1983 ("**Map: EGO Sahasının Yeniden Düzenlenmesi**", Evrak No: R_5453/82 R-1475/83, Dosya No: 7369/1, Plan No: 75 180/A)

constructed in 1963, the new electricity plant and a new warehouse building, which were established in 1968, and finally the construction of a new workshop for repair and maintenance services in 1981.[124]

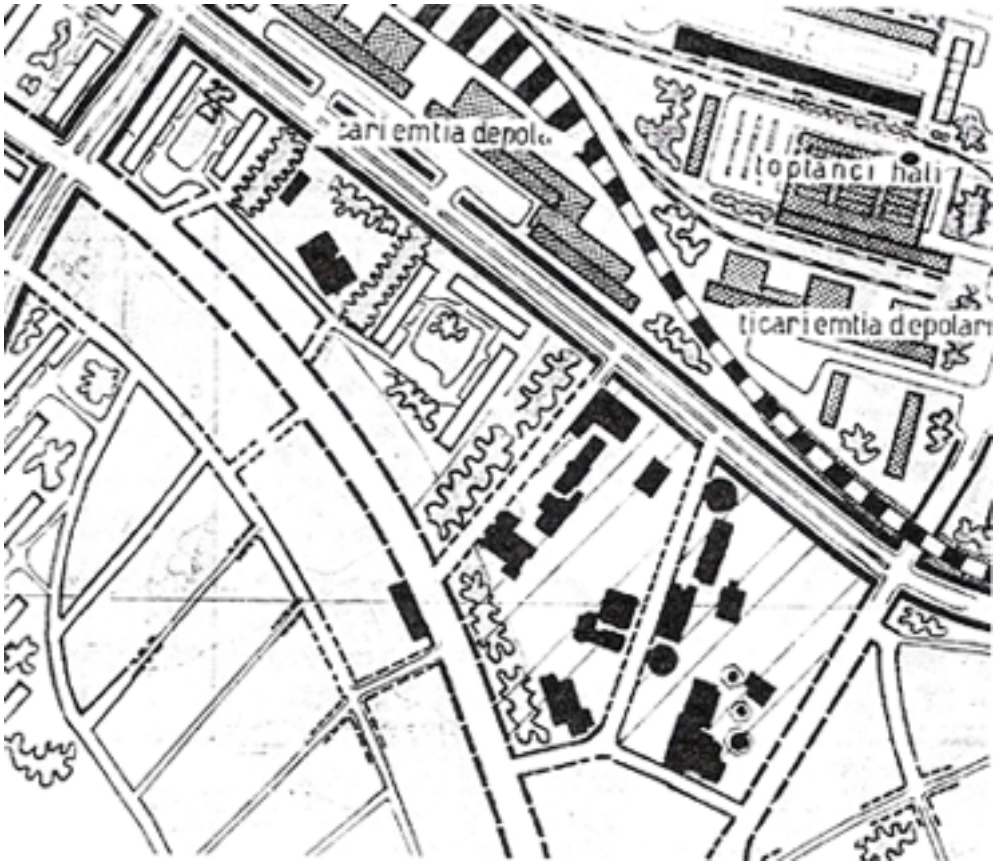

Fig. 38: Maltepe Gas and Electric Factory landscape in the Yücel-Uybadin Plan. Hatched structures shows industrial production spaces around the Maltepe District
Source: 1957 Yücel-Uybadin Plan (in Saner, M. (2004), "**Transformation of Old Industrial District of Ankara and Political Actors**", A Thesis Submitted to the Graduate School of Natural and Applied Sciences of Middle East Technical University, June 2004)

Besides the small-scaled developments in the Maltepe Gas and Electric Factory, an important decision taken in 1967 suddenly designated the future state of the Maltepe Electric Factory. According to this final decision, it was emphasized that the Maltepe Electric Factory would not be able to supply a further demand of the city in the near

[124] Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, UPRS Dairesi Başkanlığı (1991), "**TEK ve EGO Maltepe Tesisleri Arazi Kullanım Haritası**" (in Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu Büro Müdürlüğü, Kayıt No: 294, 21.22.1991, Dosya No. 06/06/72)

future.[125] Consequently, in this same year a new power plant was constructed in the Balgat District. With this new development, the function of the Maltepe Electric Factory ended theoretically. Finally, in 1982 EGO, which was responsible for the production, distribution and selling of the electricity and gas services, delivered its privileges related with electricity to Turk Elektrik Kurumu (Turkish Electricity Authority), which is also known as TEK, with the Act No. 2707.

TEK found the functioning of Maltepe Electric Factory as a costly making enterprise.[126] Thus, instead of fostering industrial development activities within the landscape, TEK decided to use the area for administrative purposes and as a depot. Moreover, the close connection of the electricity production spaces with the gas production spaces within the landscape was blocked due to a shifting in the ownership of the sites. A grill system was used to separate the properties of EGO and TEK (Fig. 39). Hence, the industrial history of the Maltepe Electric Factory was completely ended due to the intentions of the new operator in 1983.

[125] EGO (1973): 15

[126] The production capacity of the Maltepe Electric Plants was very low. It used an expensive, exhausting, and environmentally damaging raw material, the coke coal. Operating the factory with this raw material was a costly task.

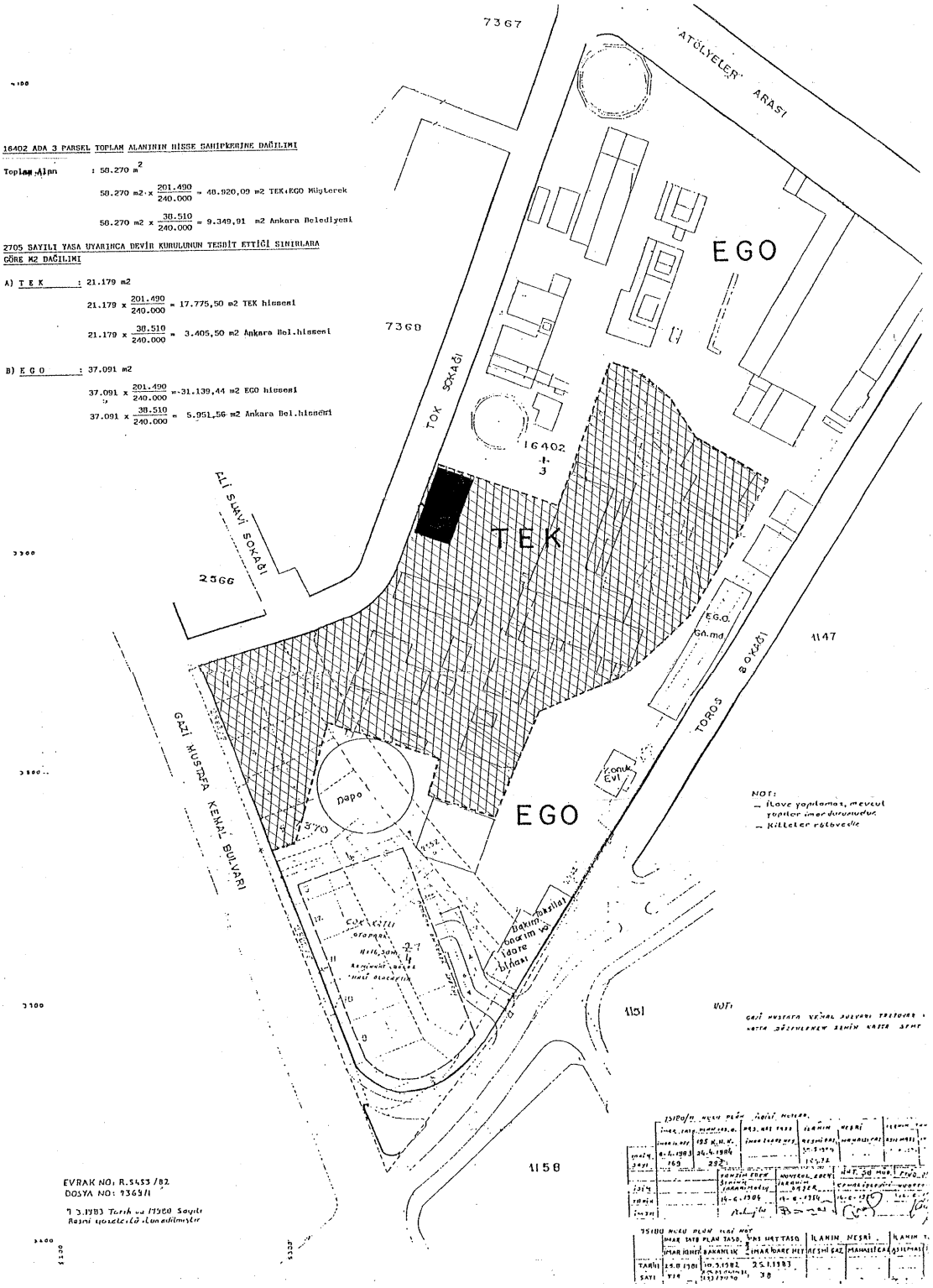

Fig. 39: The plan showing the property boundaries of TEK and EGO sites. In the left top of the plan, statistical values with respect to areas of the property boundaries of these landowners are given.
Source: TMMOB Mimarlar Odası Ankara Şubesi, Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası"

The reasons behind the decline of the Maltepe Gas Factory, were similar to that of the electric factory. After the 1960s, the Maltepe Gas Factory became insufficient for supplying the required gas demand of the city with its existing plants. According to a report prepared by EGO (1985), most of the gas production furnaces had reached their economic and operating life spans 10 years before.[127] Furthermore, among the three gasholders of the Maltepe Gas Factory, one was shut down and re-functioned into a tar warehouse, and the other two gasholders were highly damaged.[128] Therefore, it was put forth that even with full maintenance and repair, the factory could function at a maximum capacity of 100,000-110,000 Nm^3/day, which constitutes only 50 % within the total production capacity.

The type of the raw material used in the production process was another reason behind the decline of the Maltepe Gas Factory. The transportation and operation cost of coke-coal, which was maintained from Zonguldak coalmines, was very high at the time. Furthermore, according to a report of EGO it was suggested that the coke produced in Zonguldak would become insufficient for supplying the raw material needed the Maltepe Gas Factory in the near future, and thus new techniques should be used for gas production purposes.[129] Meanwhile, in the twentieth century, new energy sources such as naphtha and fuel-oil started to take the place of coke-coal in the world. Consequently, EGO officials first, decided to use fuel-oil as an energy source, which was one of the cheapest and plentiful resources of the country.[130] Following this decision, a treaty was signed between EGO and a French firm called Onia-Geri, in August, 1968, for the construction of a new gas factory that would

[127] Ankara Büyük Şehir Belediyesi EGO Genel Müdürlüğü, Gaz Dairesi Başkanlığı (1985), "**Ankara Şehrinde Artan Gaz Talebinin Karşılanması ve Hava Kirliliğinin Önlenmesi İçin Doğal Gaz Kullanımına Geçilmesi Hakkında Ön Rapor**", pp. 13. However, according to another report of EGO, the decrease in the productivity level of the factory was stated as follows: "Since the furnace groups 1-4, 5-6, 7-8 have been used for approximately 17 years, they have completed their economic and operational life spans. Therefore, their productivity is very low. The renewal of the furnace groups 9-10 and 11-13 was started in 1970 and finished in 1976. Because of the problems that occured during the renewal of the furnace group 11-13, there are difficulties in the operation of these furnaces. The gas generated in these furnace groups passes to the heating canals where they are burned, and causes smoke in the chimneys when there is not sufficient air. In this case, the production capacity drops from 83.000 Nm^3 per day to 30.000 Nm^3 per day ." (Ankara Belediyesi Elektrik Gaz Otobüs İşletme Müessesesi Genel Müdürlüğü (EGO), "Naftaya Dayalı Şehirgazı Üretim Tesisi Fizibilite Etüdü", pp. II-3)

[128] Ankara Büyük Şehir Belediyesi EGO Genel Müdürlüğü, Gaz Dairesi Başkanlığı (1985): 13

[129] EGO (1973): 29

[130] EGO (1973): 29

function with fuel-oil in the Güvercinlik District.[131] In conclusion, after some delay, the new gas factory was put into use in 1973. This event heralded the closure of the Maltepe Gas Factory. Furthermore, after the 1980s EGO decided to construct a new Gas Factory, which would depend on naphtha. According to this report it was stated that:[132]

> The increasing demand of energy needed for the kitchen works, and the inability for supplying the required gas need of the city from the existing plants, lead to an emergent construction of new gas plants within Ankara. However, supplying the gas need of the city with a maximum 200,000 Nm^3/day from both the Maltepe and Güvercinlik Plants causes difficulties. Furthermore, it is not possible to supply the required demand by increasing the capacity of the existing plants. This is because:
>
> (1) In order to keep maintenance, the factories must be shut down. However, in this case, it won't be possible to supply the required gas need of the city.
> (2) It is not possible to shut down all of the Maltepe Gas Factory, since the Güvercinlik Factory works only in peak hours.
> (3) If the gas demand of the city cannot be satisfied at a sufficient level, air will be sucked into the gas network of the city. When the gas in the pipes mixes with air at a certain proportion, it may cause explosions in the pipes or equipments. As a result of this, the safety of human life and property as well as the safety of the pipe network will be under threat.
> (4) It is not possible to convert the Güvercinlik complex to naphta before establishing new production facilities. There is a lack of knowledge as to how to implement the necessary changes in the processes. In addition, at least one year is required for the conversion to naphta production. It will be necessary to stop both of the production units because of technical reasons. But, during this period the Maltepe

[131] EGO (1973): 29
[132] EGO, "**Naftaya Dayalı Şehirgazı Üretim Tesisi Fizibilite Etüdü**", pp. I-6, I-7

complex cannot by itself provide the gas demand of the city of Ankara.

Moreover, according to this same report, it was emphasized that the Maltepe Gas Factory constitutes a great threat for its social and physical environment.[133] It was suggested that due to the accumulated gas within the pipes, the Maltepe Gas Factory could explode in the near future.[134] Furthermore, the gas factory had polluted the air of Ankara for decades.[135] Indeed, the air pollution values of Ankara dramatically increased after the 1960s, and reached its zenith in the 1980s. According to Tekeli (1985), the most crucial factor of the pollution was not the industrial wastes, but more importantly, the raw material used as energy for the heating of the houses.[136] Since the raw material used as an energy source in the city was the coal-gas that was produced in the Maltepe Gas Factory from the coke-coal, for many years the gas factory attracted the main focus of the citizens and environmentalists.

In order to surpass the problems that hindered the functioning and development of the Maltepe Gas Factory, EGO found the exit in its closure, and the usage of natural gas[137]. EGO based the rationale of this transformation to air pollution and the insufficiency of the existing plants in Maltepe to supply the required gas demand of the city.[138] However, more important then these reasons, the initiation of the usage of natural gas allowed EGO to maximize their profits in terms of distributing and selling this new energy source. As a result of these factors, the Maltepe Gas factory was closed down in 1989.[139]

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[133] Ankara Belediyesi Elektrik Gaz Otobüs İletme Müessesesi Genel Müdürlüğü, "**Naftaya Dayalı Şehirgazı Üretim Tesisi Fizibilite Etüdü**", pp. I-7
[134] Ankara Belediyesi Elektrik Gaz Otobüs İletme Müessesesi Genel Müdürlüğü, "**Naftaya Dayalı Şehirgazı Üretim Tesisi Fizibilite Etüdü**", pp. I-7
[135] Ankara Belediyesi Elektrik Gaz Otobüs İletme Müessesesi Genel Müdürlüğü, "**Naftaya Dayalı Şehirgazı Üretim Tesisi Fizibilite Etüdü**", pp. I-7
[136] Tekeli, İ (1985), "**Ankara Kent Makroformunun Değerlendirilmesi**" (Cited in ODTÜ Şehir ve Bölge Planlama Çalışma Grubu, Ankara: 1985'den 2015'e, Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, pp.170-179)
[137] Natural gas has been imported from Russia since 1989.
[138] See EGO (1985): 3-4; EGO, "Naftaya Dayalı Şehirgazı Üretim Tesisi Fizibilite Etüdü": I-6 to I-11; Ankara EGO Genel Müdürlüğü, "**Tarihçe**", http://www.ego.gov.tr, January 24, 2006
[139] EGO (1985): 5-13

3.3. From the Closure to the Declaration of the Factory Area as an "Industrial Site" (1989-1991)

Starting from the closure of the factory until today, depending on the aims and visions of different actors, the Maltepe Gas Factory property has been exposed to various regeneration attempts. The story of the regeneration process within the industrial site begins with EGO's decision to destroy the Maltepe Gas Factory complex, and to open a competition project for the building of a profit-making structure in its place. As a consequence of this motive, EGO signed a treaty with the Musa Akar firm, which was hired to demolish the buildings related to production activities within the site. Eventually, on October 5, 1990 demolition processes started within the landscape of EGO.[140]

The destruction of the industrial archaeological heritage in the Maltepe Gas Factory site could not be completed with full success. Some intellectual actors, who were aware of the importance of the industrial archaeology discipline, reacted stiffly to the destruction attempts of EGO. They entered into harsh struggles with the actors, who desired the demolishment of those industrial buildings. One, and probably the most influential of the intellectual actors was the Chamber of Architects in Ankara. Especially from the period that started after the closure of the factory in 1989 and continued until the declaration of the factory area as an "industrial site" in 1991, the Chamber of Architects played the key role in starting a conservation process within the site. Within this period, the Chamber of Architects aimed to attract the attention of public bodies to the conservation problem of the Maltepe Gas and Electric Factory landscape, and in this way aimed to create a reaction within the society to the demolishment of the industrial site.[141]

[140] Ankara Koruma Kurulu Büro Müdürlüğü (1991), Official Communication Report, Kayıt No:1003, 06.06/72

[141] The Ankara Chamber of Architects partially achieved its aim. An effective public reaction to the regeneration of the site had not occurred in the past. However, as will be examined in the later chapters of this thesis, the Chamber of Architects achieved its aim of attracting the focus of the media, and universities to the heritage value of the landscape.

The Chamber, immediately after the start of the destruction attempts, published a report emphasizing the importance of sustaining this landscape. This report stated:

> (…) The Maltepe Gas Factory Complex is the only spatial circulation path between the city center Kızılay and the Station Area.
>
> The site, beside some manageable little problems, gained an award for its conservation, not only due to its advantageous position in its land ownership situation and its geographical location, but also due to its importance of being one of the last survived 'images' of the Ankara city with its cooling towers, hammer headed cranes, high shafts and gasholders.
>
> (*Thus*), the EGO Gas Factory complex is
>
> 1. A part of the constituents of the 'propaganda' space, which demonstrated the passions of the 'institutionalization' aims of the new economic order of the Early Republic Period, and which can be observed along the railways, including the Atatürk Orman Çiftliği and the Tractor Factory,
> 2. The last and the inevitable complement to the historical picture of the Station Area and its environment that has succeeded in surviving until today. [142]

Furthermore, according to this same report, it was stated that unless the area is conserved, any profit-making complex built on this land would increase the 'urbanization' pressures of the 'metropolitan' Ankara city on the urban lands located between the Station Area and Celal Bayar Boulevard. [143]

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[142] TMMOB Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu Raporu (1990), "**EGO Maltepe Havagazı Tesislerinin Sökülmesi İşlemlerine Niçin Karşı Çıkıyoruz?**", Site Survey Report, pp.7-8, in Mimarlar Odası Ankara Şubesi, Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası"

[143] TMMOB Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu Raporu (1990), "**EGO Maltepe Havagazı Tesislerinin Sökülmesi İşlemlerine Niçin Karşı Çıkıyoruz?**", Site

The aim of the Chamber of Architects was to conserve the industrial site with its entire industrial heritage by re-functioning it into a cultural use. According to the opinion of the Chamber:

1. Like Atatürk Orman Çiftliği and Ankara Station, the Maltepe Gas Factory is one of the main components that constitute the urban identity of Ankara. It was formed as a result of efforts for the institutionalization of the capital city during the Early Republic Period, under a state of deprivation, impatience, hurry, and anxiety for the future of the newly created nation.
2. It is necessary to consider the plants of the Gas Factory as a part of their environment, since these plants established functional relationships with the Ankara Station in terms of transportation activities.
3. It is necessary to preserve the whole plant. If only a part of the plant is symbolically preserved it will mean no less destroying the perception of a visual block that appears as a massive silhouette within the urban pattern.[144]

The aim of the municipality, on the other hand, was to gain economic profits from the site. In one of his declarations to a public newspaper, Murat Karayalçın, who was the head of the Ankara Greater City Municipality at the time, stated:

> "I display a special sensitivity to the cultural activities and environmental issues of Ankara. However, there is another issue that I am also sensitive to: the funding resources. This area is a very valuable place for Ankara.

Survey Report, pp. 7-8, in Mimarlar Odası Ankara Şubesi, Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası"

[144] TMMOB Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu (1991), "**Ankara Havagazı Hakkında Şube Görüşü**", in Mimarlar Odası Ankara Şubesi, Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası"

During the preparation of a project, these opinions should be evaluated."[145]

However, according to information given by municipality officials, because the soil of the Maltepe Gas and Electric Factory landscape was polluted up to 40 cm below the surface area, it would be impossible to regenerate the site into a recreational area.[146]

After the consultations made between the Chamber of Architects and the Ankara Greater City Municipality, a decision was made to stop the destruction process within the landscape on October 23, 1990.[147] Although the decision to end the destruction process within the site was approved by both of sides, eight days after this decision the demolishment process of the gasholder structure had started.[148] As a consequence of this attempt, the Chamber immediately contacted EGO on November 1, 1990, to make the institution aware of the agreement between the municipality and the Chamber.[149] EGO, in contrast to the statement of the Chamber, asserted that the destruction attempts had been stopped within the site, except the gasholder unit.[150] EGO further stated that demolishment of the gasholder structure was a must due to technical reasons.[151]

[145] 50. Yüzyıl Gazetesi, "**Ankara Müzelik Olmadan…**", August 26, 1990, pp.51
[146] 50. Yüzyıl Gazetesi, "**Ankara Müzelik Olmadan…**", August 26, 1990, pp.50
[147] TMMOB Mimarlar Odası Ankara Şubesi, "**Doğal ve Kentsel Çevre Komisyonu Çalışma Raporu**", in TMMOB Mimarlar Odası Ankara Şubesi, "Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası""
[148] TMMOB Mimarlar Odası Ankara Şubesi, "Doğal ve Kentsel Çevre Komisyonu Çalışma Raporu", in TMMOB Mimarlar Odası Ankara Şubesi, "Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası""
[149] TMMOB Mimarlar Odası Ankara Şubesi, "Doğal ve Kentsel Çevre Komisyonu Çalışma Raporu", in TMMOB Mimarlar Odası Ankara Şubesi, "Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası""
[150] T.C. Ankara Büyükşehir Belediye Başkanlığı, EGO Genel Müdürlüğü (2.11.1190), Sayı: 250
[151] T.C. Ankara Büyükşehir Belediye Başkanlığı, EGO Genel Müdürlüğü (2.11.1190), Sayı: 250

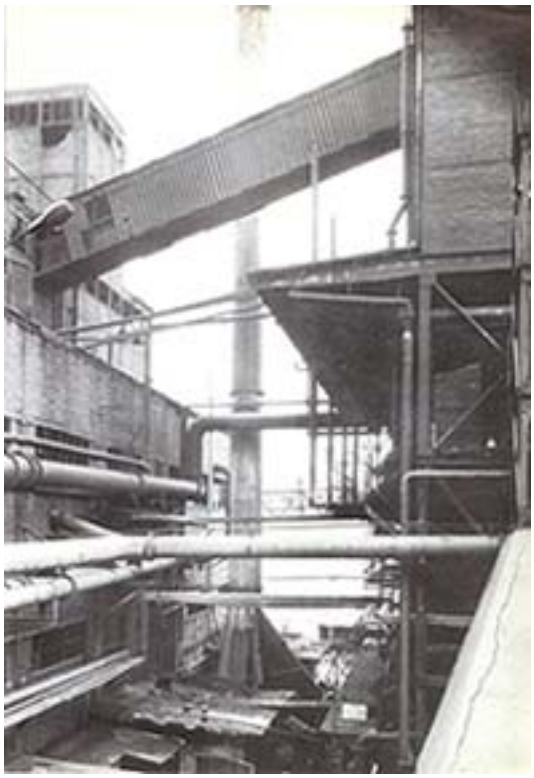

Fig. 40: A view from the gas furnaces
Source: İnciroğlu, G. (1991), "**Ankara Havagazı Fabrikası**", Arkitekt Dergisi, Sayı: 2, pp. 84

Fig. 41: A view from the industrial archaeological structures in the Gas Factory
Source: İnciroğlu, G. (1991): 81

Finally, the Chamber of Architects demanded the Ankara Board of Preservation of Cultural and Natural Heritage, which is a unit of the Ministry of Culture, to stop demolition, on November 2, 1990.[152] The Chamber based its preservation rationale on the report declared to the Board of Preservation as follows:

1. Besides being one of the techno-historical layers of the city, the Maltepe Gas Factory plants are the last example of their type that managed to survive until today.
2. Since the construction date of the first units of the factory goes back to 1929, and since the 1930s were the years in which 'industrial structures' were still designed as 'crafts' in Germany, the factory has a special place in our architectural history.

[152] TMMOB Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu (1990), "**Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu müdürlüğüne Gönderilen Şube Yazısı**", Official Communication Report, Date: 2.11.1990, No: 822, in TMMOB Mimarlar Odası Ankara Şubesi, "Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası""

3. To perceive the whole picture of an age, the Maltepe Gas Factory complex and Ankara Station should be comprehended together.
4. If the plants of the Maltepe Gas Factory are demolished, then Ankara Station and its environment, which are some of the most important components of our urban culture, will be exposed to speculation attempts.[153]

As a consequence, following the report of the Chamber of Architects, the Board of Preservation decided to stop the profit maximization attempts of the Municipality and EGO, through Act No. 1477, and decided to designate the location of the plants on the map on November 13, 1990.[154]

Up to November 13, 1990, many industrial structures had been demolished. Among these structures was the gas production units' bricks and machinery, which were either unstitched and sold or demolished and thrown to the factory site, the three gasholder structures, the extension of the railway system, and most of the technical equipment and machinery of the factory.[155] However, although most of the images of the industrial site had been demolished, there were still survived objects within the landscape that could be classified as "industrial heritage", such as a cooling tower, administrative buildings, laborers housing units and furnaces (Fig. 43 and Fig. 43).

[153] TMMOB Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu (1990), "**Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu müdürlüğüne Gönderilen Şube Yazısı**", Official Communication Report, Date: 2.11.1990, No: 822, in TMMOB Mimarlar Odası Ankara Şubesi, "Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası""

[154] Güneş Gazetesi, "**Bir Hatıranın Sökümü Üzerine**", 27.12.1990; Ankara Büyükşehir Belediye Başkanlığı EGO Genel Müdürlüğü, Ulaşım Planlama ve Raylı Sistem Dairesi Başkanlığı (February 20, 1991), Official Commission Report, Sayı: UPM-07-01/116-2982

[155] See Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi, İkmal ve Tesis Dairesi Başkanlığı, 14 Etüd Proje Müd., 20.5.1991, Official Communication Report, 16-7985, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

Fig. 42: A view from the cooling tower. This tower was build in 1929, and is one of the oldest industrial archaeological objects in the area
Source: İnciroğlu, G. (1991): 84

In order to safeguard the existing 'urban values', the Ankara Chamber of Architects organized a colloquium on November 14, 1990, related to the profit maximization aims of the municipality, and invited Karayalçın and other representatives of the municipality.[156] The aim of the Chamber was to re-start the competition project that was originally begun by the Municipality, and which was blocked by the decision of the Board in November 1990. However, the Chamber aimed to change the context of this competition into an urban design idea competition.

[156] TMMOB Mimarlar Odası Ankara Şubesi, "**Doğal ve Kentsel Çevre Komisyonu Çalışma Raporu**", in TMMOB Mimarlar Odası Ankara Şubesi, "Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası""

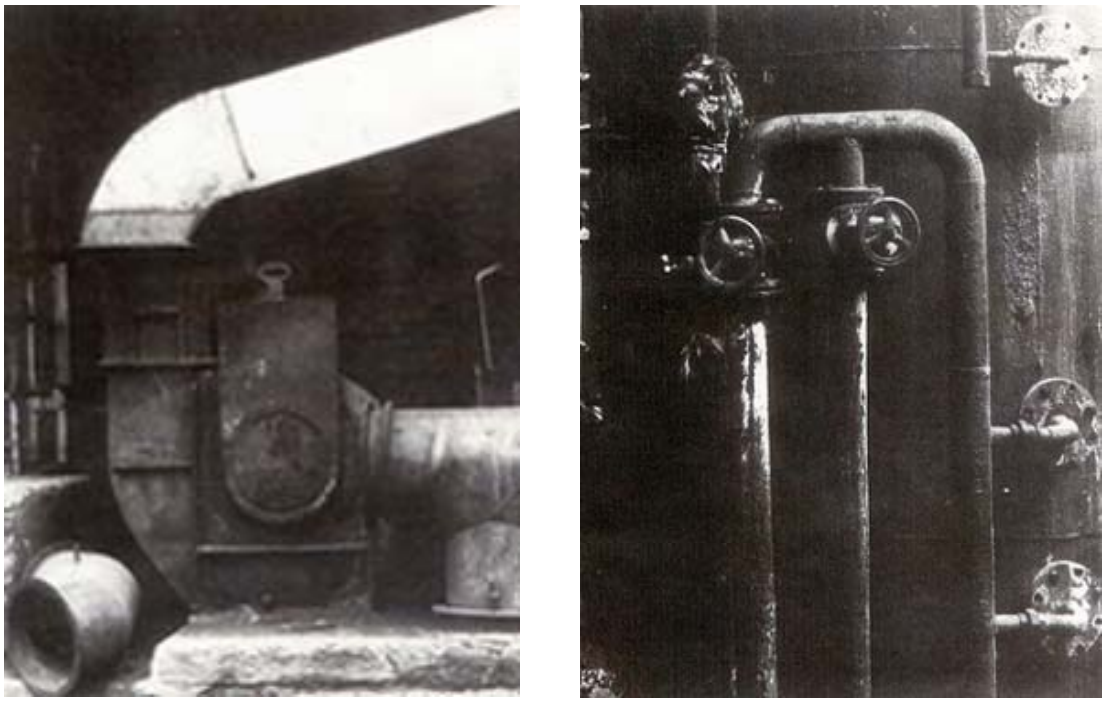

Fig. 43: Some of the survived industrial machinery and structures used for gas production activities
Source: İnciroğlu, G. (1991): 82

Since the Board of Preservation had not yet listed the area, the Ankara Chamber of Architects was still afraid of the annihilation of the factory landscape. Consequently, the Chamber sent a declaration to the Board on January 28, 1991, requesting that the Board list the area as "industrial landscape".[157] Furthermore, the Greater City Municipality of Ankara also sent a report to the Board on February 20, 1991, in order to request the institution to derive a conclusion for the site.[158]

As a consequence of the requests of both the Chamber of Architects and the Greater City Municipality of Ankara to regenerate the industrial site, the Ankara Board of Preservation of Cultural and Natural Heritage finally decided to list the area, through Act No. 1679 in March 19, 1991 (Fig. 44). This decision stated that:

[157] Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu (January 1991), "**Ankara Havagazı Hakkında Şube Görüşü**", in TMMOB Mimarlar Odası Ankara Şubesi, Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası"
[158] Ankara Büyükşehir Belediye Başkanlığı EGO Genel Müdürlüğü, Ulaşım Planlama ve Raylı Sistem Dairesi Başkanlığı (February 20, 1991), Official Communication Report, Sayı: UPM-07-01/116-2982

> In order to increase the architectural quality of the environment and to create urban spaces that will meet the requirements of the modern society, buildings that are devoid of any historical value and which are aesthetically inharmonious with their environments should be demolished. Instead of these demolished buildings, new modern buildings should be designed that will be created in harmony with their environment. Thus, as shown in the drawing attached to our decision; (…), it has been decided to preserve the gas production plants, and their transportation pipes, the cooling tower, the crane, the railway lines and the housing structure that face Toros Street in the north of the district. It has been decided to preserve these buildings and structures in their context, since they collectively constitute the 'whole', and to request the competitors to decide on new functions for the plants and the necessary preservation areas (that would take place within the site). It has been decided to preserve the gasholder, the shafts of the electric production plants and the pumping station, by transporting them to elsewhere, if it is found to be necessary. Finally, it has been decided to preserve the sulphur eliminator plants and the head office buildings of EGO, if determined a necessity by the competitors.[159]

Unfortunately, the preservation decision of the Board contained a number of mistakes. The area was listed under the vague status of "to be preserved" without any information provided concerning the level of preservation for the landscape. The indefinable structure of this decision has been a great danger in the past one and a half decade to the survival of the landscape, since no regeneration action could start within the site.

[159] T.C. Kültür Bakanlığı, Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, 19.3.1991, Board Decision, Sayı: 1679

3.4. A Destruction Story: From the First Declaration for the Preservation of the Landscape Until Today

The preservation decision of the Board for the industrial landscape of the Maltepe Gas and Electric Factory did not facilitate the survival of the industrial heritage but instead prevented it. The main reason for this problem was due not only to the content of the listing decision of the Board, but also to the negative attempt of EGO and TEK, which saw the decision of Board as wrong, ridiculous and non-profit-making. Hence, until March 19, 1991, the Maltepe Gas and Electric Factory landscape has been the stage for a conflict of decisions for its future.

The first reactions to the decision of the Preservation Board did not come late. On May 20, 1991, EGO asked the Board whether the removal of the decision was possible. EGO pointed out the following mistakes of the Board's preservation decision:

1. The bricks of the gas production furnaces and the inner machinery of the factory buildings had been separated from their context to a great extent. Due to the destruction process, the existing buildings demonstrated a great danger.
2. A 65-meter portion of the railway lines, which was meant to be preserved by the decision of the board, was unstitched from its context by the contractor firm, and taken to another area.
3. Gasholder structures that were meant to be preserved but could be re-located according to the decision of the Board, were unstitched 30-40 centimeters above the surface area and transported to another area by the contractor firm.
4. Cranes, pipe-lines (except flanges and valves) and the General Directorate's housing unit, which were specifically meant to be preserved, and the sulphur purification plant and General Administration Building, which were designated to be preserved "if the competitor desires", were not damaged.

5. The water cooling towers and chimneys of the electric plant are not situated within the property of EGO, but within the property of TEK. Therefore, our General Directorate could not make any attempts for their preservation.[160]

Consequently, EGO applied to the courts for a cancellation of the decision taken by the Board of Preservation and underlined that:

> *(the decision)* does not fit with the 1st and 6th entries of Act No. 285. The preservation of the plants, which seemed to be in a ruinous situation, is contrary to the beautification of Ankara, and (*lastly*), the designated buildings within the decision were demolished much before the approval of this decision. Furthermore, it is impossible to re-allocate those demolished buildings back to their context.[161]

However, the court decided to refuse the claim on January 13, 1993, depending on an expert's report prepared by a university institution, dated December 1, 1992. This report emphasized that although the buildings, which are the property of EGO, are in a ruinous state, the industrial plants, with their imported technologies, have an important position in the urbanization history of the city.[162] Thus, even with the preservation of the survived buildings, it would be possible to comprehend this position and the physical environment of the industrial building, and to transmit the level of science and technology used during the establishment of these plants to future generations.[163]

[160] Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi, İkmal ve Tesis Dairesi Başkanlığı, 14 Etüd Proje Müd., 20.5.1991, Official Communication Report, 16-7985, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
[161] Cited in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
[162] T.C. Danıştay, Yedinci Daire, 13.1.1993, Court Decision, Esas No: 1991/687, Karar No: 1993/19, in the Archives of the Chamber of Architects
[163] T.C. Danıştay, Yedinci Daire, 13.1.1993

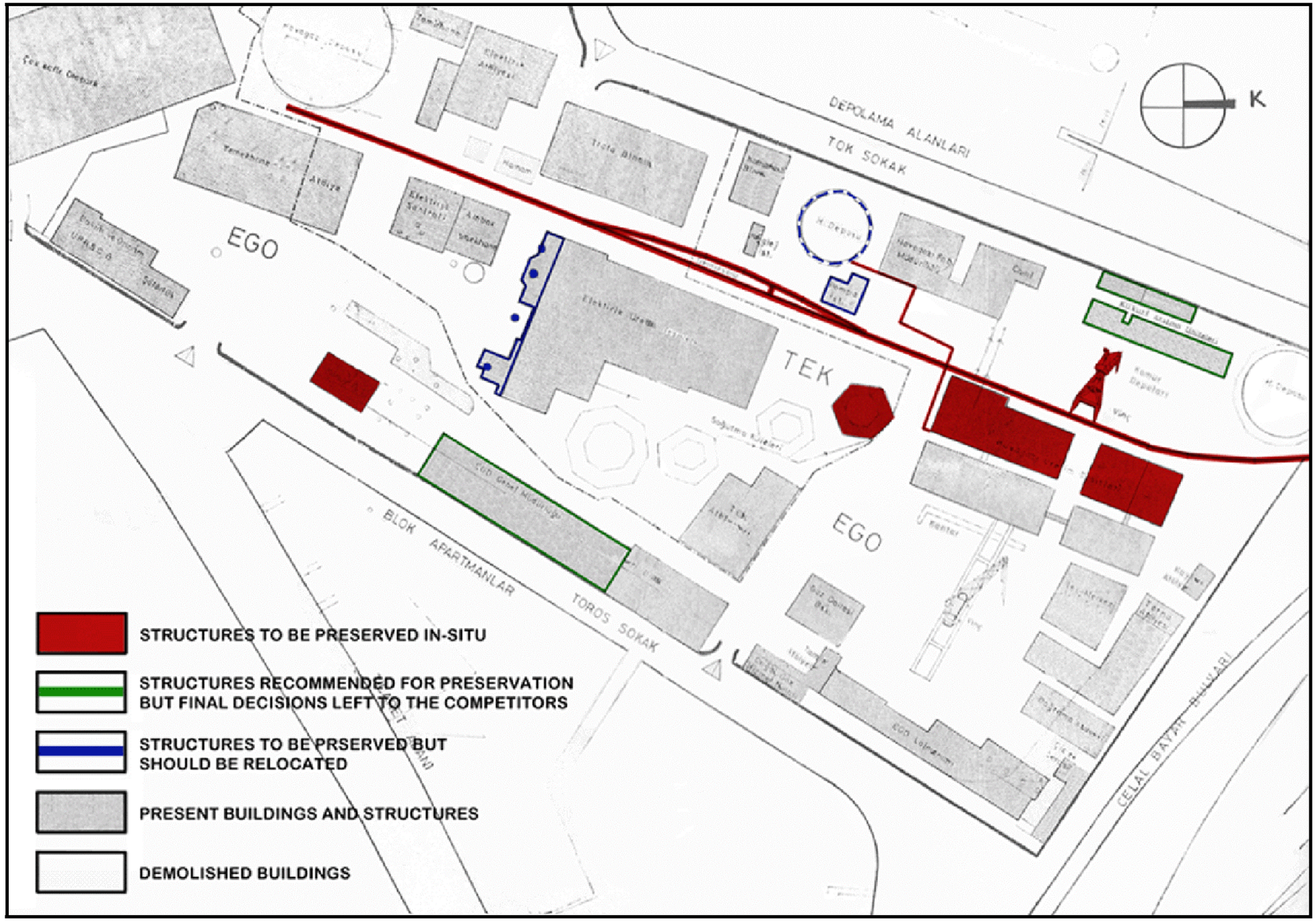

Fig. 44: Listed buildings and structures and their status of conservation
Source: T.C. Kültür Bakanlığı, Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, 19.3.1991, Board Decision, Sayı: 1679, in the Archives of the Board of Preservation

After the refusal of the claim brought by EGO, as a second intervention, EGO decided to go into discernment against the Ministry of Culture by claiming that the decision taken by the Board of Preservation was incongruous to the procedures and laws. According to Aylin Arıkan, who was the Judge of Scrutiny at the court:

> From the examination of the document, it has been understood that the industrial building that has been decided to be protected with the operation of the lawsuit does not have any properties that are a cultural asset. Although this issue is mentioned in the expert commission report, according to this same report it is recommended to preserve and evaluate the building within the framework of Industrial Archaeology. However, (according to this report) it was understood that the term "industrial archaeology" was not explained and evaluated within the framework of Law No. 2863. Furthermore, the building was not evaluated with respect to its location or to public interest. Therefore, it has been agreed that the court's decision, which depended on the insufficient examinations of the expert's report, must be cancelled.[164]

On the other hand, according to Orhan Dikbaş, the attorney general responsible for the lawsuit:

> It is obvious that the acceptance of the statement that 'this complex is not a building and it does not have an artistic and architectural value' can be made without any expert. It should also be accepted that this building, which does not have any artistic value, may be dismantled and a profit-making building constructed instead. For these reasons, it is thought that it would be suitable to cancel the court decision, which is not suitable to the laws.[165]

[164] T.C. Danıştay, Altıncı Daire, 22.6.1994, Court Decision, Esas No: 1993/3899, Karar No: 1994/2657, in the Archives of the Chamber of Architects
[165] T.C. Danıştay, Altıncı Daire, 22.6.1994

Similar to the previous decision, the request of EGO was once more refused by the court on June 22, 1994. However, in contrast to the previous decisions of the court, in this new decision the court focused on the content of the preservation policies of the Board, which showed great deficiencies in terms of legal aspects. The court stated that:

> (…) From the examination of the expert report, it has been understood that the types, shapes and properties of the buildings, which were listed according to the court's decision, were not investigated and evaluated within their position, in terms of public interest or in terms of their artistic and architectural values. Furthermore, although the buildings were decided to be protected within the framework of Industrial Archaeology, it has been understood that this term has not been sufficiently defined. Moreover, within a legal context, this term has not yet entered into the legal structure of the State terminology, and was not evaluated within the framework of Act No. 2863. From now on, it is required to reach a decision after an examination of whether these buildings, which do not have an architectural and artistic value, can be preserved in another location or not.[166]

In order to fulfil the last requirements of the court, a third expert report was prepared by a university institution on April 24, 1995. This report pointed out that an important segment of the factory building had been destroyed and thus, the ninth clause of Act No. 2863 had been violated (Appendix I).[167] However, it was also emphasized that due to industrial archaeological, historical, cultural, educational and architectural reasons the factory buildings must be preserved.[168] Furthermore, the report suggested the option of conserving the industrial heritage *in situ* by claiming that:

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[166] T.C. Danıştay, Altıncı Daire, 22.6.1994, Court Decision, Esas No: 1993/3899, Karar No: 1994/2657, in the Archives of the Chamber of Architects

[167] T.C. Danıştay, Yedinci Daire, Court Decision, Esas No: 1994/1356, Karar No: 1995/1281, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

[168] T.C. Danıştay, Yedinci Daire, Court Decision, Esas No: 1994/1356, Karar No: 1995/1281, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

a) It would be difficult to dismantle the industrial equipment. If the equipment is dismantled approximately 70% of them will be demolished.
b) A proper dismantling process requires the labor force of the period in which they were constructed. There are no employees or expert teams to manage this type of task.
c) The transportation costs are high and are not economic.
d) The cost of assembly is high and not economic
e) The contextual aspects of the building will lose their meaning
f) It is possible to transfer the buildings and units belonging to EGO and TEK
g) While dismantling the equipment located underground, extensive security and fire precautions are needed. Even if these precautions were taken, it would be impossible to dismantle and transfer all the equipment away from the site.[169]

As a consequence, considering the objection of EGO on the one hand, and the data presented in the report on the other, the court reached a final decision. According to this decision, it was once again determined that the decision of the Board was legal, and that EGO was unjust in its objections. [170]

EGO was not the only actor to threaten the survival of the industrial archaeological landscape of the Maltepe Gas and Electric Factory. In 2002, efforts to cancel the decision of the Board were re-started. However, this time, in addition to the actions of EGO and Greater City Municipality, TEK and media organs also played a leading role in the destruction scenario of the industrial site.

[169] T.C. Danıştay, Yedinci Daire, Court Decision, Esas No: 1994/1356, Karar No: 1995/1281, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
[170] T.C. Danıştay, Yedinci Daire, Court Decision, Esas No: 1994/1356, Karar No: 1995/1281, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

On February 4, 2002, TEK applied to the Preservation Board for a cancellation of the preservation decision. TEK suggested that the electric factory building was under threat of destruction, that the windows and doors of the factory building were broken, that its chimneys created a danger for the workers on windy days since the metal was decayed and had oxidized over time and lastly, that the technological machinery within the building was rotten, oxidized and rusted.[171] Thus, TEK requested that the Board either cancel the preservation act on the buildings or, cancel the preservation act on the machinery situated within the buildings, so that they could be sold to M.K.E.K. Hurdasan A.Ş., in order to generate an economic profit from them before disintegrated completely.[172]

The Board of Preservation responded positively to this application and informed TEK that they will reach a decision after a scientific analysis was conducted within the problem site, based on Act No. 2863.[173]

Meanwhile, a slander campaign was started by certain media organs for the cancellation of the Board's decision. Many suspect that the source of this campaign was probably the Greater City Municipality, since the president of the Municipality, Melih Gökçek, has previously attempted to destroy industrial heritage buildings, and to establish profit-making structures in their place.[174] In this context, in one newspaper, Gökçek spoke on the Maltepe Gas and Electric Factory issue as follows:

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[171] Başkent Elektrik Dağıtım A.Ş. Genel Müdürlüğü, Ticaret Malzeme Yönetim Müdürlüğü, 4.2.2002, Official Communication Report, Sayı: B.15.2 BAŞKENT A.Ş. 4.06.00-223, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

[172] Başkent Elektrik Dağıtım A.Ş. Genel Müdürlüğü, Ticaret Malzeme Yönetim Müdürlüğü, 4.2.2002, Official Communication Report, Sayı: B.15.2 BAŞKENT A.Ş. 4.06.00-223, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

[173] T.C. Kültür Bakanlığı, Kültür ve Tabiat Varlıklarını Koruma Genel Müdürlüğü, 10.4.2002, Official Communication Report**,** Sayı: B.16.0.KTV.0.10.00.01/720-114, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

[174] The general point of view of these media organs was that clearing the site by demolishing the plant was the best solution for enhancing urban quality and health. These opinions were reflected in some of the headlines in newspapers at the time, as follows: "As if it is an historical heritage!" (Kotan, B. (2003), "**Sanki tarihi eser!**", Sabah Gazetesi, 27.3.2003, pp. 21), "Cancel this decision" (Cited in Sabah Gazetesi, 28.3.2003, "**Kaldırın bu kararı**", pp. 21), "These must be preserved!" (Miser, B. 2003), "**Bunlar Korunmalı!**", Sabah Gazetesi, 27.3.2003, pp. 21), "You will put up with this picture" (Baş, S. (2003), "**Bu görüntüye katlanacaksınız**", Sabah Gazetesi, 30.3.2003, pp. 23).

That place is neither a natural nor a cultural heritage. The Gas Factory also does not have any historical value. If they want it to be preserved they can preserve the crane *in situ* in the new rearrangement project.[175]

This type of one-sided news reporting by certain media organs could not dissuade the Board from its decision. The Board attempted to remain resolute in its aim to preserve its decision from further threats. Unfortunately, it was unable to achieve this. On November 12, 2003, the members of the Art History Department of Gazi University prepared an expert's report, related to the situation of the electric factory building. However, this report supported the wishes of TEK and made illiterate claims related to the current situation of the plant. According to this report (Appendix J):

> (…) The pump station and chimneys of the electric factory were left unused and without repair or maintenance. This situation introduces a danger to human life and economy due to their possible collapse and destruction. Furthermore, due to corrosion and collapses, an unaesthetic scene has been created causing an environmental visual pollution. Derelict structures and chimneys in the centre of the city affect the silhouette of the city in a negative way. They also have no historical value.[176]

Thus, based on the reasons specified above, after a comprehensive documentation process, the report recommended that the buildings be detached from the landscape, without further damages to the site. [177]

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[175] Conversation with Gökçek, M. (Cited in Sabah Gazetesi (2003), "**Kaldırın bu kararı**", 28.3.2003, pp. 21)

[176] T.C. Gazi Üniversitesi, Fen-Edebiyat Fakültesi Dekanlığı, Sanat Tarihi Bölüm Başkanlığı, 12.11.2003, Expert's Report, B.3.2.GÜN.0.13.00.00.10/05-210-4000 ve B.30.2.Gün.0.13.00.00.14-059/224, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

[177] T.C. Gazi Üniversitesi, Fen-Edebiyat Fakültesi Dekanlığı, Sanat Tarihi Bölüm Başkanlığı, 12.11.2003, Expert's Report, B.3.2.GÜN.0.13.00.00.10/05-210-4000 ve B.30.2.Gün.0.13.00.00.14-059/224, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

As a consequence of this report, the Board of Preservation decided to reach a conclusion on the status of the electric plant after the completion of a scientific analysis on the site. To accomplish this task the Board required the assistance of either the Chamber of Mechanical Engineers and Chamber of Construction Engineers and/or the staff of a faculty of engineering in a university institution.[178]

At last, a second report was prepared by the staff of Gazi University, this time by the members of the Faculty of Engineering and Architecture, and was comprised of more technical data. The new report, unfortunately, derived a similar conclusion to the first one, and stated that:

> The chimneys have a height of 43 meters and a diameter of two meters, and they have not been used for approximately 21 years. These chimneys are prone to meteorological effects because of the lack of repair and maintenance, and because they have no protection against the wind. Furthermore, they are under the threat of earthquake, a very likely occurrence in Ankara. In the event of a collapse of one or all three of the chimneys, it is obvious without any debate that, due to the development and human traffic around them, they pose a threat to property and human life.[179]

The production of technical reports that threatened the conservation of the landscape continued with EGO. EGO officials prepared a detailed commission report, dated November 12, 2003. This report emphasized that in order to prevent tragic events in the event of an explosion or collapse of the industrial remnants, it was a must to first unfit the remaining buildings and structures within the site and then clear the site after this initial process (See Appendix L).[180]

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[178] Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, 12.12.2003, Board Decision, Karar No: 8894, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

[179] T.C. Gazi Üniversitesi, Mühendislik-Mimarlık Fakültesi (April 2004), "**Bacaların Konum Emniyeti İncelemesi Bilirkişi Raporu**", Expert's Report, Ankara, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

[180] Ankara EGO Genel Müdürlüğü, "**Maltepe Eski Havagazı Fabrikasının Son Durumu Hakkındaki Komisyon Raporu**", Site Survey Report, Sayı: M.06.1.EGO.065.02.02/105-21583, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

Until now, with the support of the Chamber of Architects and some scholars, the Board of Preservation had attempted to resist the disastrous attempts of the landowners, municipality and certain illiterate sections of the society. However, what made the issue more grievous, was not only the attitudes of EGO and TEK, but also, unluckily, the presence of academics that inaccurately informed the society and general decision makers. Furthermore, the preservation decision of the Board, which was lacking in terms of definitions and legal aspects, made the situation worse. Those who wished to demolish these industrial buildings and structures and build a profit-making complex in their place, took advantage of the legal gaps and went to court for the cancellation of the decision.

The future of the Maltepe Gas and Electric Factory is obscure. Nothing has been done in the past fifteen years in terms of conserving the industrial archaeological heritage and regenerating the landscape, besides a few weak attempts. The general opinion of the public concerning the future state of the site is that the structures will collapse spontaneously unless some action is taken to preserve them. As a consequence, one of the last industrial archaeological survivals of Ankara, which witnesses the foundation of the Early Republic Period, and one of the last generators of a collective memory and social unity will be completely destroyed.

CHAPTER 4

4. PRESENT SITUATION OF THE SITE FROM A SPATIAL PERSPECTIVE

4.1. Borders

Until the beginning of the 1960s, the Maltepe District was the center of industrial activity within the city. Hence, the Maltepe Gas and Electric Factory landscape was indistinguishable from its context. It was surrounded by industrial buildings and structures, and thus had a visual harmony with its environment. However, after the 1960s, due to the relocation of industrial production activities from Maltepe to the fringes of Ankara, and due to the spatial allocation of offices and residence related utilizations to this district, the Maltepe Gas and Electric Factory site started to differentiate from its environment both in terms of visual and functional relations.

Since its establishment, the landscape of the Maltepe Gas and Electric Factory had been detached from its area by tangible borders. These borders first defined the property boundaries of Didier and then of EGO and TEK. Furthermore, these borders maintained the security of the land, which is risky in nature, from unexpected attacks.

Until 1983, the periphery of this industrial area was surrounded by only one border, which separated the property area of EGO from its environment. On the other hand, with the shifting of electricity production, distribution and selling privileges from EGO to TEK, a second border was created on the site, not for

separating the industrial areas from their context, but for differentiating the property areas of EGO and TEK. Presently, there are two different borders within the site, in terms of their purposes. One is for separating the industrial production areas from their environment, and the second is for distinguishing the property areas of the two owners of the landscapes: EGO and TEK. Furthermore, there are three different types of borders. The first is the artificial ones, which are in the form of either grills or concrete barriers. Through examining the site, it is observed that while grills are preferred for separating the property boundaries of EGO from TEK (Fig. 45), the semi-concrete barriers (part concrete and part grill barriers), are preferred for separating the industrial archaeological landscape of the Maltepe Gas and Electric Factory from its context (Fig. 46). However, it is also possible to observe grills surrounding some parts of the landscape.

Fig. 45: The fence separating the properties of EGO and TEK
Source: Personal Archive (2005)

Fig. 46: The semi-concrete barriers separating the properties of EGO and TEK
Source: Personal Archive (2005)

The second type of border is the permeable ones that are formed by the facades of the buildings. While some of the buildings detach the industrial landscape from its surrounding environment, others detach the property boundaries of EGO from those of TEK. In this context, the facades of the Directorship building of EGO and the multi-storey car park building of the municipality detach the industrial archaeological landscape from its environment. Conversely, the two workshop buildings of TEK (one of which is adjacent to the dining hall used by EGO, and the

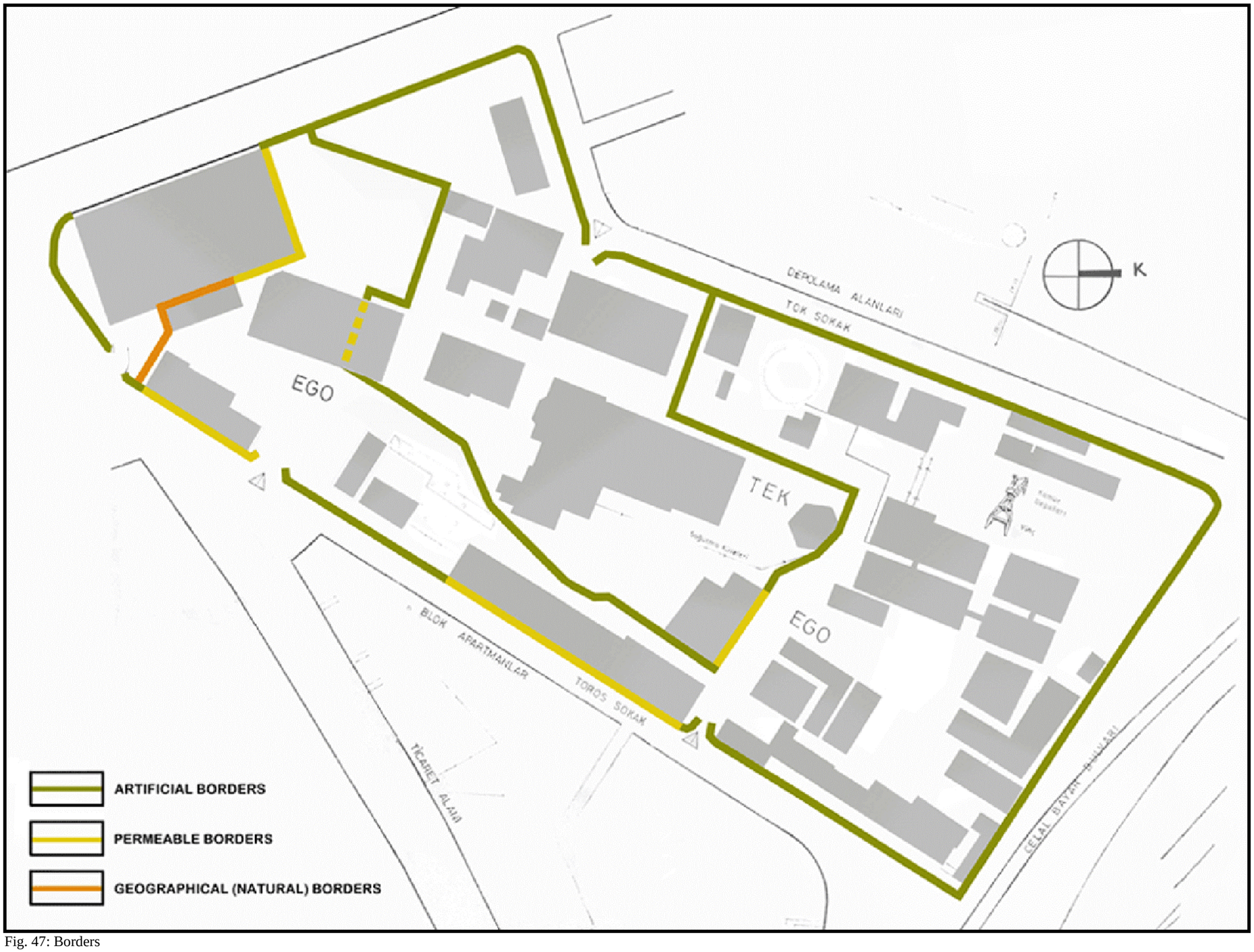

Fig. 47: Borders
Source: Personal Archive (2005)

second of which is located in front of the Gas Department of EGO) separate the property areas of EGO and TEK.

Finally, the third type of border is formed by geographical thresholds. The zone separating the multi-storey car park building of the municipality from the industrial landscape is the only place that accommodates this type of border. This is because the industrial landscape of the Maltepe Factory site is situated at a lower level when compared to GMK Boulevard. Because of this level difference, both permeable and natural thresholds separate the area from its environment on the side of GMK Boulevard.

4.2. Access

In terms of its location, the Maltepe Gas and Electric Factory site has many advantages. There are four ways to access the site, by vehicle, by foot, or by using one of the two modes of public transportation systems within the city: the subway and the bus.[181]

The landscape has 13 gates. Four of these gates are open to public service, and six of them are used in special cases by the official personnel of EGO and TEK. Due to the position of these gates, the site has great potential for attracting masses from every direction (Fig. 48). One of the biggest flows of people comes from the GMK Boulevard direction. GMK Boulevard, which is one of the major arteries of the District and the city, brings together pedestrian and automobile masses from different parts of the city, including downtown Kızılay and Bahçelievler. Furthermore, the accessibility of the site is increased by two major public transportation systems: the subway and the bus. Both of these transportation systems have stops directly in front of the multi-storey car park building of the municipality. Arrivals from GMK Boulevard, enter the property of EGO usually from the Bomonti Gate, which takes its name from the former usage of the dining hall of EGO located in front of this

[181] Although the railway lines pass through the north of the site, the closest station to the area is within 5-10 minutes in walking distance.

gate.[182] The gate is located at the junction of Toros Street, Lale Street and Strazbourg Boulevard. On the other hand, in order to enter the electric factory area, arrivals usually use the gate located south of the landscape, on Tok Street, which is the only public gate of TEK.

Arrivals from Celal Bayar Boulevard, another major artery of the city connecting the railway station and the old city center of Ulus to the rest of the city, may enter the site either from the "3rd Door" located at Toros Street or from the gate located on Tok Street. However, both of these gates are used only for entering the EGO area. In order to gain entrance to TEK property, arrivals must walk to the gate located in the middle of Tok Street, since as has been emphasized, there is no second public gate into TEK.

Besides the three major gates of EGO, and the single gate of TEK, there are six more gates, which are only used for special purposes. Five of these gates belong to EGO, and only one belongs to TEK.

There are five more gates on Toros Street in addition to the Bomonti gate and the "3rd Door". These gates belong to EGO, and their uses are all different. Three of the gates are located at the north of this street and are used only for entering the housings of EGO. The other two gates, which are located in the middle of Toros Street, are used by officials only, and are thus kept locked. The two gates located on the GMK Boulevard and Celal Bayar Boulevard side, on the other hand, are positioned in the property boundary of EGO, but are always out of service.[183]

[182] The dining hall of EGO once functioned as a casino building (Fig. 28). The name of this casino was Bomonti, and thus, it is said that the gate in front of it took the name of the casino (Conversation with Gülser Dinç).

[183] This door was probably used before the 1980s as one of the major gates to the site. Dinç states that, in order to access the Maltepe Bazaar area, which was once located in place of the multi-storey car park, people working in the industrial landscape used this gate at the time for entering and leaving the site (Conversation with Gülser Dinç).

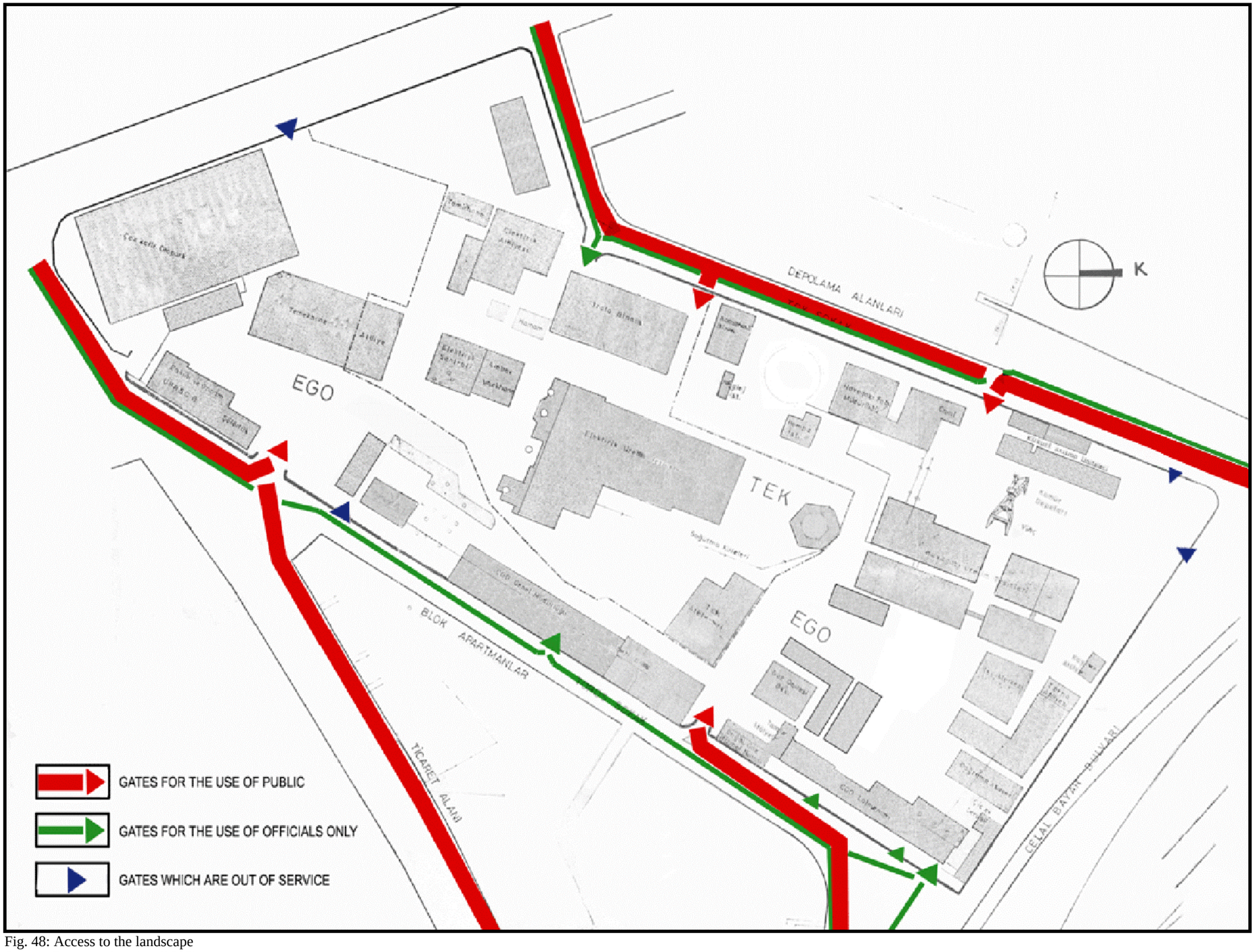

Fig. 48: Access to the landscape
Source: Personal Archive (2005)

In addition to these gates, there are two additional gates at the Tok Street. Although these gates belong to different ownerships, both of them are used for same purpose.

Fig. 49: GMK Boulevard and the multi-storey car park building of EGO
Source: Personal Archive (2005)

Fig. 50: One of the gates of EGO at the Tok Street. Once a gasholder structure was located within this area, today the land is used as and open car park for the EGO officials.
Source: Personal Archive (2005)

4.3. Solid-Void Analysis

The industrial nature of gas and electric factory landscapes is unique when compared with other industrial landscapes and areas of modern cities. Voids are required as much as solids, since empty spaces are needed not only for storing raw materials, but also for the easy flow of labor within the site.

The first masses in the Maltepe Gas and Electric Factory landscape originated at the middle of the site in 1928, where the extension of the railway road ended. After a while, other masses were added to the area, all of which were firmly fitted with the railway system. Solids that were not directly related to production activities, such as the administrative and housing functions, on the other hand, were always allocated to the fringes of the landscape, and thus defined the boundaries of the industrial landscape.

As the urbanization rate of the city increased, more spaces of production were required to supply the gas and electricity needs of the city. The spatial evolution of the landscape within an industrial framework continued until the closure of the gas and electric factories. However, the spatial development of the site did not end, since the administrative functions of EGO and TEK took the place of the industrial spaces. As a consequence, while many new buildings were constructed to meet the administrative demands of the landowners (either by demolishing the old industrial buildings or by constructing them within the industrial voids), some of the old industrial complexes were re-functioned for administrative uses. However, as each new building appeared on the site, both industrial voids and solids were continuously removed, and thus, the landscape of the Maltepe Gas and Electric Factory continued to lose its industrial archaeological identity.

Fig. 51: A part of the recreational area
Source: Personal Archive (2005)

Fig. 52: Some of the barracks of EGO. These barracks were constructed in the mid-1990s.
Source: Personal Archive (2005)

To sum up, when compared with the early years of the industrial landscape, it is observed that the solid-dense areas located around the old demolished railway lines, which were used for industrial purposes until the end of the 1980s, have now been transformed into a void-dense area. This land is now used for recreational purposes (Fig. 51)[184]. On the other hand, the fringes of the landscape, which was a void-dense area, began to be developed, especially after the mid-1980s. Hence, today, many

[184] For example, the area of the gasholder structure, which was built in 1930 and is situated in front of the pump station, and the three cooling towers, which were built in 1930 and the 1960s, are now used for recreational purposes.

barrack type buildings are observed along the periphery of the industrial landscape of the Maltepe Gas and Electric Factory, which were constructed to meet the new demands of the landowners (Fig. 52).

4.4. Industrial-Historical Analysis of the Buildings and Structures

Although the industrial landscape of the Maltepe Gas and Electric Factory does not have an age value, it has a historical value. The buildings and structures in the landscape were constructed by using the architectural production techniques of a certain era. Furthermore, they are the witnesses of the Early Republic Period of the nation, in which the society was suffering from harsh economic, spatial and social conditions. Therefore, conservation of the site is important not only for the permanency of collective memories, but also to understand the industrial, archaeological, technological and architectural histories of shared cultures (refer to Section 5.1.3 for the rationale of conserving industrial heritages).

The first building within the landscape was an electric plant. The German company Didier constructed this building in 1928, on the land where the extensions of the railway lines end. After this first establishment, other industrial archaeological buildings began to be built on this land, by German, British and Turkish enterprises. Finally, in the year 1989, the number of buildings within the site had reached approximately 47, not counting industrial structures such as cranes or the railway lines.

The allocation of industrial-archaeological buildings within the industrial landscape differed according to their typologies. In the early years of the industrial site, while spaces of production were positioned around the railway lines, other buildings used for housing and administrative functions that did not directly participate in the production processes were positioned away from these spaces. As the years passed, and the demand for gas and electrical services increased due to the high urbanization rate of the city, vacant spaces for new buildings were required. This led to the construction of new buildings away from the railway lines.

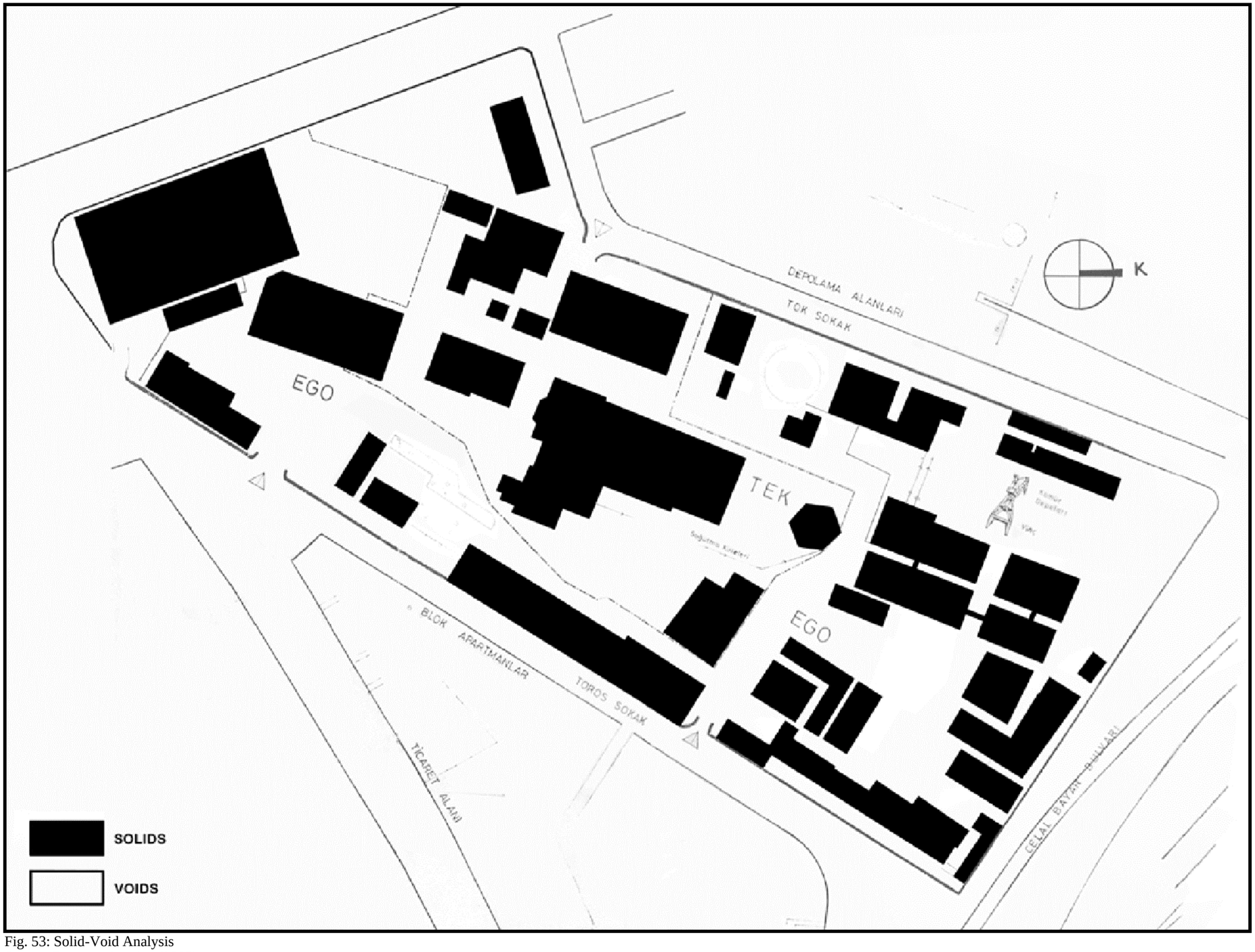

Fig. 53: Solid-Void Analysis
Source: Personal Archive (2005)

Until the 1970s, all of the industrial archaeological buildings, including housing and social units, established strong spatial and functional relations with each other. This is why gas furnaces was spatially positioned within a close distance to the gasholders, pumps stations and the repair and maintenance workshops, and away from the social buildings such as from the dining hall, housing units and administrative units.

After the 1970s, the spatial evolution of the Maltepe Gas and Electric Factory landscape started to decline. First TEK, and then EGO decided to use their properties for different purposes. Therefore, most of the factory buildings began to be used for different functions. As a result, the industrial landscape of the Maltepe Gas and Electric Factory began to redefine itself through its administrative functions. New administrative buildings were constructed after this date within the site, especially on the property of EGO. Some of these buildings were: a driver's office building, which was constructed in 1978, the building of the Department of Transportation Planning, which was constructed in 1981, and some further administration related office buildings, which were constructed in the late 1970s. On the other hand, only an electric transformer building was constructed by TEK, in 1990.

Along with the functional changes of the buildings within the landscape, demolitions also started. The industrial landscape of the Maltepe Gas and Electric Factory lost some of its important symbolic structures: the three gasholders, the extensions of the railway lines and three of its cooling towers. Furthermore, the walls of some industrial structures and some of the industrial equipment within these buildings were completely destroyed or sold for scrap value.

Fig. 54: Construction dates of the buildings
Source: Repro from Ankara Koruma Kurulu Büro Müdürlüğü, Kayıt No: 294, 21.2.1991, Dosya No: 06.06/72

Fig. 55: Chairmanship building of the Gas Department. The building was constructed by a German company called as Didier in the year 1929.
Source: Personal Archive (2005)

Fig. 56: Housing units of the "white collar" staff. The building is located at the junction point of Toros Street and Celal Bayar Boulevard and was constructed in 1960.
Source: Personal Archive (2005)

Despite these demolitions, the industrial identity of the Maltepe Gas and Electric Factory is still preserved by several industrial survivals. Among these survivals are the Chairmanship of the Gas Department (Fig. 55), the General Presidency Offices of EGO (one at the west, and one at the east end of the site), the pump station, the guest house and the oldest cooling tower of the landscape (Fig. 57). Furthermore, the workshop building of the gas factory, a part of the General Presidency Office building, the gas factory furnaces, the heat station building, another administrative building of EGO that was constructed as an attachment to the previous ones, the housing units (Fig. 56), the workshops, and the sulphur elimination plants are still standing in the property area of EGO. On the TEK property, on the other hand, there are the TEK workshop, the mosque, the electric plant and, finally, the TEK warehouse building.[185] The construction dates of all these buildings are known and are presented in Fig. 54. Presently, besides these, there are 10 buildings and one industrial structure within the site, whose ages are unknown.[186] These buildings and structures are: the woodwork and welding workshops of EGO, the electricity and repair workshops of TEK, the old housing units of TEK, the dining hall of EGO,

[185] Archives of the Ankara Board of Preservation of Cultural and Natural Heritage, Dosya No: 06.06/72
[186] According to the plan prepared by the Ankara Municipality in 1965, all of these buildings appear to be present

which was once called the Bomonti Building, the bath, and finally the crane of the gas factory, which is located between the sulphur eliminators and the furnaces (Fig. 58). In this context, in Fig. 54, the age of the buildings within the industrial landscape is given. Moreover, the map also presents both the demolished and surviving structures of the present time.

Fig. 57: The last survived cooling tower within the industrial landscape. This structure was constructed in 1960 and is important not only in terms of being an industrial archaeological or technological survival, but also due to its symbolic value for the city, as it stands as an "urban object" within the urban space.
Source: Personal Archive (2005)

Fig. 58: The only survived crane within the site. The Board of Preservation listed this structure in 1991.
Source: Personal Archive (2005)

Fig. 59: Industrial Archaeological Building Analysis
Source: Personal Archive (2005)

Fig. 60: Building typology analyses
Source: Personal Archive (2005)

The buildings that were constructed between the 1970s and today have never participated in the industrial archaeological history of the landscape. Thus, they do not have any symbolic value. Furthermore, they were constructed using the architectural production techniques of the modern age. They do not present any architectural value in terms of their construction techniques, spatial features or materials used during the construction process. Hence, they form an opposition to the architectural vocabulary of the industrial archaeological site. In other words, these buildings and structures do not have any industrial heritage value.

1.5. Analysis of the Present Situation of the Listed Industrial Buildings and Structures Based on the Official Commission Reports

After the closure of first the electric factory in 1983, and then the gas factory in 1989, the industrial landscape of the Maltepe Gas and Electric Factory became one of the most speculative areas of the city. The importance of the site was due not only to its location, close to the city center and to the main public transportation networks, but also due to its land features, which cover a vast area and contain many vacant potential building stock, open spaces and symbolic historical buildings, which may be used for other purposes.

After the abandonment of the factories, although TEK decided to re-use the industrial landscape for its administrative purposes, EGO decided to re-use its property for gaining economic profits. Therefore, unlike TEK, EGO aimed to demolish the buildings, clear the landscape and eventually construct a profit-making function, such as a commercial building, within its property. Following this decision, a project competition was initiated by the Greater Municipality. Meanwhile, after an agreement with the Musa Akar firm, which would take responsibility for the destruction, demolition processes within the site were started on October 5, 1990.[187]

With the co-operation of the Chamber of Architects and the Board of Preservation, the destruction processes within the landscape were stopped on March 19, 1991.

[187] Ankara Koruma Kurulu Büro Müdürlüğü (1991), "19.03.1991 günü ve 1679 sayılı kararın iptali ile ilgili başvuru", Official Communication Report, Kayıt No: 1003, 21.06.1991, 06.06/72

However, until that time, many industrial archaeological buildings, especially the ones located within the EGO property, had already been destroyed or exposed to damage.

There are many unofficial and two official technical reports documenting the rate of damage within the industrial landscape of the Maltepe Gas and Electric Factory. The first of these reports was prepared on May 20, 1991 by EGO officials. With this report, the aim of EGO was to dissuade the Board from its preservation decision. According to this report, the decision of the Board contained a number of mistakes and therefore could not be legally valid. Related to the situation of the listed buildings within the site, the report stated that:

FURNACES 1-4

1. The lower gas inlet collectors and gas control valves of these furnaces were dismantled. Some of them were taken apart and the pieces were sold. (Some are in the factory site.)
2. The entire furnace top cabin covers and *kaskak*s were dismantled.
3. Some of the gas outlet elbow-type pipes and forlage calyxes were dismantled. Some are in place. (The dismantled ones were sold.)
4. The tiles of the furnace top recuperators and a large portion of the camara tiles were dismantled. The tiles are being kept on the site.

FURNACES 5-6

1. The generator gas inlet collectors and gas control valves were dismantled and sold. (Some are in the factory site.)
2. The lower gas outlet pipes were dismantled. (They have been sold.)
3. The furnace top camara covers and *kaskak*s were dismantled. (They have been sold.)

4. The furnace top elbow-type and the entire gas outlet intermediary pipes were dismantled. Some of them have been sold, and some are in the industrial site.

FURNACES 7-8

1. The generator gas inlet main collectors and gas control valves were dismantled and are below the furnace in the factory site.
2. The lower back gas outlet pipes were dismantled. (They have been sold.)
3. Five of the furnace top elbow-type pipes were dismantled while the furnaces were still in operation and taken to be used in other furnaces. The other five have been dismantled and taken (by the client firm).
4. Some of the tiles of the furnace top recuperator were dismantled; the tiles are below the furnace.

FURNACES 9-10

1. Only the lower generator gas inlet collectors of these furnaces were dismantled. They are in the factory site.
2. The furnace top camara covers have been taken.
3. Part of the chimney aspirator was dismantled. It is in the factory site.

OTHER UNITS

1. The three gasholders in the landscape were dismantled and were converted into a brown-field area.
2. The mechanical rooms erupted from the furnaces and the large aspirative line pipes between the absorbents were all in place but the bolts at the joints were dismantled.

3. The four gas coolers in the factory site are in place, but the honeycombs in some of these were taken out and cut (including their covers). They are in the factory site.
4. The two electrical, one gas-operated absorbents in the absorbent room are in operation, but the gas outlet pressure pipes (in the outer part) were dismantled. Some are in the factory site.
5. The larger of the two tar separators was sold with its systems by the responsible firm to the İzmir-ESHOT General Directorate. The smaller tar separator is in operation as a whole, but the outlet intermediary pipes were cut and taken.
6. Two naphthalene separators and their accessories are in place.
7. The outer, smaller one of the two ammonium separators was cut, dismantled and sold. The larger one is inplace as a whole.
8. Two top covers were taken from the sulphur capturer cases, the lower siphon systems were dismantled, and the gas inlet and outlet pipes were cut, and are in place (below).
9. Two gas meters are fully operational and are in place with their systems.
10. The parallel valves and storehouse inlet-outlet valves and their bents, between the city gas outlets and gasholders, have been dismantled. The dismantled pieces are in the factory site.
11. The coal crane is in place with all of its systems.
12. A part of the railway track has been dismantled, the dismantled pieces have been sold, but a part of them are in place.
13. The electrical engines in the factory and in all of its units were dismantled by factory employees and stored in the depot prior to the tendering process.
14. All of the electric meters in the factory were dismantled and turned over to TEK with an official report.

15. No cutting and dismantling has been carried out after 25.10.1990 in the places that have been requested to be stopped with a cheerful statement.[188]

The Board of Preservation prepared another report following the first. The aim of the Board was to correct the determinations for the listed buildings made by EGO officials. As a result, the Board conducted a survey on the site in order to display the latest situation of the listed buildings (Fig. 62).

Fig. 61: The demolished gasholder structures. The only trace of these structures is their spherical forms, and in the one constructed in 1930, the steel supporters of the structure remain. This structure is currently used as part of a bower. Today, two of these vacant areas are used for open car-parking and recreational purposes.
Source: Personal Archive

Although the destruction processes on the listed buildings stopped with the decision of the Board, after this decision, two major factors threatened the survival of the industrial archaeological buildings. One factor was the lack of a comprehensive preservation decision on the unlisted industrial buildings, taking into account the industrial-archaeological relationships. As a consequence, both EGO and TEK profited from this legal gap, and made devastating changes to these unlisted buildings. One of the final examples of these disastrous changes is the present situation of the electric factory building, which is the oldest industrial-archaeological

[188] "Üretim Ocakları ve Diğer Üniteler Hakkında Rapor", in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage, Dosya No: 06.06/72

building within the landscape. Although this building was constructed in 1928, the Board, surprisingly, did not list part of this building. As a consequence, TEK has destroyed one of its walls, in order to rehabilitate and use it for other purposes.

The second factor is the final state of the listed buildings. Because of the deficient decision of the Board, which did not define a legal context for the industrial buildings within the landscape, the listed buildings were faced with a further danger that threatened their survival. Since 1991, due to the negative attitude of the landowners and certain media organs to the issue of conservation of the site, and due to the lack of funding mechanisms, and visions or regeneration projects for the survival of the industrial heritages, no attempt has been made to conserve the landscape.

In this sense, the third and last technical commission report concerning the present situation of the listed industrial buildings located in the EGO property area was prepared on May 4, 2004 by EGO officials. In this report, information about the present situation of the structural walls is given. According to the report:

> The joints of the beam columns were made with gusset plates. Throughout the observations, it was seen that the rivets that hold the joints of the gusset plates have decreased in thickness.
>
> Approximately the entire bottom taps of the solid-web girders, which are located on the slabs, have been spoiled. Thus, the load-bearing capacity of the beams, which are situated between these columns, has decreased.
>
> The coats and cement within the buildings have lost their character due to environmental threats, such as acids, frosts and water vapour. Undesired exfoliation and weakening continues within these construction materials.
>
> The steel steps of the staircases and the elevators, which were used in coal transmitting processes, were spoiled and lost their functions due to

corrosion. This will eventually cause the collapse of the system on its own.

To sum up:

- Approximately all of the structural walls made of steel have been spoiled due to corrosion generated by chemicals such as acids, and by water vapour, which was produced during the irrigation of coal. Those that were made of bricks and coats were totally deformed and lost their functions due to environmental factors such as heat, cold, snow, rain and vapour.
- Furthermore, one of the most important factors is that, according to estimations it is believed that the static and dynamic balance of the system was shattered due to the previous demolition attempts within the site.
- Due to the high percentage of decay within the units of the factory structures, which reach a height of 16.5 meters, the rigidity in the joint parts of the structure has been damaged, and thus, according to observations, they have started to sway.[189]

[189] Ankara EGO Genel Müdürlüğü, "**Maltepe Eski Havagazı Fabrikasının Son Durumu Hakkındaki Komisyon Raporu**", Site Survey Report, Sayı: M.06.1.EGO.065.02.02/105-21583, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

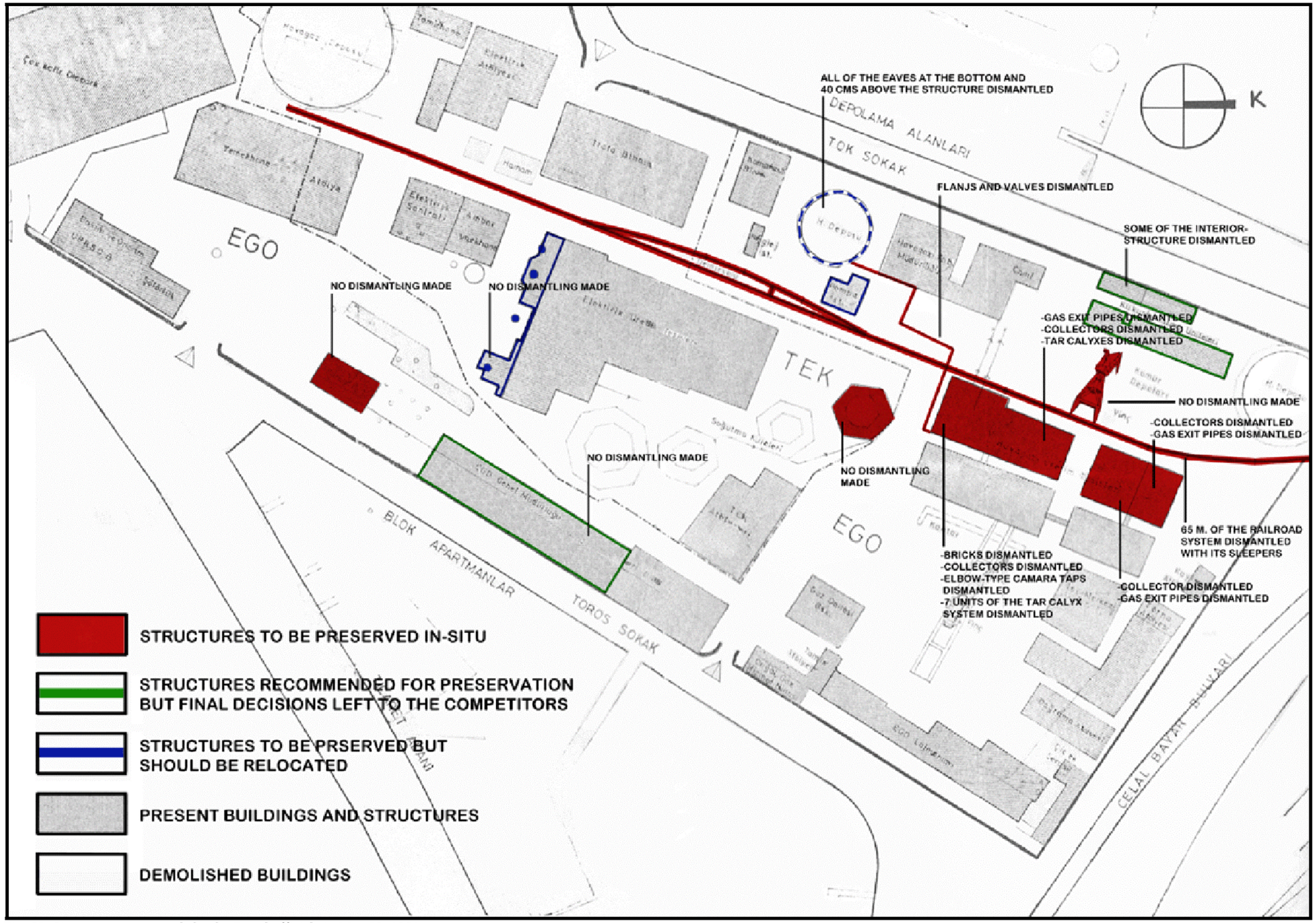

Fig. 62: Site survey report made by the Board officials in May 28, 1991
Source: Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, “Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulunun 19.3.1991 gün 1679 Sayılı Kararı”, Kayıt No. 831, 28.5.1991, in the Archives of the Board of Preservation

Fig. 63: The final situation of the old furnaces of the gas factory. Although these buildings have a listed status, no attempts to preserve them have been made in the past 15 years. Therefore, after their abandonment, one of the most important industrial archaeological assets of Ankara has become an industrial slum area. Today, an important part of these listed buildings are at risk of deterioration due to the continuing decay of the construction materials and the structural walls.
Source: Personal Archive (2005)

Listed buildings within the TEK area also face similar problems. Beginning in February 2002, TEK warned the Board of Preservation of the threat posed by the situation of the chimneys of the electric plant, claiming that they were swinging on windy days.[190] Following this warning from TEK, an expert report was prepared by several professors from the Art History Department of Gazi University, with the guidance of the Board. This report stated that:

> The electric plant and its chimneys, which have not been used since their operations ceased in 1983, are virtually in ruins. The interior of this electric factory, the chimneys and the pump station are at risk of destruction, because no repairs or maintenance has been done since their

[190] Başkent Elektrik Dağıtım A.Ş. Genel Müdürlüğü, Ticaret Malzeme Yönetim Müdürlüğü, 4.2.2002, Sayı: B.15.2 BAŞKENT A.Ş. 4.06.00-223

> closure. The metal structures located inside and outside of the factory, such as the pipes, pump station and chimneys have decayed due to corrosion caused by environmental factors, such as rain, snow and wind. As a consequence of these factors, there have appeared partial holes and openings, especially on the chimneys.[191]

Following their examination, the Board did not approve this report, claiming that it had been prepared by those who had no stake in the matter. Therefore, the Board demanded another expert's report, which was required to be prepared only by scholar engineers of an educational institution or by the Chamber of Mechanical or Construction Engineers. An expert's group of the Architecture and Engineering Faculty of Gazi University eventually prepared a second report, in April 2004. Unfortunately, similar consequences were also drawn in this report. At the end of this report it was concluded that:

1. The platforms that support the two corner chimneys and the pump groups related to these structures have decayed, and thus are unable to continue their supporting functions in a secure state.
2. From an optimistic view, both of the three chimneys' interior and exterior corrosion values have reached 25% of the eaves' thickness, and corrosion damages have appeared on the bodies of the chimneys.
3. Although the tension capacity of the chimneys presently seems to satisfy the values required in the event of an earthquake , this is a misleading conclusion since these values do not include the resonance behaviours aroused in the event of an earthquake, and thus it can not be concluded that the chimneys are in a safe condition with respect to earthquakes.
4. The effects of wind is much more influential than a possible earthquake. Thus, the tension may reach the wind-load effect values recommended by the Turkish Standards Institute (Standard No. 498)

[191] T.C. Gazi Üniversitesi, Fen-Edebiyat Fakültesi Dekanlığı, Sanat Tarihi Bölüm Başkanlığı, 12.11.2003, Expert's Report, B.3.2.GÜN.0.13.00.00.10/05-210-4000 ve B.30.2.Gün.0.13.00.00.14-059/224, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

for buildings having a height of 9-20 meters. Furthermore, it was observed that, in the case of a windy environment, these slender chimneys, which are 43 meters in height, show vibaration-oscillation-*golope* behaviours.[192]

Fig. 64: The electric factory building. The building was constructed in 1928 and today, due to careless efforts for conserving the building as an industrial heritage, it faces with the risk of deterioration.
Source: Personal Archive (2005)

Fig. 65: The building attached to the electric factory. Benefiting from the legal context, the northern facade of this industrial building was partially demolished by the TEK in order to convert it into another use.
Source: Personal Archive (2005)

In conclusion, due to the undefined and insufficient legal status of the industrial landscape of the Maltepe Gas and Electric Factory, the unlisted industrial-archaeological heritage buildings have been exposed to varied arbitrary conservation attempts by the property owners. Furthermore, nothing may be done for the preservation of the listed buildings, since the degree of conservation necessary for these listed buildings remains undefined. The structural walls and symbolic parts of the industrial heritage buildings, such as the chimneys, furnaces, and pump station are continuously deteriorating due to indifference. As a consequence, the landscape now appears to the public as a slum area. Unless appropriate action is taken, one of the last remaining industrial survivals may be destroyed for the sake of maximizing economic profits.

[192] T.C. Gazi Üniversitesi, Mühendislik-Mimarlık Fakültesi (April 2004), "**Bacaların Konum Emniyeti İncelemesi Bilirkişi Raporu**", Expert's Report, Ankara, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

CHAPTER 5

1. TOWARD A SOLUTION: EXPERIENCES FROM POST-INDUSTRIAL COUNTRIES

1.1. Approaching the Regeneration Problem of Industrial Archaeological Sites and Buildings

1.1.1. Approaching the Industrial Heritage: Early Years

The rescue of industrial survivals from a mentality that would facilitate their deterioration has been quite a difficult process in history. After the Second World War, and especially after the 1970s, in which urbanization movements dramatically increased all over the world, many industrial, historical and cultural buildings were demolished due to the futurist approaches of governments, under so-called "modernization" discourses. The basic reason for the destruction of these heritages was the lack of an official policy.[193] Since cultural reactions are generally seen as a prerequisite for political actions, the lack of legislative background for the conservation of a cultural heritage is generally based on the unconscious mentality of societies towards the issue of conservation. Indeed, conservation in such times is generally seen as an inhibitor, preventing progress and change, both materially and image-wise.[194] Conservation efforts are seen as an inhibition to artistic creativity, quality of life and economic growth.[195] Furthermore, they are seen as the reason

[193] The Norms of Quito, "**Final Report of the Meeting on the Preservation and Utilization of Monuments and Sites of Artistic and Historic Value**", December 2, 1967, Organization of American States, in Madran, E.; Özgönül, N. (1999), "International Documents Regarding the Preservation of Cultural and Natural Heritage", METU Faculty of Architectural Press, pp.56
[194] Dobby, A. (1978), "**Conservation and Planning**", Hutchinson of London, pp.26-30
[195] Dobby, A. (1978): 26-30

for social injustice, social stratification in the urban space and speculative movements on the market mechanism.

Although, there were many conservation proclamations, charters and conferences until the mid-20th century, most of these attempts aimed to conserve only "aesthetically beautiful" historical buildings. Unfortunately, most industrial buildings are not as architecturally attractive as monumental or civic buildings. Therefore, for a long time, industrial heritages were considered brutal, dirty and unnecessary.[196] Hence, industrial landscapes were perceived as urban wastelands, located in the cores of cities. As well, conservation was generally seen as an attempt to stop or reverse time in selected environments.[197] Therefore, many industrial buildings and structures were demolished by modern societies for the sake of creating more profit-making consumption spaces.

Furthermore, conservation practices occupied only a minority of the society, which was mainly the noble class. Alongside a few weak attempts and efforts for the conservation of cultural heritage, there was a stronger backlash to the conservation issue within the greater society. Many questions were raised on the issue in various platforms:

> Is it socially and economically healthy to control the future through the past? Does not conservation imply protection for the "haves" in the slowing down of economic growth and denying for the "haves not" the benefits of such growth and change? Can the domestic gross product of a country sustain the burdens of using an urban infrastructure which by definition must in general be relatively dated and not designed by the current generation to accommodate its own future? Does not the growth of the inventory produce ever increasing heavy burdens of maintenance on older property? Whatever the answer to these questions for the country as a whole, since the heritage tends to be concentrated in

[196] Köksal, T. G. (2000), "**A New Lease of Life for Industrial Buildings**", M Domus, December-January 2000, pp.68
[197] Dobby, A. (1978): 29

> particular in towns, can the people of that town function adequately in the light of contemporary needs in buildings, areas and circulation patterns designed for an earlier age?[198]

Since an awareness of the conservation of industrial heritage was not widespread among society or within the academic field, and since conservation was criticized as the actions of a minority imposed on a weaker majority at the latter's cost,[199] governments focused on the demolition of such industrial heritages. Additionally, many elected representatives of local authorities showed reluctance to employ public money, which was scarce in quantity, for the revitalization of historic properties for a minority, which they perceived as less important in their scale of priorities than improving housing and transportation conditions for the majority.[200] This mentality was mainly due to the economic and speculative aims of governments. Lewis Keeble, in his book "Practice of Town and Country Planning", depicts this mentality as follows:

> There is something a little futile in preserving any but the most outstandingly beautiful buildings merely as museum pieces... Yet many fine buildings are quite unsuited to present-day use, *the cost of adapting them would be greater than demolishing them and replacing them by new buildings*, and their structural condition is often such that to maintain them in a usable and sightly state would be very costly...[201]

For these reasons, during this period, in order to foster economic development, governments sought room in towns for the accumulation of capital, and thus demolished many industrial assets in order to achieve their aims.

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[198] Lichfield, N. (1988), "**Level of Investment and Cultural Value of Built Heritage**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp.13

[199] Dobby, A. (1978): 28

[200] Dobby, A. (1978): 28; Kostof, S. (1999), "**The City Assembled: The Elements of Urban Form Through History"**, A Bulfinch Press Book

[201] Keeble, L. (1964), "**Principles and Practice of Town and Country Planning**", 3rd edition, Estates Gazette, pp.315-316; italics belong to Alan Dobby (Cited in Dobby, A. (1978): 15)

5.1.2. Development of the Industrial Archaeology Discipline

Even though the origin of conservation attitudes dates back to the Renaissance, conservation of the industrial heritage is a very new issue, which originated in the mid-20th century.[202] According to Marilyn Palmer and Peter Neaverson (1998), there have been various attempts to demonstrate that the term 'industrial archaeology' has its origins in the late nineteenth century, but that it did not pass into popular usage until the mid-1950s.[203] Until this time, industrial heritage was the focus of only a small group of enthusiasts[204], and was the target of wrong beliefs and futurist public policies. These beliefs and policies led to their annihilation to some extent, depending on the intensity of actions carried out by governments. However, awareness of historical, cultural and architectural heritages increased, first with the emergence of "Welfare State" policies, constituted as a result of a search for better living standards in the post-war era, including newly emerging consumption patterns, and second with the ecological crisis of the 1970s, which required the usage of finite resources in an economic manner. These factors prompted an increasing interest in the preservation of domestic artifacts associated with recently vanished ways of living, beginning with the Victorian era.[205] Besides these factors, there were three crucial developments, which cannot be underestimated in the conservation of industrial monuments.

The first development arose in response to the studies of Michael Rix, who emphasized the importance of industrial monuments and attempted to explore what could be learned from the physical remains of industrialization.[206] Rix's use of the term 'archaeology' eventually, in 1959, inspired the Council for British Archaeology

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[202] Alfrey and Putnam (1992) suggested that industrial archaeology developed as an attempt to remedy the deficiencies both of academic study, and of amateur histories. Their programme suggests an alliance of particular histories based on artefacts, and a grand conceptual dimension as the archaeology of the industrial period (Alfrey, J. and Putnam, T. (1992), "**The Industrial Heritage: Managing resources and uses**", Routledge, London and New York, pp. 7)

[203] Palmer, M. and Neaverson Peter (1998): 1

[204] Haskel, T. (1993), "**Caring for Our Built Heritage: Conservation in Practice**", E&FN Spon, London, pp.66

[205] Palmer, M. and Neaverson Peter (1998): 143

[206] See Rix, M. (1955), "**Industrial Archaeology**", The Amateur Historians, 2, 8, pp.225-229 (Cited in Palmer, M. and Neaverson Peter (1998): 1); Raistrick, A. (1986), "**Industrial Archaeology**", Paladin Grafton Books, London, pp. 2

(CBA) to set up a Research Committee on Industrial Archaeology and to call a public meeting, at which it was resolved that recommendations should be made to the national government, urging the formation of a national policy for recording and protecting early industrial remains.[207]

The second development with respect to the conservation of industrial heritage was the spread of awareness of architectural history, especially as concerned modern monuments.[208]

Finally, the third development, which was probably the most crucial step in the conservation of industrial heritage, was the development of industrial archaeology as an academic discipline. In its early years, the discipline lacked an acute and clear context and definition to distinguish it from other disciplines.[209] There were many different approaches to the definition of the industrial archaeology discipline at the time, and thus it was very difficult to 'academicise' the subject. The first step in defining 'what is an industrial monument?' was taken at a conference arranged by the Council for British Archaeology (CBA) in 1959. At this conference, an industrial monument was defined as "any building or other fixed structure, especially of the period of the Industrial Revolution, which either alone or associated with primary plants or equipment, illustrates the beginning and development of industrial and technical processes, including means of communication".[210]

However, this definition has changed as the discipline has developed through time. One of the proposed changes to the early definition was the time constraint. Defining the beginning of the industrial period has become a difficult process in the development of the discipline. Thus, in some countries and for some industrial archaeologists it is thought that:

[207] Palmer, M. and Neaverson, P. (1998): 1-2
[208] Dobby, A. (1978), "**Conservation and Planning**", Hutchinson of London, pp. 17
[209] Raistrick, A. (1986): 1-2
[210] Cited in Raistrick, A. (1986): 2

> (…) industrial archaeology concentrates on the period when the manufacture of goods ceased to be at the level of domestic or craft production and moved into industrial and capitalist production.[211]

Indeed, it is generally understood that the term 'industrial revolution', covers the period between the early 19th and the early 20th century in England. In this context, Palmer and Neaverson (1998) explained this term "as a way of looking at a period of human history, which can be considered as the material culture of the last 250 years or so, using all the evidence available, including the visual and written documentaries and artifacts of the period".[212] However, this approach neglects industrial developments before the machine age. Furthermore, since industrial revolutions have been experienced in different times in different countries, the question of defining a specific industrial archaeological heritage has become a problem. It has since been agreed that a building, in order to be appreciated as an industrial heritage, should not be required to have been constructed after the 19th century, with the emergence of industrial revolution, but can date back even to the Hellenistic era, or much earlier. Thus, finally, the definition of an industrial monument has been transformed into the verbal expression: "industrial buildings, structures or landscapes which were witnesses to the changes in the modes of industrial production through the ages".[213]

The second change to the definition of the term was the contextual approach. Minchinton, in a book review, stated that: "the industrial archaeologist is concerned to locate, record and, when appropriate, preserve the physical survivals of past industrial processes together with the ancillary buildings associated with such activity."[214] Indeed, industrial archaeologists at present concentrate on the interpretation of sites, structures and landscapes rather than artifactual material. Furthermore, in many countries, as in the case of Ankara, industrial buildings and

[211] Palmer, M. and Neaverson, P. (1998): 15
[212] Palmer, M. and Neaverson P. (1998): 15, 141
[213] In this sense, the term "industrial monument" not only includes factory buildings that emerged after the mid-19th century, which have modern machines, but also includes the manufactories of the 16th, 17th and 18th centuries, or even of the Romans, in which traditional modes of production were processed.
[214] Minchinton (1970), "**Industrial Archaeology**", pp.99 (Cited in Raistrick, A. (1986): 10)

structures are evaluated independently of their contexts. Nevertheless, Palmer and Neaverson (1998) emphasized that: "any industrial structure is not an isolated monument but part of a network of linkages relating to the methods and means of production".[215] Similarly, Ian Hodder (1986) used the term 'contextual archaeology' to give emphasis to the issue, meaning that "the full and detailed description of the total context as the whole network of associations is followed through".[216] These associations, however, include not only economic ones, such as the sources of raw materials, methods of processing and transport networks, but also the social context of production, which constitutes the third change made to the definition of industrial archaeology. In fact, Palmer and Neaverson (1998) stated that the term now generally emphasises human efforts rather than artifacts. This is because "the recording of a factory is as much a recording of the place in which lives have been spent as one which sheltered archaic machines".[217] Industrial landscapes are now perceived as "an integration of man at work, with the tools, structures, and materials with which he works, and the immediate environment in which his work is done".[218] Smith (1965), in this context, stated that:

> Industrial archaeology is, of course, ultimately concerned with people rather than things: factories, workshops, houses and machines are of interest only as products of human ingenuity, enterprise, compassion or greed - as physical expressions of human behavior. From whatever standpoint the subject is approached, man is the basic object of our curiosity.[219]

In brief, since the 1950s, the discipline has aimed to examine the living and working environments of the laborers of the past, and thus, focuses its study on all monuments and tools that were constructed and used for the purpose of producing goods and services. However, because the rate of destruction of these documents and

[215] Palmer, M. and Neaverson, P. (1998): 4
[216] Hodder, I. (1982), "**Symbols in Action**", Cambridge University Press (Cited in Palmer, M. and Neaverson, P. (1998): 4)
[217] Raistrick, A. (1986): 13
[218] Raistrick, A. (1986): 13
[219] Smith, D. (1965), "**Industrial Archaeology of the East Midlands**", Dawlish: David & Charles (Cited in Palmer, M. and Neaverson, P. (1998): 14)

structures continuously increases, today, industrial archaeologists are widely concerned with the preservation of these tools.

Especially after the 1950s, a turnabout in mentality with respect to the perception of industrial buildings has started, first in European post-industrial countries, and then in other post-industrial countries. In these developed countries, the change began first as a cultural transformation in the mentality of the society and then was reflected in the legal structure of state mechanisms. European societies, in this sense, approached their industrial heritage as a shared cultural product, and tried to conserve this asset through state laws. As the usage of the term industrial heritage widened within the society, especially after the 1970s, many international and national organizations were founded, including voluntary organizations founded by citizens and enthusiasts such as charities, trusts and foundations, for the conservation of the industrial heritage. Among the most widely known of these international organizations are: the International Committee for the Conservation of the Industrial Heritage (TICCIH), the Council of Europe (CE), the International Council on Monuments and Sites (ICOMOS) and the Documentation and Conservation of Buildings, Sites and Neighborhoods of the Modern Movement (DOCOMOMO). These organizations coordinate periodic conferences and seminars throughout the world for the widening of awareness to industrial heritage, by assisting and supporting regional and specialist survey and research groups and bodies involved in the preservation of industrial monuments. As a consequence, to attract the focus of the public to this heritage, various literature related to industrial archaeology has been published.

5.1.3. The Rationale of Conserving the Industrial Heritage

As awareness of the industrial archaeology discipline widened within the society, industrial buildings were no longer seen as the inhibitors of progress and change, but instead, as a prerequisite of social, cultural and economic development. Furthermore, it was revealed that conserving the industrial heritage is not a cost-making task, but contrarily, that the benefits of conserving these sites exceed the costs of attitudes that

aim for their demolition. [220] Hence, it is observed that there is a growing consensus in European countries on the desirability of preserving and enhancing the architectural heritage in particular.

There are various positive results to conserving an industrial monument. According to Ülkü Altınoluk, there are three types of values of a cultural heritage:[221]

- Intellectual (its place in terms of art history)
- Emotional (its effect on the silhouette of the city or in the natural environment)
- Material (its usage value)

These values constitute the fundamental reasons for conserving a cultural heritage. Alan Dobby and Alois Riegl have also made similar classifications. According to Dobby (1978), there are four reasons for conserving cultural heritage:[222]

- Economy
- History
- Artistic design
- Associations

According to Alois Riegl (1928), on the other hand, there are five different values to monuments:[223]

- Age value
- Historical value
- Commemorative value

[220] Centorrino, M. (1988), "**Economic Effects of a Renovation Programme**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp.25
[221] Altınoluk, A. (1998), "**Binaların Yeniden Kullanımı**", YEM Yayınları, pp.11
[222] Dobby, A. (1978): 23-24
[223] Riegl, A. (1982), "**The Modern Cult of Monuments: Its Character and Its Origin**", Oppositions, No: 25, New York, Rizzoli (Originally published in Alois Riegl, Gesammelte Aufsate Augsburg-Vienna: Dr. Benno Filser, 1928) (Cited in Cengizkan, A. (2002): 240-241)

    - Intentional commemorative value
    - Unintentional commemorative value
- Use-value
- Art value
    - Newness-value
    - Relative art value

Among these reasons, economic purposes are probably the most widely known.[224] Saving the old materials and equipment of an abandoned building and re-functioning them to generate new job opportunities is an economic benefit of conservation actions.[225] The costs of restoration, when compared with public benefits, become an unimportant obstacle. According to Dobby, the suggestion that "it is cheaper to redevelop than to adapt" has been reversed as a generalization due to rising energy, labor and material costs.[226] Furthermore, besides public benefits, in many successful conservation projects, profits gained from new uses exceed the costs of conservation. Much of the current literature underlines the economic benefits of refurbishment and re-use. Köksal (2000) put forth that in Germany, 12.4 million people visited museums related to industrial archaeology in the year 1995.[227] In the year 2003-04, 6.2 million people visited the TATE Modern Art Gallery in London.[228] Indeed, marketing the industrial heritage has become an important element in cultural resource management in recent years, exploiting the public's nostalgia for escapism into the recent past.[229] Therefore, today, many landowners aim to gain economic profits by meeting the public demands of the society by re-functioning for need-based utilization.

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[224] Riegl related this economical concept of Dobby's with his "use-value" concept (See Riegl, A (1982): 39-42)
[225] Köksal, G. (2000), "**A New Lease of Life for Industrial Buildings**", M Domus, December-January 2000, pp.70; Albanese, F. (1988), "**Message from the Secretary General of the Council of Europe**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp.9
[226] Dobby, A. (1978): 15,23
[227] Koksal, S. (2000): 68
[228] IJP Community Regeneration, 2005
[229] Palmer, M. and Neaverson, P. (1998): 150

Conserving a cultural heritage for historical reasons is accepted as one of the most important rationales. Industrial buildings and structures are generally monumental in character. [230] Therefore, industrial buildings are accepted not only as providers of historical records of previous ages, but also as the symbols of permanence and continuity of societies as against the finite human lifetime.[231] Additionally, conserving an industrial building due to its "reminder" character, or as Riegl (1982) called it, due to its "intentional commemorative value", is seen as essential for the creation of trustworthy urban environments. In this context, in the Recommendation of UNESCO, organized on November 15, 1972, declared that:

> Considering that, in a society where living conditions are changing at an accelerated pace, it is essential for man's equilibrium and development to preserve for him a fitting setting in which to live, where he will remain in contact with nature and the evidences of civilization bequeathed by past generations, and that, to this end, it is appropriate to give the cultural and natural heritage an active function in community life to integrate into an overall policy the achievements of our time, the values of the past and the beauty of nature.[232]

Furthermore, since each monument is the product of shared cultural and social values, they are perceived as the generators of a collective memory and shared urban identity. This identity and collective memory is accepted to be an essential entity for the generation of citizenship, and thus as a tool to create a public realm within the cityscape.

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[230] According to Dobby (1978), "the term 'monument' can include any 'reminder' such as written documents, furniture, paintings, sculpture, etc., all of which are movable, and immovable buildings" (Dobby, A. (1978): pp.19)

[231] Palmer, M. and Neaverson, P. (1998) state that industrial archaeology makes a distinctive contribution to an understanding of the development of human society, since the discipline tries to explain how industrial structures indicate change or continuity in human behaviour (Palmer, M. and Neaverson, P. (1998): 8)

[232] UNESCO, "**Recommendation Concerning the Protection, at National Level, of the Cultural and Natural Heritage**", November 15, 1972, Paris, in Madran, E.; Özgönül, N. (1999), "International Documents Regarding the Preservation of Cultural and Natural Heritage", METU Faculty of Architectural Press, pp.109

One of the most neglected features of abandoned industrial landscapes is their power to proliferate the lost public realm. In fact, if they are used for public purposes, they could be one of the most potent tools for regenerating our privatized public life. Besides their monumental and symbolic characters, there are five major advantages of industrial landscapes, which make them a considerable tool for public use. The first is their position within the urban context. Once, these production spaces were located at the city edges and close to energy sources, but following urbanization movements, they became part of the inner cities.[233] Today industrial landscapes are usually located in the heart of cities, in downtown and waterfront areas. They are located at the nodes of attraction of modern cities, which gather societies into its privatized realm for a variety of different purposes. In this sense, conservation of the industrial heritage for public purposes not only plays a leading role in downtown revitalization projects, but also helps the regeneration of a public life by attracting users of different backgrounds into public areas, to share a collective memory and perform various public/private rituals.

Secondly, industrial landscapes occupy huge amounts of land. In today's congested inner cities, where modern societies continue to destroy public lands for the sake of creating spaces of consumption, societies could use this potential vacant land stock as an important tool to recreate former communal areas. Much of the literature related to industrial heritage management refers to the advantages of industrial archaeological parks and open-air technology museums that exhibit the industrial heritages *in situ* (refer to Section 5.2.4. for management models). These landscapes would help the permeability of the social symbolism of industrial archaeological heritage by preserving local settings. As a consequence, they would help create a nostalgic landscape in the center of cities that would attract and educate societies. Indeed, industrial heritage buildings are vital to an understanding of the present and are accepted to be the milestones for constructing a better future.

> Guardians of the past, they testify to the ordeals and exploits of those who worked in them. Industrial sites are important milestones in the

[233] Kostof, S. (1990)

> history of humanity, marking humankind's dual power of destruction and creation that engenders both nuisances and progress. They embody the hope of a better life, and the ever-greater power over matter.[234]

Thirdly, abandoned industrial sites have a potentially usable vacant building stock. An advantage to these buildings is that most of them allow a variety of re-uses due to their wide spatial features. Although there are some counter arguments, most of the academic literature claims that using these buildings for a cultural purpose is a more sound way to incorporate them into the public realm. Köksal (2002) puts forth that using an industrial building for a cultural purpose will not only have beneficial effects on urban cultures, but also on the sustainability of cultural heritage.[235] Thus, whatever the new function of the abandoned industrial survival, using this vacant building stock for public purposes (museums, local markets, guesthouses, theatres, etc.) would help the revitalization of a public life in cities, and thus the individuation and socialization of the modern individual.

Fourthly, industrial survivals have a unique visual and architectural vocabulary. The products of the modern society - chimneys, cooling towers, blast furnaces, gasholders, docks and cranes - built using the construction materials and techniques of a specific era, makes cities not only legible, but also attract societies to explore their "self". Discovery is one of the reasons for people's presence in public spaces and represents the desire for stimulation[236] and the delight we all have in new, pleasurable experiences.[237]

Finally, abandoned industrial landscapes are usually on public property. In most countries, production and distribution of public goods is conducted, by and large, by public agencies, due to security reasons. This creates significant advantages for public benefit during the conservation of such landscapes. It hinders the privatized

[234] UNESCO, "**Industrial Heritage**", http://whc.unesco.org/sites/industrial.htm, January 24, 2006
[235] Köksal (2002): 86
[236] Lynch, K. (1960)
[237] Carr, Francis, Rivlin and Stone (1992): 134

and consumption-oriented projects focusing on industrial landscapes, and makes possible the use of these vacant lands for public purposes.

Another rationale for conserving cultural heritages is due to their artistic design, or as Riegl (1982) stated, for their "art value". Although cultural heritages are not artifacts, they represent the building techniques of the era in which they were constructed. Thus, their presence is accepted as both educative and entertaining for societies. In this context, due to their monumental character, they not only help in the construction of an urban image, but also help in the construction of artistically created environments.

On the other hand, according to Dobby (1978), the most vague justifications for conservation are those reasons that rely upon identity, associational and psychological needs. In this sense, it is a known fact that since ancient times, certain historical objects have been preserved due to the belief that these structures embodied a spiritual power. Thus, Dobby, in considering cultural heritage buildings states that "these have been touched upon earlier in the context of symbolism and the reverence given to the products of an earlier and perhaps more idealistic age".[238]

When industrial monuments are considered, the rationales of conserving a cultural monument become insufficient. This is due to the fact that industrial monuments can not only be defined by their historical, architectural and cultural values, but by another distinctive feature: their identity. This identity represents not only the values previously mentioned, but additionally represents the social conditions and technological features of the industrial period. Related to this issue, Gülsün Tanyeli (2000) declared that: "industrial sites, institutions, monuments or any tools have both a technological history and architectural history, and an archaeological as well as historical dimension".[239] According to Mantoux, the word "factory" itself seems to

[238] Dobby, A. (1978): 25)
[239] Tanyeli, G. (2000), "**Conservation of Industrial Archaeological Sites and Assigning New Functions**", M Domus, December-January 2000, pp.50

bring out the fundamental identity of the machine industry and the factory system that gave the essential characteristics to the:[240]

> For 'factory system' is the best translation of the French expression 'la grande industrie'. In the middle of the 18th century the word 'factory' was still only used in the same sense as the French word to which it is related: 'factorie', which means shop, warehouse or depot.[241] The first factories were not called factories, but mills. (...) Ultimately the word, used in an ever wider sense, came to be almost synonymous with machinery: thus factory, mill and machine were one and the same thing. During the last years of the 18th century, the words mill and factory were constantly used for one another. (...) As early as 1806 we find the expression 'factory system' used in the report of a Parliamentary Committee on the woolen industry, although the idea of machinery does not appear in this case to have been implied in the definition.[242] When 'factory system' had become a current expression it was defined as follows in Ure's Philosophy of Manufactures: 'The factory system designates the combined operations of many orders of workpeople, adult and young, in tending with assiduous skill a series of productive machines, continuously impelled by a central power.'[243] The legal definition of a factory dates from 1844: 'The word factory (...) shall be taken to mean all buildings and premises (...) wherein or within the close or curtilage of which steam or any other mechanical power shall be used to move or work any machinery employed in preparing, manufacturing,

[240] Mantoux, P. (1961), "**The Industrial Revolution in the Eighteenth Century: An Outline of the Beginnings of the Modern Factory System in England**", Harper & Row Publishers, New York, pp.38-39
[241] Such is still the meaning attached to it in Johnson's dictionary. It is possible that 'factory' owes its modern meaning to the word 'manufactory' (Mantoux, P. (1961): 38-39)
[242] Report from the Select Committee appointed to consider the State of Woolen Manufacture in England (1806), p.8 (Cited in Mantoux, P. (1961): 38-39)
[243] Ure, A., "**Philosophy of Manufactures**", p.14 (Cited in Mantoux, P. (1961): 38-39)

or finishing, or in any process incident to the manufacture of cotton, wool, hair, silk, flax, hemp, jute, or tow (...).'[244]

Hence, it is this industrial identity, which provides a collective memory for post-industrial societies. The preservation of this identity is required for the individuation of the modern individual to know himself/herself, and to feel a sense of belonging to his/her living environment.

5.1.4. Approaching the Conservation of the Industrial Archaeological Survivals

Especially after the 1970s, with an increase in the urbanization rate, industrial functions began to leave inner cities and move towards the urban fringe. As a result of this withdrawal, while some of these abandoned buildings and structures were demolished and transformed into recreational, commercial or imposing residential areas, some of them were discarded as industrial slum areas or urban wastelands.

The most influential conservation attempts for rescuing the industrial archaeological heritage emerged as a strategic decision, after the mid-20th century. After this period, preserving the industrial survivals became one of the major responsibilities of the institutions of the state.[245]

Acts for conserving the industrial heritage started first in England, through Michael Rix's addressing the issue of industrial archaeology. This issue was further developed with the campaigns of a small segment of the society, which was composed mostly of scholars and persons interested in the industrial archaeology discipline. Consequently, many national and international conservation institutions were founded, such as, in England: Save Britain's Heritage, RESCUE, the Trust for British Archaeology, and in the world: TICCIH, CE, ICOMOS, UNESCO and

[244] 8 Victoria, c.15 (An Act to amend the Laws relating to Labour in Factories, June 6, 1844). It should be noticed that this legal definition applied only to textile factories (Cited in Mantoux, P. (1961): 38-39)

[245] Palmer and Neaverson state that the movement for the conservation of industrial artifacts and structures pre-dates the development of the discipline of industrial archaeology. It began with the Great Exhibition of 1851 in England, which was a display of Britain's industrial pre-eminence but also paid tribute to her industrial past (Palmer, M. and Neaverson, P. (1998): 142)

DOCOMOMO. All of these foundations, in general, aimed to spread awareness of industrial and modern architectural heritage buildings. They organized conferences, seminars and cultural events throughout the world to increase conservation of the industrial heritage. As a result, conservation of the industrial heritage became part of the regional and local scale urban policies of developed post-industrial countries.

Integrated strategies are being developed for managing and interpreting the historic environment in its totality, in partnership with a range of other conservation interests. The most fundamental change has come with the reception of ideas concerning the sustainability of the global environment, as they have cascaded down from the Bruntland Commission,[246] to United Kingdom government policy,[247] and evolved via the agendas of the Earth Summits in Rio de Janeiro in 1992[248] and Kyoto in 1997.[249]

As a consequence of these conservation attempts, a resistance to the demolition of industrial buildings and structures started in western post-industrial countries. Many successful conservation projects have been achieved since that time, both by public and by private enterprises. Some of these projects have been the conservation of: gas factories in Vienna, in London at King's Cross and Battersea, in Birmingham, in Ruhr, and in Alabama; a rail station in Paris; and the textile factories of Lowell Mills and Boot Mills in Lowell, USA (Fig. 66 and Fig. 67). Furthermore, in contrast to early approaches, today, in several economies, heritage related investments and trading have moved from a marginal position to attain considerable importance,

[246] WCED (1987), "**Our Common Future**", World Commission on Environment and Development, Oxford: Oxford University Press (Cited in Baker, D. (1999), "Context for Collaboration and Conflict", in Chitty, G. and Baker, D. (ed.) (1999), "Managing Historic Sites and Buildings: Reconciling Presentation and Preservation", Routledge, London, pp. 6)
[247] DoE (1989), "**Sustaining Our Common Future: A Progress Report by the United Kingdom on Implementing Sustainable Government**", London: HMSO (Cited in Baker, D. (1999): 6)
[248] UN (1992), "**Earth Summit '92**", United Nations Conference on Environment and Development, Rio de Janeiro 1992, London: Regency (Cited in Baker, D. (1999): 6)
[249] Baker, D. (1999), "**Context for Collaboration and Conflict**", in Chitty, G. and Baker, D. (ed.) (1999), "Managing Historic Sites and Buildings: Reconciling Presentation and Preservation", Routledge, London, pp. 6

linking cultural industries, leisure and tourism, retailing and economic regeneration.[250]

Although there are positive developments in the conservation of the industrial archaeological heritage throughout the world, unfortunately, even in the most developed post-industrial countries, industrial heritage objects and landscapes still continue to deteriorate and be destroyed by public and private bodies.[251] Furthermore, according to Alfrey and Putnam (1992), much of the industrial heritage is still not registered.[252] Some of the basic reasons behind this deficiency are that the discipline has not yet been fully developed, the low age values of certain sites and/or their lack of conventional architectural aesthetic values.[253] Tağmat (2003), related to the issue of destruction, emphasized that:

> (…) (*Resistance to the determination of the modern architectural heritage*) shows itself especially within the conservation of public buildings. However, when small-scale projects are considered (generally due to legal gaps within the legislative structure), the demolition of such buildings, which starts with the transfer of land ownership to land speculators, cannot be prevented. When the issue is examined within a periodical perspective, it is observed that although there is a greater sensitivity to such buildings, which dates from the 1920s, buildings which were constructed after the Second World War are generally more threatened by actions that target their destruction.[254]

Although there remain many industrial heritages which are unregistered and even demolished due to neglect and indifference from society, examining the

[250] Alfrey and Putnam (1992), in this context, states that often, industrial projects have been at the forefront of these developments (Alfrey, J. and Putnam, T. (1992): 42)
[251] Stratton and Trinder (2000) state that in 1999 the Klölnne-type gasholder at Swan Village, West Bromwich, was demolished to fulfil the wishes of local residents. However, the structure had been one of the most prominent features of the Black Country landscape in England (Stratton, M. and Trinder, B. (2000): 32).
[252] Alfrey, J. and Putnam, T. (1992): 9
[253] Alfrey, J. and Putnam, T. (1992): 9
[254] Tağmat, T. S. (2003), "**Modern Mimarlık Ürünlerinin Korunması**", Mimarlık Dergisi, Temmuz-Ağustos 2003, No.312, Mimarlar Odasi, pp.17

developments, techniques, methods and polices previously implemented for conserving the industrial heritage within post-industrial countries would be extremely beneficial for conserving such heritages in underdeveloped countries.

Fig. 66: Preserved gasholders at the Kings Cross
Source: English Heritage, "**Kings Cross Gasholders, London**", http://www.eng-h.gov.uk/archrev/rev96_7/ kcgas.htm, January 24, 2006

Fig. 67: The Gas Factory in Ruhr. This building was re-used for cultural purposes after its abandonment
Source: Steinglass, M., "**The Machine in the Garden**", Metropolis Magazine, http://www.metropolismag.com/html/ content_1000/lat.htm#9, January 24, 2006

Among the most important reasons for the success of conservation attempts conducted within developed post-industrial countries are, probably, the source of such efforts. In contrast to many underdeveloped countries, conservation actions within western post-industrial countries are, by and large, started as a result of a collective civic movement.[255] Civic societies have resisted demolition actions, claiming that the industrial buildings, structures and landscapes are their own "shared" cultural heritage[256].

> Modern human being, when looks to a monument, sees a part of his/her life, evaluate each intervention toward it as an intervention toward his/her

[255] Köksal, T. G. (2000), "**A New Lease of Life for Industrial Buildings**", M Domus, December-January 2000, pp.68
[256] ICOMOS (1965), "**Venice Charter: International Charter for the Conservation and Restoration of Monuments and Sites**", Venice, in Madran, E.; Özgönül, N. (1999), "International Documents Regarding the Preservation of Cultural and Natural Heritage", METU Faculty of Architectural Press, pp.31

own life, and make a reaction as the intervention was done to his/her own body.[257]

Furthermore, western post-industrial societies, attempted to adopt a general policy, to give industrial heritage a function in their communal life and thus to integrate their protection into comprehensive planning programs. Hence, "...the encouragement of civic groups dedicated to protecting the cultural heritage, has had excellent results, especially in localities that do not yet have urban regulations and where protective action at the national level is weak or not always effective".[258]

As a consequence of these initial developments, basic principles for the conservation of the industrial and modern architectural heritage was set out by various charters, conferences and seminars. Among these declarations, especially before the 1970s, the Venice Charter, which aims for the conservation and restoration of monuments and sites, was probably the most widely accepted charter for the conservation of the architectural heritage. The charter consists of sixteen Articles and was developed as a revision to the Athens Charter of 1931 and Carta del Restaura of 1932, signed in Italy.

Although the Venice Charter put forward important principles for the conservation of cultural heritage, toward the mid-1970s many governments claimed that the Charter could not be adopted, given the changing social conditions of the time. Furthermore, this primitive Charter became useless in terms of conserving industrial heritages, due to their specific natures. Thus, many administrations emphasized the need for a recovery of the principles according to different local conditions and situations.[259]

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[257] Riegl, A. (1982), "**The Cult of the Modern Monument**" (Cited in Maravanszky, A. (2001), "**İzler ve Aura: Mimarlığın Eskilik Değeri, Yenilik Değeri ve Geçicilik**", Arredamento Mimarlık, Eylül 2001, pp.91)

[258] Cited in The Norms of Quito, "**Final Report of the Meeting on the Preservation and Utilization of Monuments and Sites of Artistic and Historic Value**", December 2, 1967, Organization of American States, in Madran, E.; Özgönül, N. (1999), "International Documents Regarding the Preservation of Cultural and Natural Heritage", METU Faculty of Architectural Press, pp.61

[259] Erder, C. (1977), "**Venedik Tüzüğü Tarihi Bir Anıt Gibi Korunmalıdır**", in ODTÜ Mimarlık Fakültesi Dergisi, No. 2, Fall 1977

Therefore, after the 1970s many countries revised their conservation policies and differentiated them from city to city, and even from region to region.[260]

After clarifying the policies for conserving the industrial archaeological heritage buildings, structures and landscapes, the next step is to make a comprehensive definition and documentation of their heritages through site surveys, oral resources and literature reviews. There are various types of survey techniques, which differ from country to country. According to Alfrey and Putnam (1992):

> These survey types were both specifically defined as surveys of industrial buildings, although their geographical remit helped to determine the differing levels of information that they could give: other inventories have been organized looking at the buildings and sites associated with particular industries, or with the traces of an industrial society or landscape as a whole. Others still have not distinguished industrial from any other building type. In Flanders, a general architectural inventory was launched and industry had its place within it.[261] Similarly, an inventory of post-1850 buildings commissioned by the Dutch government as the basis for a revised conservation strategy, did not make distinctions between industrial and other buildings.[262] Swedish local authorities are required to undertake comprehensive inventories of their built heritage resources before making conservation decisions. Small-scale local surveys have sometimes taken as their subject not a particular industry or a particular period, but a landscape itself.[263]

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[260] Çıkış, Ş. E. (2002), "**Türkiye'de Modern Korumacılık: İlkeler ve Etikler**", Arredamento Mimarlık, Aralık 2002, pp. 85

[261] Aerschot, V. S. (1986), "**Communaute Flamande de Belgique: Patrimoine industriel et inventaire du patrimoine architecturel**", pp. 69-80, in Inventaire General des Monuments et des Richesses Artistique de la France, Les Inventaires du Patrimoine Industriel: Objectifs et Methodes, Paris: Inventaire General (Cited in Alfrey, J. and Putnam, T. (1992): 137)

[262] Docter, R. (1987), "**Les Pays Bas: developpement d'une politique gouvernementale pour l'inventaire et la protection des monuments et des paysages urbaines de l'epoque contemporain**", Inventaire General des Monuments et des Richesses Artistiques de la France, Les Enjeux du Patrimoine Architectural du Xieme Siecle, Paris: Ministere de la Culture et de la Communication (Cited in Alfrey, J. and Putnam, T. (1992): 137); Nijhof, P. (1990), "**Cultural Heritage: The Netherlands**", European Environmental Yearbook, Milan: Institute of Environmental Studies (Cited in Alfrey, J. and Putnam, T. (1992): 137)

[263] Alfrey, J. and Putnam, T. (1992): 137

The documentation of industrial buildings, structures and sites constitutes the first step of a conservation process, and thus must be achieved carefully and sensitively for success. The documentation process, in this sense, is as important as the conservation of the building itself. In the event that industrial heritages are erased from our collective memories, such data may be the only traces that can give information about our lost products.

Following such surveys and documentation, the next step is to list or schedule the industrial heritage, according to legal criteria defined by a Board of Preservation, which will be discussed further chapters of this thesis. According to Alfrey and Putnam (1992), inclusive strategies have a number of advantages. Probably the most important advantage is that these strategies do not involve pre-selection according to a rigid criteria. For this reason, although there are a variety of buildings on the list, including those used as industrial buildings at the present but not designed according to industrial purposes, the whole heritage is recorded in such a list.[264] However, since a scheduling and listing process requires an extensive knowledge of the historical, technical and architectural information of such buildings, and since in many situations conservation requires pilot projects due to economic limitations, it is essential to make comprehensive surveys, for the success of an evaluation to be made between various alternatives.

Beside evaluating the characteristics of industrial buildings or sites, in most situations, experts approach the issue of conservation from an urban design perspective, not only for the process of listing and scheduling, but also for deciding on new utilizations, funding and management models. Since an object or a landscape always establishes functional and sociological relationships with its environment, when preserving such objects or sites it is also essential to protect their environment.[265] Unfortunately, preservationists sometimes do not evaluate the archaeological character of industrial buildings and approach the conservation issue

[264] Alfrey, J. and Putnam, T. (1992): 137
[265] Palmer and Neaverson called this approach "contextual archaeology" (Palmer, M. and Neaverson, P. (1998): 4-5)

by preserving only single buildings and structures. Furthermore, approaching the issue from an urban design perspective leads to more successful solutions, since urban dynamics are examined within this process in all their aspects, and the industrial objects or landscapes are considered as a part of a whole in terms of their spatial, social and economic positions. However, in some cases, there may be inhibiting factors to the archaeological perception of industrial buildings, structures or landscapes. Such obstacles may be either the urban functions surrounding the industrial objects or sites, or be irrelevant buildings that present a strict contrast to the industrial context. Such obstacles hinder the permeability and sustainability of the industrial heritage by preventing an accurate perception of the industrial relations. Therefore, selective demolition may benefit the survival rate of industrial heritages.[266] In other words, demolishing unimportant structures, which hinder the comprehensive perception of the industrial assets, will not only save the industrial heritage building from the products of modern individuals, but also provide such areas as open car-parking spaces or recreational areas in the congested cores of cities.

After a broad examination of the urban environment in terms of its spatial, economic, legal and social characteristics, the next step is to remove other contextual threats, such as problems that may arise from landownership and contamination of the land. Related to the issue of the contamination of the land, Palmer and Neaverson (1998) state that:

> The Environmental Protection Act of 1990 empowered the Secretary of State to require local authorities to maintain registers of potentially contaminated land and, in some cases, to take drastic action to neutralise the contamination. Landscapes of metalliferous mining have been deemed a particular hazard and the removal of burial of waste heaps has been instrumental in the destruction of much archaeological evidence.[267]

In order to begin conservation actions, due to the hazardous effect of the contamination of land, first of all, accurate finance mechanisms should be identified.

[266] Palmer, M. and Neaverson, P. (1998): 152
[267] Palmer, M. and Neaverson, P. (1998): 155

Then, with the identified resources, the reclamation tasks of the contaminated industrial sites must performed.

On the other hand, when ownership of the land becomes an issue, the problem becomes more obscure. This is because maintaining the benefits to landowners is as much important as maintaining the enjoyment level of the public, since the final decision is always taken by the landowners. To sum up, before starting conservation actions, the landowners should be persuaded, and their wishes should be considered first.

Maintaining the enjoyment of the public is a crucial task for achieving the sustainability of the industrial heritage. As was explained in the previous sections, industrial landscapes are unique tools for proliferating a public life and a public realm among the society. In this sense, the quality of the presentation of an industrial monument or structure, and the new uses made of abandoned buildings, becomes a very important issue for attracting the attention of the public. Furthermore, this issue is also important for increasing the consumption of the new spaces, and thus for their educative value. In this way, awareness to the industrial archaeological history in the public sphere may also be achieved.

Finally, the success of a conservation project depends not only on state or private landownership of the site, since public bodies also play an important role in the conservation of the industrial archaeological heritage. The success of conservation projects starts with a cultural awareness of the industrial archaeology discipline, and then continues, first with an accurate management model, second with a full presentation of values and symbols, and is completed with user satisfaction (Fig. 68). Therefore, approaching the conservation issue becomes a very important task for generating such awareness. For this reason, during the conservation process, each step of the process should be considered in relation to the other steps, dynamically, strategically and comprehensively, but more importantly, with the guidance of a flexible and long-term strategic plan.

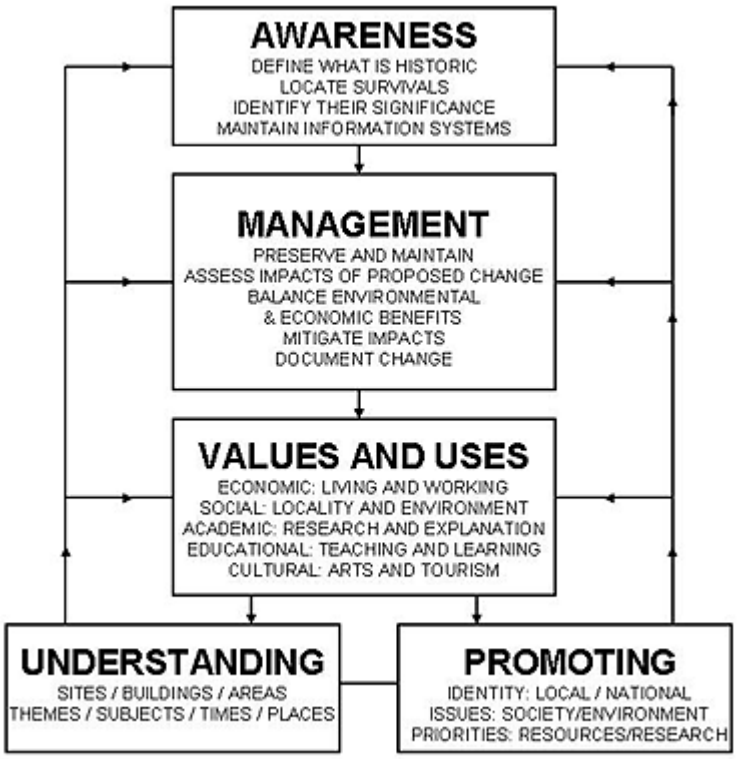

Fig. 68: The flow of actions for conserving the historic environment

Source: Baker, D. (1999): 7

5.1.5. Approaching the Re-Functioning of Industrial Archaeological Monuments

Re-functioning abandoned buildings is not a new issue. Civilizations have been changing the uses of their buildings according to their differentiating demands for many centuries. The re-functioning issue of industrial buildings, in this sense, also dates far back in history. One of the earliest example known is a warehouse building in Nürnberg that was re-functioned in the 16th century.[268]

In the past, in the early years of the conservation of cultural heritage, the re-functioning issue was mainly geared to economic purposes. However, it was soon perceived that maintaining historical, architectural and archaeological characteristics of cultural heritages for educational purposes, and for generating a collective

[268] Hahn, M. (1999), "**Historiche Umnutzungen**", A Doctoral Thesis submitted to Berlin Technical University (Cited in, Köksal, G. (2000), "A New Lease of Life for Industrial Buildings", M Domus, December-January 2000, pp.70)

memory and civic identity within the society, is much more important than the former purpose. Furthermore, re-functioning is the best way to preserve these characteristics.

It is a well-known fact that the most cost-effective way to preserve industrial buildings is by means of suitable adaptive re-uses. Therefore, when deciding a new re-use for such buildings, benefits are calculated not only in terms of economic, but also in terms of the social, historical and cultural feedback of the re-functioning process. European post-industrial countries have been undertaking re-functioning projects of industrial objects and sites for many decades. Although there were many unsuccessful attempts in the early experiences of the re-functioning of abandoned buildings, there has also been considerable development on the issue. One of the more dreadful examples of the early re-functioning processes of industrial landscapes, was the re-utilization of the warehouses and docks within the London Docklands region. In this area, while structurally weak and unaesthetic industrial monuments were demolished by the government of the period, the physically undamaged, reliable and visually attractive ones were mainly speculatively re-used for private uses.[269] Furthermore, the government approached the industrial buildings not as a "heritage" that must be conserved for future generations, but as empty and worthless shells, which could only be used to meet the housing and office requirements of the current society.

As awareness of industrial archaeological monuments increased within western societies, the point of view towards the re-functioning of such buildings also changed. For instance, local authorities and other public and private conservation authorities started to see public oriented re-uses as an important aspect of the decision making process, due to the institution's responsibilities to the society. In this context, the Venice Charter (1964) declared that: "The conservation of monuments is always facilitated by making use of them for some socially useful purposes"[270].

[269] Basatemür, B. (2001), "**Kıyı Şeridi Docklands**", XXI Dergisi, Mart-Nisan 2001, Sayı 7, pp. 146-161

[270] Venice Charter (1964), "**International Charter for the Conservation and Restoration of Monuments and Sites**", ICOMOS, in Erder, C. (1986), "Our Architectural Heritage. From Consciousness to Conservation", UNESCO, pp.222

Indeed, the architectural characteristic of industrial spaces, which are spatially wide and architecturally attractive, provides various possibilities for re-functioning solutions. Thus, in much of the literature, due to their nature, these buildings are ascribed for cultural uses.[271] However, re-functioning decisions within western post-industrial countries are not only limited to public oriented re-functions. This is due to the general belief that whether re-functioned for public or private uses, an industrial heritage exhibits itself as a shell embodying a social function for the society. In this sense, industrial buildings have been re-functioned for a variety of distinct re-uses in these countries, such as for housing, commercial (hotels, cafes, shopping centers, etc.) or cultural (museums, exhibition centers, theatres, schools, etc.) uses (Fig. 70).

Although authorities in European post-industrial countries approach the issue from a broad perspective by claiming that "there is not only one correct way to re-function industrial buildings", there are some important criteria that should be met during the re-functioning decision process. Achieving these criteria is seen as a crucial task for the survival of the heritage. It has been understood that, if a cultural heritage is not properly re-functioned, then the existence of that building is non-sense for the society. Therefore, the new function's of an industrial heritage must be carefully decided, to avoid the annihilation of the 'soul' of the building, which bears the cultural, social and architectural assets of the building, and thus to maintain the sustainability of the heritage.

[271] Atagök, T. (2000), "**Sanayi Mekanlarından Sanat Mekanlarına**", Mimarlık Dergisi, No.292, pp.9; Köksal, T. G. (2002), "**Endüstri Mirasında Çağdaş Sanatlar; Kazanımlar, Kayıplar…**", Mimarist Dergisi, No.4, pp.86

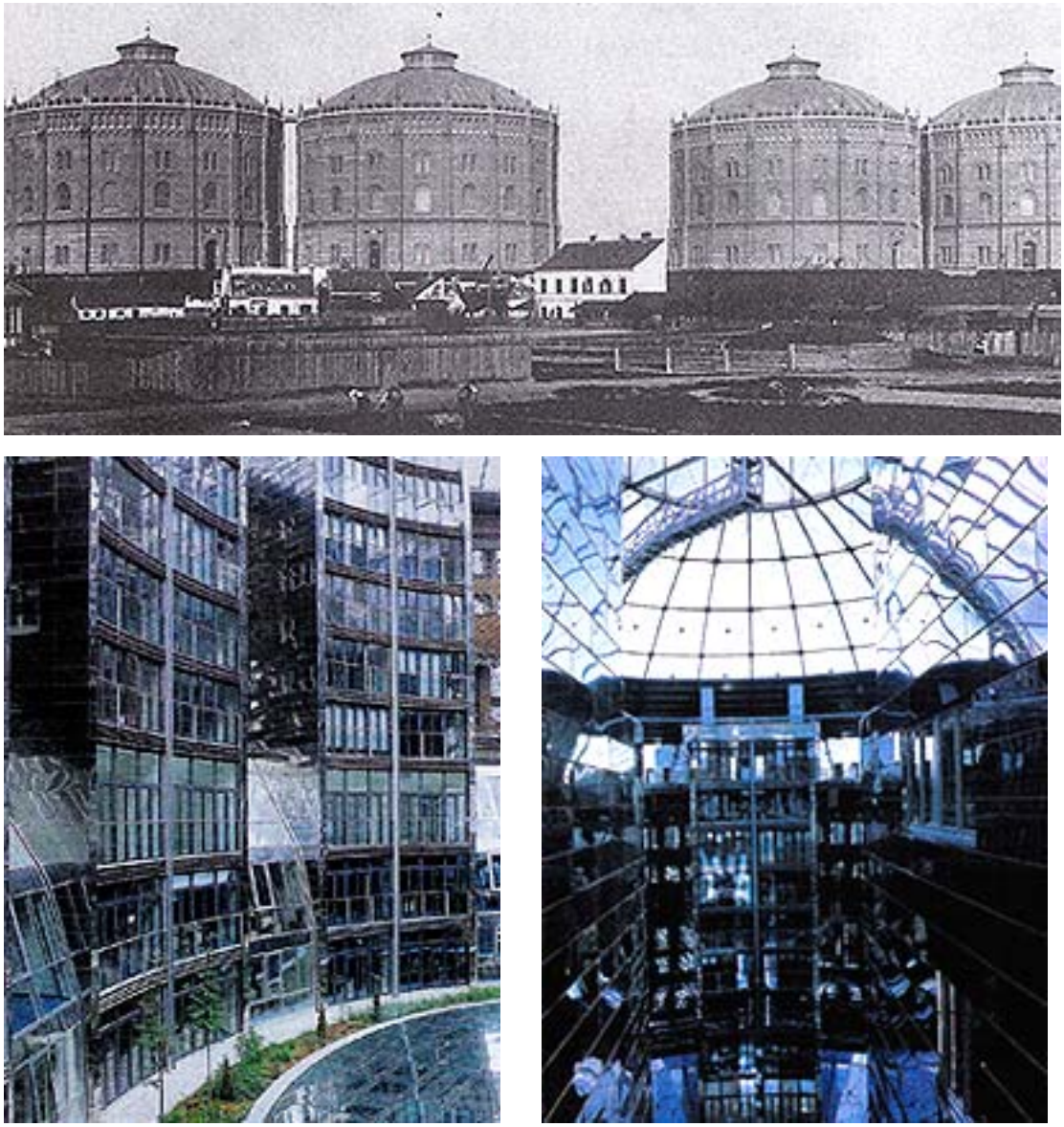

Fig. 69: Gasholders of Vienna. The buildings were constructed between 1896 and 1899 and were abandoned in 1891. Ten years before its closure, the Board of Preservation of Vienna listed the monuments. During this ten-year period, one of the gasholders was re-used for leisure purposes, such as a theatre, dance hall, etc. However, the operation costs of this re-use decision could not meet the conservation costs and thus a new conservation project was developed for these gasholders. Today, these buildings comprise a variety of mix-use functions, including offices, commercial, residential, and recreational uses.

Source: Cimcoz, N. (2002): 124-128

Although there is not a legal or accurately defined path for re-functioning industrial heritages, there are some criteria that should be met for sustainable solutions. One of

these criterions is the harmony of the new function with the modern society's demands. In this context, according to Guyt Leymarie (1988):

> The architectural heritage can not survive unless it moves with the times and, in particular, unless it keeps pace with the economic and social developments of our century.
>
> If the architectural heritage is to come alive, it must be part and parcel of modern life.[272]

It is essential to evaluate industrial buildings and monuments not only by their spatial characteristics on an architectural scale, but also by in the spatial, sociological, cultural and economic context in which they are situated. This requires the evaluation of the industrial heritage in an urban design context. Therefore, a comprehensive analysis should be made, which should evaluate opportunities for and threats to the building itself, as well its urban environment. In this context, conservation plans play an important part in setting an agenda for making an inventory of resources around particular uses, and thus for achieving a sustainable re-functioning solution.[273]

Another criterion that should be met for a sustainable conservation solution is to evaluate each industrial building as a unique object. Each industrial building has different characteristics compared to other buildings. For instance, the nature of a gas factory is completely different from that of a textile factory. These characteristics involve not only the architectural (such as the volume of the spaces and the spatial divisions within the building), but also the historical and archaeological characteristics of the industrial heritage. Furthermore, the cultural, social and historical context of each building is completely different from the others. Therefore, distinct, special re-functioning models must be created for each industrial building. In this context, in the European post-industrial countries, by and large, it is observed that a minimal design approach is adopted during the re-functioning projects of

[272] Leymarie, G. (1988), "**The Cartier Foundation**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp.97
[273] Alfrey, J. and Putnam, T. (1992): 150

industrial buildings.[274] The aim of this approach is not only to preserve the authentic identity and function of the industrial buildings, but also to emphasize the architectural spatial features of these buildings. Furthermore, for the preservation of the archaeological values, all industrial heritages, including machinery and structures that make up the original industrial atmosphere are also preserved within the re-functioned industrial buildings. In this context, while some of the tools are exhibited *in situ* within the landscape, like sculptures, some of the tools are processed for educative and active-learning purposes.[275] Moreover, it is also common to exhibit the previous industrial processes, social and working conditions within the industrial landscape on metal boards and monitors. This solution is beneficial for sustaining the identity of the building, understanding the relationships between different components of the complex, and learning about the human ingenuity, enterprise, compassion or greed as physical expressions of human behavior, and for their social symbolism.[276]

In order to maintain the sustainability of the industrial buildings, merely preserving their values may not be sufficient. Thus, an important criterion that should be met during the re-functioning process is to decide on an economically feasible re-use solution. The achievement of this criterion is important because, in order to maintain the sustainability of the re-functioned building, the capital gained must exceed or be equal to the costs spent on the conservation and maintenance of that building. This is an important criterion especially for the landowners. Palmer and Neaverson (1998) emphasized that during re-functioning projects aesthetic value must take second place to economic value.[277] The gained capital, however, may not only be limited to economic profits gained from the management of the industrial building alone, if it is

[274] Altınoluk, Ü. (2000), "**Endüstri Arkeolojisi Kapsamındaki Binalarda İşlev Dönüşümü**", Mimarlık Dergisi, No. 292, pp.8

[275] However, Palmer and Neaverson (1998) state that, although the informational value of projects in which the machines are processed within industrial structures either for commercial or thematic purposes is undoubted, their economic viability is often precarious. This form of preservation requires considerable resolve and manpower, requiring a continuous supply of new recruits willing to learn the skills. Voluntary preservation groups also face the problem of the lack of recurrent funding after initial grants for the preservation project itself; their dependency on visitor income makes their long-term outlook perilous (Cited in Palmer, M. and Neaverson, P. (1998): 150)

[276] Altınoluk, Ü. (2000), "**Endüstri Arkeolojisi Kapsamındaki Binalarda İşlev Dönüşümü**", Mimarlık Dergisi, No. 292, pp.8; Palmer, M. and Neaverson Peter (1998): pp. 5, 14

[277] Palmer, M. and Neaverson Peter (1998): pp. 153

managed by public agencies, but also include job opportunities created in the surrounding environment. This will also help in the enhancement of the life quality within the region. Furthermore, besides the economic gains, social and cultural gains must also be considered during the decision process. According to Altınoluk (1998), "a heritage must be re-used for social and economic purposes. However, beside approaching these buildings in terms of economic reasons, it is more important to approach them as cultural assets, which must be evaluated, re-used, and conserved for future generations".[278]

During the re-functioning projects, a public benefit should be sought for public purposes. Especially in the absence of public spaces, re-functioning industrial heritages for public uses would be an essential tool to proliferate the lost public life of cities. For this reason, many industrial buildings are re-functioned, sometimes as part of a theme-park concept, as museums or theatres in western countries. However, to sustain the industrial heritage in terms of economic gains, private uses are also considered in Europe, in addition to public uses for public purposes. Therefore, performing a best-use analysis, which evaluates the economic, spatial, social and archaeological assets of the building, and the environmental context of the focused landscape from an urban design perspective, is accepted to be an essential task for the re-functioning process of industrial heritage buildings.

1.1. Tools Used for the Conservation of Industrial Landscapes

1.1.1. Legal Tools Used for Regenerating Industrial Sites: Scheduling, Listing and the Legal Tools for the Conservation of the Industrial Heritage

In most developed post-industrial countries, especially in Great Britain, France, Germany, Italy and the USA, industrial heritages are subjected to stringent legal procedures in order to prevent their destruction. However, even in those countries, there are cases where not all of the industrial archaeological buildings are scheduled or listed. Institutions responsible for listing and scheduling, as well as those applying

[278] Altınoluk, Ü. (1998), "**Binaların Yeniden Kullanımı**", Yem Yayın, pp.19

to these institutions for the conservation of heritages, play an important role in the preservation of the industrial heritage.

There are two forms of legislation intended to provide statutory protection for the historic environment: scheduling and listing.[279] While scheduling is intended to preserve unoccupied sites and structures that had no further practical use, listing, on the other hand, is intended to protect the historic fabric of a building while it remains in use. Industrial structures, buildings and landscapes are subject to both of these forms of legislation. However, the distinction between these two forms is not always very clear. For instance, an industrial structure may be both scheduled and listed at the same time.[280] Recent legislation in Britain, the Listed Buildings and Conservation Areas Act, 1990, which is one of the three classes of protection,[281] has attempted to remove some of the anomalies.

The most important and problematic process in the conservation of an industrial heritage is the criteria for listing. This process is essential for sustaining the industrial heritage and for beginning the conservation process. It is especially important for the funding and management of the heritage, which will enable the stability and quickness of the conservation actions. This is because limitations placed on development by the listing process can prevent the future viable use of industrial buildings, when it is considered that adaptation would materially alter their integrity. Palmer and Neaverson (1998) state that: "this has often resulted in the loss of unoccupied listed buildings through the ravages of weather, fire and vandalism".[282]

Industrial heritage has to be observed in its context, instead of examining only a single industrial building or structure deprived from its surroundings, to sustain the archaeological character of the industrial heritage. Therefore, industrial sites, in most cases, are legislated as a Conservation Area status in most developed post-industrial

[279] Palmer, M. and Neaverson, P. (1998): 145
[280] For example, as stated by Palmer and Neaverson (1998), Bestwood Colliery's winding house and headstocks in Nottinghamshire are scheduled because of the survival of the steam engine *in situ*, but the winding house is also listed as Grade II (Cited in Palmer, M. and Neaverson, P. (1998): 147)
[281] The other two classes of protection in Britain are Listed Buildings and Ancient Monuments
[282] Palmer, M. and Neaverson, P. (1998): 148

countries. The outcome of this act is that it enables areas of special architectural and historic interest to be preserved or enhanced in their entirety. According to Palmer and Neaverson (1998), such legislation is instrumental in highlighting the landscape importance of industrial buildings, often in advance of the re-listing procedure.[283]

One important problem in the listing and scheduling of industrial buildings, structures and landscapes has been to define what is industrial heritage and what is not. This is because, when the issue is approached by considering the time intervals of the industrialization period, it becomes a very difficult task to give an accurate answer, as explained in the previous chapters. Eventually, it was soon perceived that representing the former industrial production techniques of an era is enough for listing industrial heritages.

The listing criteria of the 1940s gave significance to the importance of industrial structures, and thus, until the late 1960, buildings that dated back to post-1840 were listed if and only if they were very special. After the acceptance of industrial buildings as cultural, technological and architectural heritage buildings, structures and landscapes, which dated back to the industrial revolution era, also began to be listed after the mid-1970s. Summerson (1949) elaborated the main criteria for listing cultural and historical heritages during the 1940s as follows:

1. Work of art- the products of distinct and creative minds
2. Architectural curiosities and freaks
3. Buildings which are part of a chain of architectural development, that would be broken if they were lost
4. Outstanding compositions of fragmentary beauties welded together by time and good fortune
5. Examples of technological developments
6. Examples of a lost way of life having sociological aspects

[283] Palmer, M. and Neaverson, P. (1998): 147

7. Buildings associated with great people or events[284]

Within these general guidelines, buildings are statutorily listed as Grade I, Grade II or Grade III. If the cultural heritage is outstanding and excellent in its cultural and historical value, then it is listed as Grade I. Grade II buildings, on the other hand, include those which are not quite so outstanding but still excellent. In 1975, there were about 40 post-1914 listed buildings, some of which are examples of the modern movement.[285] Dobby (1978) states that many of the Grade II buildings are listed because they possess what is officially referred to as 'group value', i.e. they provide pleasing compositions and townscapes or may act as appropriate settings for finer buildings. [286]

Apart from a building becoming listed as Grade I, II or III, it can also be '*spot listed*'[287] by the Department of Environment (DoE), which is responsible for listing issues in England. Dobby (1978) states that: "the effect of this is to give the building immediate protection as if it were listed for a period of six months, during which the Secretary of State may include it in the statutory list, by confirming the building preservation notice (BPN). If there is no such confirmation the building loses its protection and compensation may be payable, although the local planning authority (LPA) may later, but not immediately, serve another BPN on the owner".[288] However, the *spot listing* procedure is not always beneficial. According to Pickard (1996), the spot listing procedure is sometimes thought to be too slow to protect buildings of special interest.[289]

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[284] These points are first paraphrased from the internal instructions given to investigators in 1946 and elaborated by Summerson in 1949 (Summerson, J. (1949), "**Heavenly Mansions**", Cresset, pp. 219, Cited in Dobby, A. (1978): 33-34)
[285] Dobby, A. (1978): 34
[286] Dobby, A. (1978): 34
[287] Apart from listings arising out of a general survey or re-survey of a particular period, buildings may be listed by a procedure known as spot listing. The system of spot listing is invariably used to give consideration to the merit of listing buildings which may have special interest or are under threat from redevelopment proposals (Pickard, R. D. (1996), "**Conservation in the Built Environment**", Longman, Edinburgh, pp. 27-28).
[288] Dobby, A. (1978): 34
[289] For instance, the Art Deco Firestone factory, which was demolished on a Bank Holiday before the mechanism of the spot listing procedure could be brought into action (Pickard, R. D. (1996): 28)

On the other hand, when the conservation of the industrial heritage became the focus of governments, a new listing criteria was produced by the Board of Preservation authority of England in order to list industrial structures. In this context, in its 1974 report, the Ancient Monuments Board for England identified criteria for selecting industrial monuments as follows:

> Firstly there are those sites associated with an 'historic first', by virtue either of their own construction as buildings, or the process which went on within them, or both. Often these remains date from that period during the 18th and 19th centuries when the technological, economic and social conditions in England were unique in the world.
>
> Sites selected against the second criterion are those, which are more generally illustrative of the technology of the period of industrialization and particularly in those industries where Britain was in the van of invention and development. There is no terminal date precluding sites from consideration.[290]

Following this first identification, new criteria for listing industrial buildings were established through time with site surveys. The new criteria now recognize industrial heritages' informational and associative values as well as their aesthetic appeal. As stated by Palmer and Neaverson (1998):

> The criteria include the degree of completeness of a site, which enables the context of buildings to be considered; the extent to which evidence exists for evolutionary change; and buildings which signal key stages in the development of forms of industrial architecture.[291]

Sherban Cantacusino, in this context, recommended that when selecting industrial sites for conservation, it is necessary to evaluate their styles, common characteristics,

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[290] Ancient Monuments Board for England, "**Twenty-first Annual Report 1974**", HMSO, 1975, Appendix 3, paragraphs 2 and 3 (Cited in Dobby, A. (1978): 43)
[291] Palmer, M. and Neaverson, P. (1998): 147

construction period and building characteristics, whether they are scarce, their relationship with the context, and their bond with art and history.[292]

Alfrey and Putnam (1992), on the other hand, stress another important issue. They suggest that: "*While criteria for selecting buildings and sites for protection are clearly defined, criteria for selecting areas are much poorly developed*".[293] Furthermore, they state that the "*designation of Conservation Areas is a local responsibility and there is no real framework to ensure adequacy either of designation or of management. (…) There is often a poor commitment to the management of Conservation Areas*".[294]

English Heritage manages all the scheduling and listing of the industrial heritage in England. Sites and buildings are subject to rigorous scrutiny before being accepted for protection. A national context of decision-making emphasizes certain aspects at the expense of others, but aspire to comparability and comprehensibility.[295] Although there is a legal listing criteria for selecting industrial heritage buildings, structures and landscapes, when selecting the industrial heritages for listing, the statutory bodies, unfortunately, consider only industrial buildings of national significance. Hence, as implied by Palmer and Neaverson (1998) local initiatives should ensure the identification and protection of a wider sample of industrial buildings.[296]

In many western post-industrial countries local planning authorities recommend buildings to English Heritage for listing industrial structures and sites and are also responsible for the development control process through which applications to alter or demolish listed buildings are first made. The documentation, on the other hand, is created by not only the preservation body of the state mechanism, or by universities but, as in the USA, by special federal or private institutions. In this context, there are two crucial federal institutions in the USA, which assist in the documentation of the

[292] Cantacuzino, S. (1989), "**Re-Architecture: Old Buildings New Uses**", Abbeville Pr (Cited in Ökem, S. (2000), "Çelik Altarlı Tapınaklar", Mimarlık Dergisi, No. 292, pp.16)
[293] Alfrey, J and Putnam, T. (1992): 144
[294] Alfrey, J and Putnam, T. (1992): 144
[295] Alfrey, J. and Putnam, T. (1992): 143
[296] Palmer, M. and Neaverson, P. (1998): 147-148

industrial heritage in the country. These institutions are the Historic American Building Survey (HABS) and the Historic American Engineering Record (HAER). These two institutions gather together different corporations such as The Institution of Chemical Engineers, the National Park Services, the Chamber of Architects, the Union of American Architects, and the Institution of Petrol Engineers, as well as unemployed architects, to organize precise engineering works, structures, tools and industrial icons in a public archive.[297]

Once the industrial buildings, structures or landscapes have been listed or scheduled, the next step is to initiate the conservation process. Conservation involves not only the preservation and re-functioning of the industrial monuments, but also specific acts of demolition. In fact, the management of historic industrial landscapes is fraught with problems. Funding conservation actions, which involve preservation, demolition, site clearance and re-functioning actions, and problems related to the design and planning process, are the main issues that must be resolved for managing a conservation project.

5.2.2. Planning, Process and Urban Design as a Tool for Conserving Industrial Sites and Constituting a Cultural Awareness within the Public Sphere

Using the tools and techniques of planning and urban design is probably the most indispensable way to conserve the industrial archaeological heritage. While a well prepared plan may start a conservation process within an abandoned industrial landscape, and thus may change the appearance of a neighborhood, district, or even of a city, a badly prepared plan can lead to drastic and irreversible drawbacks in terms of the conservation and sustainability of the industrial heritage. Therefore, defining the context, the objectives and expectancies, funding and management mechanisms, the actors to be involved in this process along with their responsibilities and tasks, and most importantly, defining each of these aspects in a process scheme before starting conservation actions, will help prevent unexpected drawbacks during an industrial heritage conservation project. Furthermore, evaluating these issues in a

[297] "Palmer, M. and Neaverson, P. (1998): 8-9; "**İki ABD Kurumu: HABS ve HAER**", Arredamento Mimarlık, Eylül 2001, pp.101

flexible manner in the early stages of the planning process may help make the implementation tasks less costly, and more successful and timely.

The first step to accomplish for achieving a successful conservation project is to create a conservation plan. This plan can be comprised of the entire problem area and its interrelated network systems within a city, or of only one of these areas. Defining a pilot project, in this sense, may be necessary in the case of limited budgets assigned to the project. Moreover, approaching the issue from an urban design context is always beneficial. If a comprehensive analysis is done during the conservation process by examining various relation networks, including the spatial, social, political and economic aspects of design, one may achieve better results. Thus, in order to constitute a conservation plan, the urban dynamics, the spatial, legal, economic and social context, and the technical, architectural, historical and industrial survey and documentation of the problem area should first be completed. Examining these factors and identifying the kind and scope of resources being dealt with within the contextual area is important not only for clarifying the objectives and for the future sustainability of the heritage, but also for stating the conservation policies. Thus, the problem of whether the industrial buildings and structures will be demolished, preserved, presented elsewhere or completely conserved within their context, and related to these, the problem of how to perform these tasks must be identified by the conservation policies.

Clarifying the objectives according to an established vision, in this sense, constitutes the second step of a conservation plan. According to Alfred and Putnam:

> Statements of objectives should link resources, work and potential uses in a way general enough to make it possible to ask whether the same objective could be achieved differently; or if the incipient group should broaden or narrow its focus. Making objectives clear helps determine appropriate organizational forms and criteria for a range of future activities.[298]

[298] Alfrey, J. and Putnam, T. (1992): 260-261

In order to clarify the objectives, the basic questions, such as who will be involved in performing the tasks projected, for which reasons and for whose benefit the project is being carried out, should also be considered. In this context, the owner of the industrial archaeological landscape may often cause problems in terms of the conservation of the industrial heritage. This is because, in some cases, the owners of the industrial properties are private enterprises, and, by and large, do not wish to preserve the buildings and structures within the site. Instead of taking perceived economic risks, private landowners generally prefer to demolish the buildings and structures, and building profit-making investments on the land. Therefore, beginning regeneration actions within the industrial site becomes very difficult. In some instances, on the other hand, private landowners agree to the conservation of the buildings and structures, but due to economic purposes wish to re-function industrial heritages for private utilizations. In this sense, the role of the state is increased. They must find ways to persuade the private landowners, and allocate more funds from the state budget or, as a more creative solution, may investigate new funding resources for public benefit. Furthermore, as well as considering the enjoyment of the society and the salvation of the industrial heritage, benefits to the landowners may also be considered during the conservation process. For these reasons, the participation of the landowners in the planning process seems to be a requirement.

While clarifying the objectives, specifying whether the project will be oriented for public or private usage may help generate views of the future state of the industrial site and/or monuments, and thus assist in defining the objectives.

At the beginning of a conservation project, generally, different actors put forward many different visions and objectives. The diversity of views, however, should not be perceived negatively, as it has many positive consequences. An environment in which the ideas of different actors are discussed not only helps the understanding of the consumption dynamics within the society, but also aids the development of a cultural awareness of the industrial archaeology discipline within the public sphere. Furthermore, this enhances the consumption of the re-functioned industrial

landscape, and thus sustains the permanence of the industrial heritage. For this reason, encouraging public involvement in the planning and design processes, and preparing discussion platforms that involve many different participants, including professionals, public institutions and civic authorities, is an essential task in evaluating an optimum re-use decision for abandoned industrial heritages. This process would also enrich ideas about the future state of the industrial archaeological landscapes or buildings, and extend awareness of industrial archaeology within the society.

During the clarification of objectives and policies, there are two important factors to avoid. One is the consideration merely of land values for the conservation of the industrial heritage, without considering the other values of the site, such as its cultural, historical, architectural or industrial values. Although land values give approximate opinions about the present state of the problem area, and have an important role in the evaluation of the site, when considered independently, they result in undesired effects in terms of the sustainability of the identity of the industrial heritage.

The second threat is the visions and desires of politicians. In most cases, especially in underdeveloped countries, land speculations have an important effect on the opinions of politicians, as well as on planners. Furthermore, if politicians have a monopoly in planning decisions, as is the case in the Ankara scenario, the situation becomes worse. For this reason, in order to surpass these obstacles, implementation of participation models in the planning and design process seems to be a requirement for the salvation of an industrial heritage.

After clarifying the objectives and constituting the legal context, based on these criteria, the next step is to derive a conclusion about the future state of the site. The conduct of a feasibility and best-use analysis often helps in reaching a conclusion. The socio-spatial and economic position of the problem area with respect to its urban environment, social and cultural dynamics, consumption patterns, and the funding

and management models for each possible conservation alternative should be examined, in order to achieve a successful conservation solution.

Probably one of the most important aspects of the conservation plan is the process design side, which is an essential part of the planning process. The roles of the different participants in the conservation process and deadlines and initial budgets that are set for an initial phase of work should considered before starting a conservation project. These decisions are important to prevent haphazard during the implementation of the process.[299] However, as Alfrey and Putnam (1992) emphasized:

> (...) often, planning is done one stage at a time, because certain problems have so filled the horizon that it is difficult to look further.[300]

Indeed, in most situations, the restoration of an industrial monument may take so many years to complete due to its size, that the funding mechanisms may run over budget during this time interval. Therefore, during the conservation process, new financial resources may need to be found. Although achieving a proper support structure is important before starting conservation actions, since it is not easy to change the mechanism in midstream, the problem does not always arise from the financial model chosen. The basic problem, in this sense, often arises from the structure of the plan, which may have been comprehensive at the start, but was not open to changes resulting from outer dynamics.

In order to surpass these hindrances, the conservation plan should have a mechanism that enables it to adapt to changes in the urban dynamics as well as to changes within the economic, legal, social and spatial environment. Therefore, independence and flexibility in planning is much appreciated by managers.[301] Thus, it is recommended that the tools and techniques of strategic planning, in which long-term decisions are made in a flexible manner, should be used within conservation plans, so that in the

[299] Alfrey, J. and Putnam, T. (1992): 276
[300] Alfrey, J. and Putnam, T. (1992): 276
[301] Alfrey, J. and Putnam, T. (1992): 265

event of an instantaneous change, the plan may re-structure itself to cope with undesired situations.

5.2.3. Funding Mechanisms

Securing funding has generally been one of the most painful processes during conservation actions for historical industrial landscapes. Several problems must be coped with during funding projects, in order to reach to a feasible solution. These problems are related not only to the funding of conservation projects, which comprise funding for preservation, demolition, and site clearance processes, but to also the funding of re-functioning and management actions. Therefore, financing the conservation of the cultural heritage is probably one of the most crucial tasks, which must be properly achieved in order to sustain the conservation effort.

Financing the conservation of industrial buildings, structures and landscapes has always become a crucial problem for countries in which the financial and legal background is inadequate. Even in developed countries such as in France, England and Italy, finance problems may still be encountered. Fortunately, most of these problems may be eliminated through rationalistic, long term and strategic tools and techniques. In the case of economically undeveloped countries, on the other hand, due to the lack of proposed solutions for the funding of the cultural heritage, or their inadequacy, such buildings continue to deteriorate.

Since the conservation of an industrial building is strictly different from the conservation of other types of buildings, the funding mechanisms used for the conservation of the industrial heritage should also be significant and distinctive, when compared with other forms of cultural heritage. Therefore, when the conservation of industrial objects is the case, due to their inherent characteristics, more diversified resources should be sought and a variety of participants, tools and techniques involved in the funding mechanism.

In general, there are a vast number of reasons behind funding problems in the conservation of the industrial heritage. Some of the examples that will be considered

in this chapter are the inadequacy of grants and the number of professional financial credit institutions involved in the process, as well as the lack of a reliable atmosphere for financial action, such as the inadequate legal structure of the companies and conservation authorities.

Among the problems considered above, an inadequacy of funding resources for the conservation of the industrial heritage is, probably, the leading problem in economically underdeveloped and developing countries. In many instances, there are elements of governmental support for the creation of inventories and for the conservation of monuments, including those of industry. However, because the restoration cost of an industrial monument is much greater than constructing a new building, implementation of the public resources alone becomes insufficient for providing the conservation costs. Furthermore, since public expenditure obeys market mechanisms, which accepts that resources are allocated to the sectors that brings higher profits, expenditure on research, conservation and the upkeep of industrial heritage projects is consequently at a disadvantage when compared with the expenditures spent on other cultural pursuits and sectors.[302] In this sense, as Centorrino states, *it is not only more difficult to find public money for these specific activities but also to programme the expenditures involved.*[303] In such cases, where financial resources for generating conservation actions are weak, the authorities very frequently turn down preservation projects for financial reasons, or abandon these monuments altogether. In developed countries, this problem has been resolved not only through the integration of new public resources, but through the integration of private initiatives as well.

In this context, in developed countries, the limited financial aid from the government is attempted to be subverted by rationalistic and strategic tools and techniques. In most developed countries, such as the Netherlands and Italy, for example, there is a general trend that subvention, which is scarce in quantity and which is usually

[302] Dobby, A. (1978): 22; Palmer, M. and Neaverson, P. (1998): 142
[303] Centorrino, M. (1988), "**Economic Effects of a Renovation Programme**", pp. 24, in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13

obtained from ministries and from the annual profits of credit institutions, is replaced by loans with lower interest rates. This transformation not only encourages conservation, but also prevents the outer expenditures of the state that is allocated in the form of subventions, and which may be spent on other activities instead. In the Netherlands, there is a further system for the encouragement of conservation actions. According to this system, the annual profits gained from interest rates return to a system called the "revolving fund" and in the form of subventions to enterprises (Fig. 70). [304]

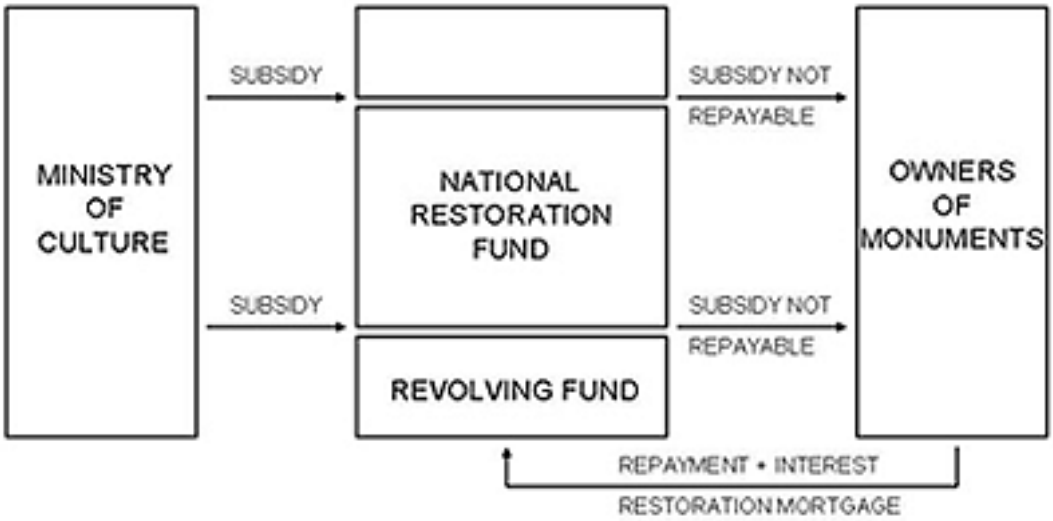

Fig. 70: A rationalistic tool of creating funds for the conservation of the industrial archaeological heritages is achieved by a process that involves returning the profits gained from the interest rates to a system called the "revolving fund", which will later be re-allocated to new conservation projects. Source: Welgraven, A. (1988): 38, in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13

Developments in the grant system, however, are not the only way of cutting state expenditures. The 'privatization' model is another solution proposed for the problem. However, as experience shows, if the legal structure and management plan for conservation is inappropriate, there are greater disadvantages to this model. The best example of this issue is the London Docklands Regeneration Project. This project is the greatest urban regeneration process conducted in the world to this day, and was

[304] Welgraven, A. (1988), "**Subsidisation, Not the Only Way to Attain Conservation**", pp. 30-46, in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13

handled using only private initiatives. Unfortunately, since the private sector considered only the maximization of its profits, speculative aims were supported by the project. Many industrial monuments were demolished in order to make more profit yielding constructions, or they were re-functioned considering solely speculative aims.[305] The project, in this sense, clearly demonstrates what can happen if the legal background is not appropriate for conservation issues, and if the state gives full backing to private enterprises without an appropriate legal background.

The same inferences can an also be made for the "Build-Yield-Transfer" (BYT) model, which is another form of preventing public expenditure, and which has been widely preferred in developed countries. BYT is a hybrid model, in which a legal procedure is signed with a private enterprise for the building, yielding and operating of the site or monument to be conserved. An advantage of the BYT model to privatization actions is that in this model a property leasing operation takes place. According to Giovanni Ferraro, through property leasing or, more precisely, through leaseback contracts, a property owner may turn a building that is unproductive and uneconomic in condition into a productive asset.[306] In this way, public authorities, without spending from their own budgets, lease the building to another company, which is responsible for the monument. Thus, the "renter" company, in compensation for the restoration activities, has the right to manage the re-functioned monument for a designated time-period, which is specified in the contract signed between the renter and the owner of the asset. However, similar to the drawbacks of the privatization model, the use of a BYT model can also result in unsuccessful solutions, since generating a value from a building or industrial site is the main aim of the company that will preserve, re-function and operate it. This is due to the fact that for the private company, which undertakes the responsibility of implementing the project, cash flow is dominant and the underlying assumption is that the development is financed from revenue earned by the project, which is surplus to its

[305] Basatemür, B. (2001), "**Kıyı Şeridi Docklands**", XXI Dergisi, Mart-Nisan 2001, Sayı 7, pp. 146-161; Church A. (1998), "**A Shining Example, Missed Opportunity or a Redevelopment Disaster**", http://www.latymer-upper.org/geog/sixth/docklands.htm, November 11, 2002

[306] Ferraro G. (1988), "**Experience of the Savings Bank of the Sicilian Provinces**", pp. 6-7, in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13

immediate operating requirements or from borrowings in anticipation of such profits.[307] Thus, the company will try to maximize its profits by increasing the consumption value of the spaces which will be created, through capitalistic solutions, including, for instance the decision to choose cheap construction materials during the conservation project, instead of deciding to opt for profit making re-uses adapted to the buildings. Therefore, in order to conserve the identity and soul of the industrial heritage, means and ends should not be confused if the project will be funded and managed through this model. Fortunately, public landowners may eliminate this problem by shaping BYT agreements according to their public motives. This would enhance the democracy of the industrial landscapes in public oriented re-uses.

Although the privatization of industrial landscapes may have some significant drawbacks in terms of sustaining heritage values, privatization not only protects state funds, but also saves government time and aids completion of the conservation process in a limited time-period. Furthermore, in most cases, due to economic reasons, privatization becomes necessary in terms of public benefits. Even though privately financed work is seen as a prerequisite to financing the conservation of the industrial heritage, there are various obstacles that deter private enterprises from involvement in the mechanism. The inadequacy of credit institutions and their funds, high tax arrangements imposed on real estate by the state, and the deterioration of the environment that threatens the profit maximization aims of private enterprises, are the other specific problems encountered in the financial mechanism.

In this context, as discussed above, since public funds in most cases cover only a small portion of conservation costs, private credit institutions are seen as a crucial aid in the conservation of the industrial heritage throughout the world. However, whether private credit institutions are banks, or non- or small-profit making authorities, experiences in undeveloped or developing countries shows that their general financial mechanisms are inappropriate for conservation issues. In this context, Mr. Ab Welgraven, in considering the disorganized structure of financial mechanisms, states the problems of enterprises as follows:

[307] Alfrey, J. and Putnam, T. (1992): 265

> Once the subsidy had been granted, after answering endless questions, in many cases he had to wait four years before the money was transferred into his account and he could actually start restoring. This is due to the fact that budgets for the coming years have been allocated already. Meanwhile his house continued to go to ruin and restoration costs continued to rise. Anyway, he hardly had any opportunity to start restoring, as he needed all his time to search for a bank that was willing to provide a supplemental mortgage, as the apportioned subsidy would not cover restoration costs completely.[308]

Furthermore, in many of these countries it is observed that, while allocated a portion of the budget, industrial buildings are generally not considered as an alternative when compared with other cultural, architectural and historical heritage buildings.

Thus, in order to surpass these limitations, in developed countries, autonomously and flexibly working heritage conservation credit institutions are founded. These institutions not only work in close co-operation with other public and private actors, but also provide a variety of services in addition to their financial services, such as cultural management services. This multi-functional characteristic of such organizations is seen as an essential tool for the achievement of effectively and efficiently managed conservation projects. A good example in this regard is the San Paolo Institute in Italy. Giorgio Merighi defines the institution and the rationale of the cultural management service as follows:

> The San Paolo Institute is a credit institution in public law; its annual profits are largely ploughed back into the business, and to a lesser but nonetheless important extent, invested in social, health, educational and cultural projects.

[308] Welgraven, A. (1988): 31, in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 31

> The statutory nature of the projects precludes any short-term returns in terms of improving the institute's image, and means that no real sponsorship contract can be entered into, as usually happens when companies undertake cultural projects.
>
> This is why little by little a kind of "cultural management" service has taken shape. This actively involves the institute not only in financing, but also in choosing, planning and directing projects, bringing in all its administrative, technical and public relations resources. The institute also maintains constant communication with its opposite members in the public services responsible at institutional level for conserving the cultural heritage. These measures were also necessary because of the dilapidated state of the Italian artistic and historic heritage, and the chronic lack of finance.[309]

Another commendable example is the National Restoration Fund founded in the Netherlands. This example not only shows how partly state owned companies, combining public and private investment, could produce remarkable results, but also shows how multi-functional organizations can efficiently achieve conservation tasks. Thus, the Fund, in order to shorten the procedures that must be followed by an enterprise whose aim is to conserve a heritage, has put itself completely in charge of all tasks in connection with the financial aspects of restoration (Fig. 71 and Fig. 72). Ab Welgraven explains the characteristics of the Fund as follows:[310]

Once the government has promised him (the enterpriser) a subsidy and once the community has contacted him and our fund, the one and only organization the owner has to do with is our Restoration Fund. Total financing and support, the package deal, includes:

- restoration mortgage;

[309] Merighi, G. (1988), "**Contribution by the Instituto Bancario San Paolo di Torino Towards Architectural Heritage Restoration**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 27
[310] Welgraven, A. (1988): 34-35

- mortgage for the remaining part;
- (possibly) first mortgage;
- payment of subsidies;
- prefinancing of subsidies.

These are the characteristics of this “restoration” financing:

- complete solution for financing need;
- one single financier both during and after the restoration;
- low financing costs;
- low rate of interest as a result of guarantee construction;
- maximum security.

Maximum security is the result of:

- Level of restoration credit and of mortgage for the remaining sum have been determined in advance;
- no more money ever has to be borrowed than is needed at any moment;
- rate of interest is fixed for a long period (10 years at least);
- objective verification of financial feasibility (financial burden – income/exploitation)

A low rate of interest can be offered because:

- subsidy promises are solid (pledge);
- community guarantees mortgage for the remaining sum;
- guarantee fund to set off losses (fed by interest-surcharge);
- maximum security for those supplying money.

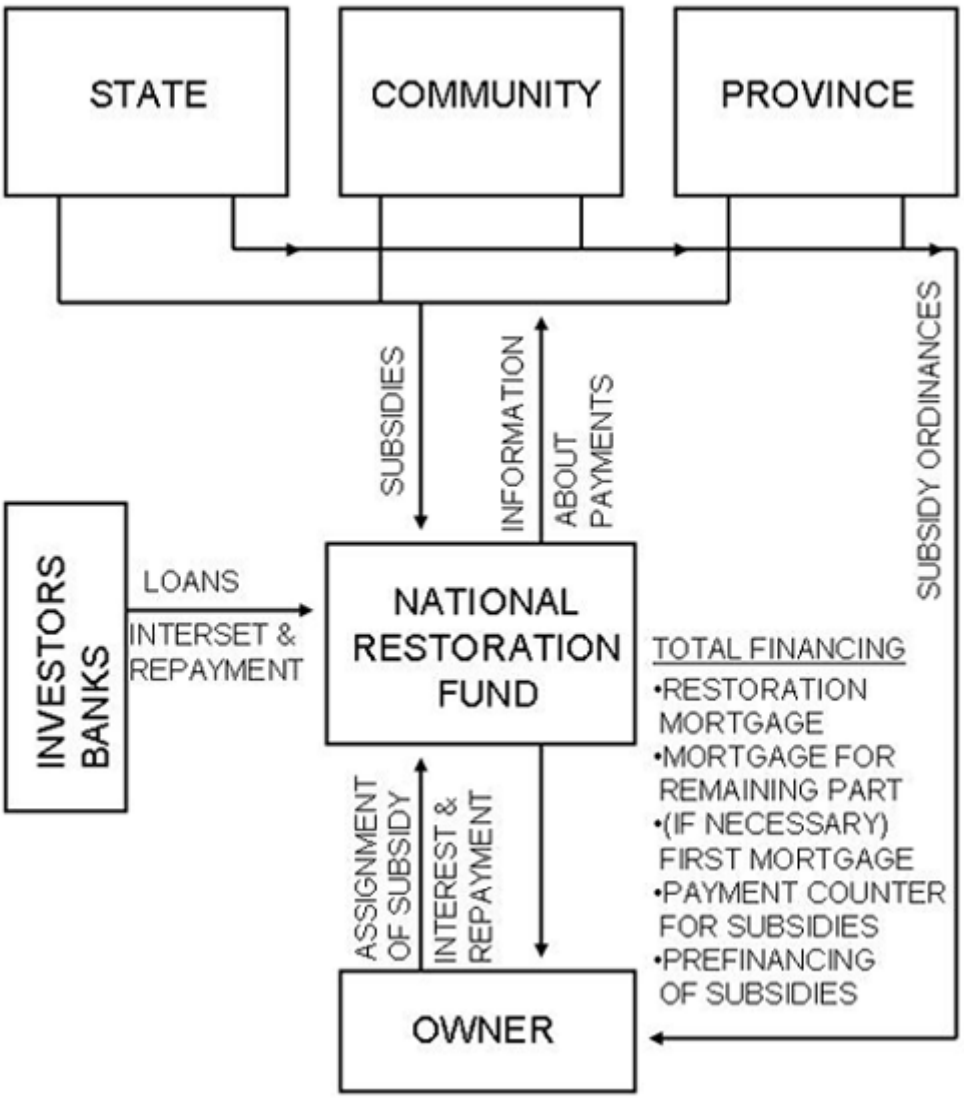

Fig. 71: Participants in the funding process in the present situation

Source: Welgraven, A. (1988): 46

In developed countries, when the allocation of the budget to an appropriate industrial heritage is the case, in order to justify the resource allocation process, the funding institutions follow a specified series of actions. Although these actions vary from country to country, the general attitudes towards the issue are the same. In this context, the first action carried out by the credit institutions is to determine whether the industrial object(s) is in the list of the government. This indicates whether the objects are subject to the historical heritage laws of the respective canton, and whether public subsidies can be expected. The second task that must be achieved is to choose the most appropriate project to be financed by the institution. In order to

achieve this, the institution first considers the economic feasibility of each project. According to Nathaniel Lichfield, a value must be designated for the project after a decision process that focuses on the future condition of the monuments.[311] After deciding whether to preserve or re-function each listed building, which also involves designating the new usage of the heritage if the object is decided to be re-functioned, a cost/benefit analysis is required for selecting the most economically feasible alternative. The cost/benefit analysis conducted during this process, however, it is strictly different when conservation is the case. The analysis carried out must not only consider economic purposes as the only entity, but social and cultural constraints as well.

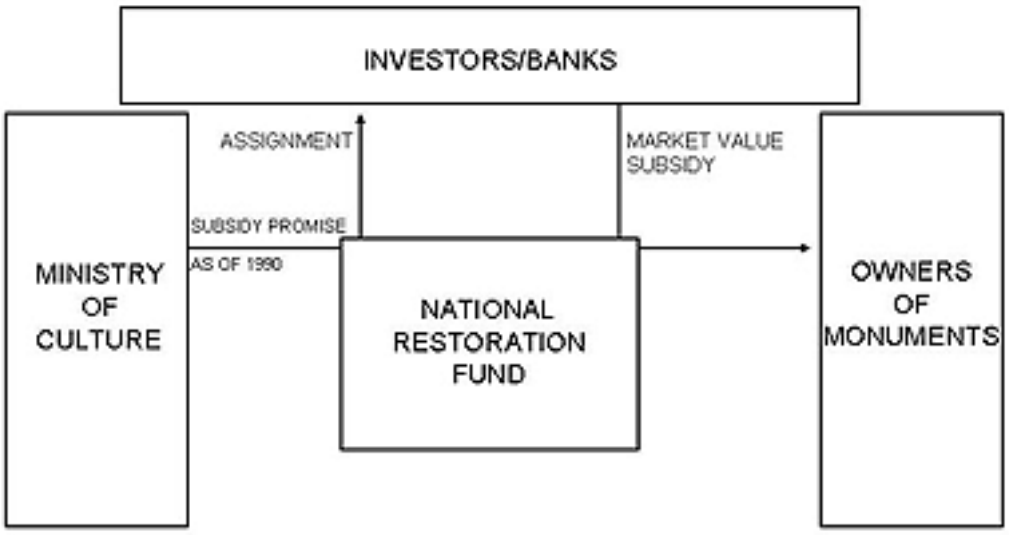

Fig. 72: A typical funding mechanism to obtain subsidies for the conservation of the cultural heritage
Source: Welgraven, A. (1988): 39

Another method that is used to assign value to industrial monuments is to determine whether there is any other support from the canton or federal government. Verena Fulleman, in this context, explains how the autonomously working organ of the Union Bank of Switzerland, namely the Jubilee Foundation, approaches such an issue:

[311] Lichfield, N. (1987), "**Achieving Value for Money in Conservation of the Cultural Built Heritage**", Paris: ICOMOS Information, in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 14

> If it is clear that cantonal or federal support can be expected, it can be assumed that the historical site is worth preserving on the basis of its historical, artistic and scientific significance. If no support is forthcoming, an investigation is made to see why this site has not been placed under protection according to the local law. By contacting the office in charge of preserving historical monuments, the Secretariat determines whether the local authorities have decided the monument is not worth maintaining or whether there are financial problems involved.[312]

After designating which industrial object(s) is to be conserved, the financial institution(s) according to its strengths, allocates a proportion from its budget. This proportion generally depends on the site's importance, the financial strength of the canton and other sources of financing available.

Finally, another problem that dissuades enterprises is the high taxes imposed on industrial real estate. The problem is that in order for private initiative and/or sponsorship to effectively work together with the government, it is essential that tax regulations for cultural assets should be deliberately favorable to work done by private enterprises. Jose Lois Alvarez, in the Messina colloquy states the irrationality of the high taxes imposed on property as follows:

> There is a tendency to think that if it cuts its tax income from cultural assets, the state will become poorer. Legislation generally favorable to the cultural heritage has generally failed because of short-sightedness on the part of government economic departments, which have quite incorrectly believed that the state coffers would be impoverished by the exemptions or rate reductions involved in such a tax system. Not only is

[312] Fulleman, V. (1987), "**Keeping the National Heritage Alive: Helping to Restore Buildings as a Major Activity of the UBS Jubilee Foundation**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp.87

this hypothesis untrue, but in fact the cultural heritage and even the state's assets are enriched.[313]

Thus, it is obvious that, due to the inherent character of these sites, it is essential to apply a special taxation system for heritage conservation, use and development. According to Alvarez (1988), this would be not a privilege, but a logical consequence of the importance of these assets, and the intention of the state and the society to protect the heritage.

In order to prevent such obstacles in the tax legislation system, the Amsterdam Declaration proposed Recommendation 880 (1979), which declared that "increased financial assistance from public sources should be made available to donors of funds for architectural conservation, by means of tax relief". States, in this sense, have a crucial responsibility in the rearrangement of financial legislation, tax legislation, tax deductions, tax incentives and subsidies.

5.2.4. Management Models

Listing or scheduling the industrial heritage is not sufficient for maintaining their sustainability. An effective and long-term management model is also needed to reach this goal. The success of management would trigger the development of awareness to the issue, a sense of belonging to the environment and of being part of a collective identity, creativity of the citizens, and a better urban quality by attracting thousands or millions of people to these lands. Presentation of the industrial heritage, in this context, is an important aspect of the industrial heritage management. Furthermore, it is an important step for the sustainability of the industrial heritage.

According to McIntosh's research, which was partly carried out at Blists Hill:

[313] Alvarez, J. L. (1987), "**Taxation and Heritage Development**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp.102

> 72.2 per cent of visitors to industrial heritage sites visit for 'learning related reasons', although only 14.6 per cent came specifically for 'child-related reasons'.[314]

She also found that just over half of the visitors surveyed at industrial heritage sites came for 'generalist reasons', for spending their free-times or for 'sight-seeing' purposes, rather than a specific interest in industrial heritage.[315]

The research of McIntosh shows the importance of consumer demands on the management decisions. These researches designate that modern societies generally intend to consume spaces for tourism, leisure and for education purposes.[316] It shows that in the absence of public spaces, societies flow in to these landscapes to proliferate their private/public rituals. However, experiences show that, for sustaining the identity of the industrial landscape by pertaining its operation, in most cases is not always sufficient for achieving this goal. There are many criteria during this process, and a proper management model is only one of these tasks, which must be achieved for the sustainability of the site.

There are many different ways of managing (or presenting) industrial heritage buildings, structures and landscapes. These management types are as follows:

- Preserving the industrial heritage by only as a shell
- Adapting a re-use to the existing monument(s)
- By re-functioning them to a closer re-use with that of the original one (like the conservation of a beer factory to a pub, or a macaroni factory to a spaghetti house)

[314] McIntosh (1997): 76 (Cited in Blockley, M. (1999), "Preservation, Restoration and Presentation of the Industrial Heritage: A Case Study of the Ironbridge Gorge", in Chitty, G. and Baker, D. (1999), "Managing Historic Sites and Buildings", Routledge, London, pp. 149)
[315] McIntosh (1997): 11 (Cited in Blockley, M. (1999): 149)
[316] Baker, D. (1999) used a special term as 'edutainment', which tried to emphasize the consumption side of education as a way of spending free-times (Baker, D. (1999), "**Context for Collaboration and Conflict**", in Chitty, G. and Baker, D. (1999), "Managing Historic Sites and Buildings", Routledge, London, pp. 20)

- By re-functioning them to a totally an un-related use (like the conservation of a gar station to a public market)
- Transferring them to other places such as to industrial or national parks, or to science, rural, company or industrial museums

Preserving the industrial buildings by only as a shell is one way of conserving an industrial heritage. However, this method is often used a method in the cases where the building cannot properly be re-used due to its statistical problems. Although, the buildings express their architectural and technological values by presenting their outer faces to the society, in terms of expressing industrial archaeological relations on the other hand, this method as a way of preservation becomes unsuccessful. They only present themselves like a sculpture, but are not added into the dynamics of urban life. Therefore, as much of the literature suggests, part of their industrial archaeological values inhibited in their walls, machines, etc., and their social and public roles are neglected by this way of conservation. Furthermore, since funding the restoration and maintenance costs of these buildings are very high due to their sizes, and since there will not be any returns in terms of capital to the enterpriser, in most situations neither the state, which has a very limited budget, nor the private enterprise wants to take the responsibility of the conservation project. In other words, although the heritage is preserved by this way as symbolic object and by demonstrating only its architectural characteristics, industrial archaeological losses, and funding the conservation costs of these buildings are the main problems faced during the preservation process.

The most preferred way of conserving an industrial heritage is to preserve them *in situ,* which means that preserving the objects in their local context. The rationale of conserving industrial heritage *in situ* is that, it is an important means of retaining and presenting the historic processes and skills for educational purposes, with all the smells, noises and visual vocabulary of the industrial period, and the working and living conditions of an age. Therefore, it is an important way of preserving the identity of the industrial structures. In this way of conservation, the monument(s) could either be used for merely industrial museum purposes, or by completely re-

used for other purposes. This new re-use, in this context, could not only be a use, which has a close functional relation with the original use of the building, but could be a use, which is totally absurd to the original use in terms of establishing relations (Fig. 73). Through the experiences achieved in post-industrial countries, it is observed that both of these methods give successful solutions to the owners of the buildings or landscapes. Especially, it is a known fact that re-use decisions, which do not consider the original use of the industrial building, are often used as a way of maximizing profits by the enterprisers. By this way of re-functioning, it is generally believed that sustaining the industrial heritages would be succeeded. However, it is also a known fact that if the re-function of the building is not given appropriately, beside its advantage of income generating value, the sustainability of the industrial heritage could not be maintained. The main reason of this is that if the industrial buildings or structures are considered as empty shells, deprived from their special and distinct characters, and from their memories, then, the identity of the industrial heritage would be lost. In this context, much of the literature suggests that, for sustaining the identity of the industrial buildings, new utilizations, having close functional relationships with the original use, should be decided. By this way the soul of the building and the romance within it not only preserved, but due to its educational reasons, a social transformation will be triggered within the society. However, according to Blockley (1999), sites selected for conservation and preservation *in situ* on the grounds of historical significance often run into financial difficulties, due to a dependence on visitor income.[317] He emphasized that, competition for leisure time is intense, and unless industrial heritage sites are imaginatively presented and their significance revealed in a way that engages with a wide range of varied audiences, their long term survival is threatened, and the considerable costs of conservation and maintenance cannot be justified. Furthermore, he added that, industrial heritage museums have been criticized for their focus on nostalgia and failure to engage with contemporary economic realities.[318] Thus, according to Blockey (1999), there has been a refocusing of the interpretative themes

[317] Blockley, M. (1999): 151
[318] Hewison 1987; West, 1988 (Cited in Blockley, M. (1999): 150)

at various industrial heritage sites and museums over the last few years to look at social reform and the social and economic impacts of industrialization.[319]

Fig. 73: The old electric plant of the Thames, London. The building was constructed in 1847, and abandoned in 1981. It is now part of the Tate Modern art gallery. During the re-use decision, the industrial heritage was considered only as a shell for profit-making purposes. However, this new use was decided in a way that does not omit the heritage value of the building. According to the Tate Report 2002-04, in the year 2003-04, 6.2 million people visited the Tate Modern in London (Tate Report 2002-04, 2004).
Source: (on the left) Glancey, J. (1999), "**20th Century Architecture**", Carlton, London, pp. 277; (on the right) "**Projects: Londra'da Bir İsviçreli**", M Domus, December-January 2000, pp. 101

In addition to economic reasons, in some special cases, it is generally recommended to transfer the industrial heritage into another location. The basic reason of this specialty is that, if the surrounding environment of the industrial building or structure is having rigid contrasts with itself, then the associative value may be lost. Palmer and Neaverson suggests that:

[319] Blockley, M. (1999): 150

> If the development pressures are too great for the retention of an important historical building on a site, the alternatives are preservation by record before demolition or the careful dismantling and rebuilding on a new site or in a suitable museum context.[320]

However, the rebuilding option may be suitable only for small structures because of the logistical problems and, of course, the expense.[321] There are many examples of open-air museums built in this way, in which many different industrial buildings are collected together, such as in Sweden, the USA and Britain. However, Palmer and Neaverson (1998) state that, although their informational value may be enhanced by their preservation within a museum context, their associative value is lost.[322] Furthermore, there are some arguments that industrial museums cannot maintain their industrial archaeological relations with their entire context if they are transferred to another location. Besides, their technological values will be entirely lost if the building is re-constructed in another place. Moreover, they will present a mix-use package to their customers to enhance consumption within the site, in order to gain economic profits. Thus, their leisure and consumer attraction value may be high, but the educative value of these 'artificial' sites may not be effective when they are compared with industrial landscapes where the industrial heritage is conserved *in situ*.

In conclusion, there are many management models, which can be used in regenerating an area. However, none of these models is correct in terms of corresponding to specific spaces and situations. The means and ends of the project become one of the most crucial criteria for selecting the best management model. Furthermore, the context of the industrial buildings, structures and sites, their architectural, industrial, technological, cultural and economic values, which involve the potential attraction and consumption value of these heritages, must be examined to derive successful and sustainable management solutions. An important point,

[320] Palmer, M. and Neaverson, P. (1998): 148
[321] Palmer, M. and Neaverson, P. (1998): 148
[322] Palmer, M. and Neaverson, P. (1998): 148

which must be emphasized here, is that, although the characteristics of the industrial buildings are considered in deciding on an appropriate management model, the importance of the context of the site is usually neglected. However, dereliction or decay, an unfavorable situation in relation to land-use zoning, vulnerability to changes in function or process are typical of the problems faced in the management of industrial heritage, which must be surpassed to maintain the sustainability of such heritages.

Therefore, it seems to be a must to consider management decisions interrelated with the planning, restoration, re-functioning and funding processes of a conservation process. Besides, making flexible but comprehensive strategic and long-term 'management plans', which consider each of these aspects, is what professionals recommend to enterprises in order to achieve a satisfactory and sustainable solution during a conservation project.

CHAPTER 6

6. CONCLUSION

6.1. Clarification of the Regeneration Problem of the Maltepe Gas and Electric Factory Landscape: Obstacles, Threats and Potentials

The foundation story of the Maltepe Gas and Electric Factory coincides with the foundation of the Turkish Republic and the declaration story of Ankara as the capital city. These two factories were the first industrial establishments founded in the Maltepe District, which was declared as the new industrial zone of the new capital. They were constructed as part of the modernization policies of the newly founded government, and to shape the new macro-form development of Ankara.

Today, the Maltepe Gas and Electric Factory is one of the last survived industrial heritages in Ankara, which witnessed the early Republic Period. It bears an important industrial-architectural and historical building stock, vacant and spatial advantages for new utilizations[323]. They are on public property[324], and thus could easily be conserved for public purposes. Furthermore, the landscape is located in a strategic position, near the downtown of Ankara and between the important attraction points of the city. For this reason, it experienced from various public and private transportation systems. Moreover, two important boulevards, connecting the east and west of the city, surround the landscape, making the land the main focus of enterprises.

[323] According to the report of the Chambers of Architects of Ankara, in addition to its building stock, the landscape has a further 23,000 m^2 potential area, which could be used for additional buildings, and 10,000 m^2 potential vacant land, which could be used for recreational purposes (Chamber of Architects, 1990)

[324] Although TEK is a privatized institution, it has been involved in the production of public goods.

After the closure of the Electric Factory in 1983, and finally the closure of the Gas Factory in 1989, the Board of Preservation listed some industrial heritages in 1991. For many intellectual scholars, the landscape was perceived as a tool of downtown regeneration and revitalization. With their huge vacant monumental buildings and potential open spaces, they could be re-functioned for public purposes, and thus could be one of the scarce breathing lands helping the constitution of gatherings in the congested inner city. They could be a potent tool for the constitution of a public realm and proliferation of public and private rituals. However, since that time no conservation and regeneration action has taken place on the landscape. Today, due to the harsh environmental conditions and lack of renovation, much of the industrial heritage has decayed and is continuing to do so.

There are six main factors, which threaten the conservation of the landscape. The first one is the intention of the landowners, EGO and TEK, to demolish the industrial heritage in order to construct a shopping mall complex. Unfortunately, the Greater City Municipality of Ankara also supports this decision, and encourages both of these institutions to fight against the preservation decision of the Board. In the past fifteen years, the Municipality, with its media organs, tried to deceive the indifferent society by claiming that the site has no special features, and a newly constructed prestigious building could increase economic and spatial conditions in the Maltepe District.

The second factor is the preservation decision of the Board. In 1991, the Board of Preservation listed some industrial buildings within the site. However, this decision was full of mistakes and lacking points. The Board did not define the context and degree of preservation for the listed buildings and structures. Furthermore, it listed some industrial buildings within the landscape, which had been already demolished. Moreover, it only listed some aesthetically perceived buildings and structures, independent of their industrial archaeological context. These mistakes of the Board encouraged its opponents for the cancellation of the decision and demolishment of the unlisted heritages. Hence, much of the industrial machines were sold for their

scrap value, and some of the industrial buildings were tarnished in order to adopt them for their new uses.

Thirdly, in Turkey, awareness of the conservation of the industrial heritage is not developed yet. This issue remains as an imported pronunciation. This is partly because, in the Turkish education system, history ends with the start of the Modernization Period. Therefore, modern heritage is a neglected issue in Turkey. Most of the society still sees industrial monuments as ahistoric and ugly objects, and industrial landscapes as urban wastelands or slums left in the core of the cities. They prefer to build more attractive, and leisure and consumption oriented projects instead of conserving these industrial landscapes. Most of the conscious segment of the society, on the other hand, still thinks that only beautiful monuments having an age-value deserves to be protected. According to this group, preserving the rest of the heritage is needless and a costly attempt.

The unawareness to the issue is also reflected on the legal structure of the country. The "industrial archaeology" concept has not entered the legal system of the country yet. Only some aesthetically perceived and old structures are listed for conservation. Besides, the Boards of Preservation is still not able to define which structures should be preserved, which structures should be demolished, and more tragically, they cannot even define in which legal context the listed monuments will be conserved.

The conservation actions undertaken in the case of Istanbul, in this context, clearly represent the problems that arouse from the legal structure. Istanbul was probably the city that was most influenced from the industrial revolution. As a consequence of this rich industrial history of the city, today, the city comprises many industrial archaeological heritage values. Until now, six of those industrial monuments within the city have been successfully conserved, and re-functioned with other purposes. The most disastrous implementations arouse from the insufficient laws within the legal context. Much of the industrial heritages were approached as if they were ordinary historical structures. Consequently, all of the industrial buildings were conserved under the Grade-II status. This legal structure enabled the conservationists

to make arbitrary changes within the internal structure of the industrial buildings.[325] Thus, dismantling the industrial equipments from their contexts and by adding or removing some internal wall to/from the structures annihilated the soul and identity of most of the industrial structures.

Fourthly, deprivation of agencies and mechanisms, which are specialized in industrial heritage conservation and management, threatens the survival and sustainability of the Maltepe Gas and Electric Factory. In Turkey, much of the industrial heritage cannot be conserved due to the lack of planning and funding mechanisms. Furthermore, evaluation methods and techniques for the conservation of the industrial heritage are still not developed in Turkey. Much of the industrial heritages are perceived as shells that are independent from their environment, and waiting to be re-functioned for new uses. More importantly, deprivation of a comprehensive documentation of the industrial heritage buildings during the decision making process, is another factor leading to the removal of industrial heritages from our collective memories.

Fifthly, according to the official technical reports, the land of the Maltepe Gas and Electric Factories was highly contaminated. According to these reports, the soil of the site was polluted with chemicals like tar, which caused the decline of the structural walls of the industrial buildings and structures. Furthermore, much of the industrial heritage that was exposed to the environmental factors, such as rain and snow, decayed over time. These factors also threaten the survival and thus the conservation of the landscape due to technical and safety reasons.

Finally, the "Floor Area Coding Plan" (Bölge Kat Nizamı Planı) prepared by the Municipality of Ankara in 1968, proposed high-rise development in the landscape of the Maltepe Gas and Electric Factory (Fig. 16). This plan threatens the conservation of the landscape and supports the intention of the Greater City Municipality of Ankara and the landowners, since the preservation decision of the Board is not strict

[325] See Köksal, T. G. (2002), "**Endüstri Mirasında Çağdaş Sanatlar; Kazanımlar, Kayıplar…**", Mimarist Dergisi, No.4, pp. 86-89; Köksal, T. G. (2000a), "**The Lost Industrial Heritage and Some Proposals**", M Domus, December-January 2000, pp. 52-55

and well defined in terms of its legal structure. Under these conditions, the Municipality waits for the collapse of the listed buildings by natural forces, in order to implement its profit-making decisions for this landscape. Unless something is done, one of the last surviving tools of social, spatial and economic regeneration, an important city object, and an important part of our "shared" collective memories will be totally destroyed and privatized like many other witnesses of the Early Republic Period.

6.2. A Solution Proposal for the Regeneration of the Maltepe Gas Factory Site within the Context of Conserving Industrial Archaeological Heritage

For the salvation of the industrial archaeological heritage in the Maltepe Gas and Electric Factory landscape, based on the experience of the western post-industrial countries, first, a mental consciousness within the society to the conservation issue of industrial heritages is essential. In the case of Ankara, "saving the industrial archaeological heritage" remains only as an imported point of pronunciation. A sense of belonging to the landscape of the Maltepe Gas and Electric Factory has not formed within the society yet. Therefore, the concept of industrial archaeology should be implanted to the society instead of imported sanctions. Thus, a reform in the education system, which comprises the industrial history of the nation, is required. Furthermore, the number of research related with the discipline and with the industrial survivals should be increased. These documentations should be presented to the society by means of media, science, technology and industry museums, and within libraries. Site surveys should be arranged for educational purposes. Most important of all, in order to spread awareness of the industrial archaeology discipline and to preserve the industrial buildings, structures and landscapes, trusts, and in a more local context neighborhood communities should be founded.

As the social transformation process is achieved, the society will approach the conservation of industrial heritages from another perspective. They will resist the actors who aim their demolition. Furthermore, this stability and decisiveness of the

society for conserving the industrial archaeological heritage will eventually reflect to the legal structure. As a consequence, the preservation decision of the Board related with the Maltepe Gas and Electric Factory, will be re-considered, re-defined and corrected within the "industrial archaeology" discipline.

After clarifying the legal context of conserving the industrial landscape of the Maltepe Gas and Electric Factory site, a comprehensive documentation of all the industrial archaeological buildings within the site is needed. Deriving an accurate and proper decision about which buildings should be preserved and which demolished, can only be achieved after this documentation process. Furthermore, for the best-use and feasibility analysis, which are performed in order to propose new utilizations for buildings and open spaces, it is essential to make a comprehensive examination of the spatial, economic and social context of the area.

In order to start the conservation actions, a proper legal context and documentation of the industrial heritage are not sufficient. A strategic, flexible and long-term conservation plan, which comprises all of the re-use, design and management processes, and funding mechanisms, are also required. However, in order to activate this plan, first of all, the landowners of the industrial landscapes need to be persuaded. Furthermore, during the decision process of the management model and the re-use of the monuments, the rights of these property owners should be considered.

Deciding on the new functions of the abandoned industrial heritages has become a painful process in history. Experience shows that privatization of these landscapes often causes the disappearance of the industrial identity. However, without private use, in most cases, it became impossible to achieve the sustainability of the industrial heritages. Besides, the land-rent of the Maltepe Gas and Electric Factory is too high. The "Density Control Plan" designates a high-rise development in this landscape. These factors encourage the landowners to demolish the buildings within the landscape and to build a new complex that would provide profit for them. Indeed, since the closure of the Electric and Gas Factories, both the Greater City

Municipality of Ankara and TEK want to maximize their profits. Thus, it is required to assign part of the buildings to private uses in terms of public benefits.

In the Maltepe Gas and Electric Factory landscape, not all of the vacant buildings can be re-functioned due to their weak bearing capacity. Therefore, during the conservation project, it should be evaluated which buildings will be preserved, and which buildings will be re-functioned. Decision of the funding mechanisms and management models for the landscape should be made after prior evaluations.

It is essential to propose an *in situ* conservation plan and project considering all of the industrial archaeological buildings and structures within the site. Due to its industrial-spatial position within the cityscape, considering this landscape as part of a broader picture formed by the other industrial remnants of the Maltepe District would be of value in the sustainability of this heritage and the preparation of a conservation project. Since the landscape has a vast number of vacant building stocks, it would not be rationalistic and economically feasible to re-use them for any one purpose. Therefore, based on the spatial, environmental and technical context and industrial identity of this problem area, the best way to conserve the landscape of the Maltepe Gas and Electric Factory is to assign a mixed-use project. These various utilizations assigned to the spaces should be part of an organic scheme that co-operate with each other in order to sustain the close functional, archaeological and social tie between the Gas and Electric Factories. Furthermore, new utilizations assigned to the industrial spaces should make close-interactions with the original use of the buildings. Considering and preserving the behavior and activity patterns, which constitute the industrial identity of the Maltepe Gas and Electric Factory, is an important mean of conserving and sustaining the industrial archaeological identity of the landscape. Moreover, considering day and night-time usage during the re-functioning process of a mixed-use area, would not only initiate the downtown regeneration and revitalization process, but also increase the consumption of this space.

The property status of the landscape is a great advantage for the conservation of the site. However, in Turkey, finance mechanisms are few and low in amount for supporting public projects. Although most of the conservation and preservation projects are supported by the national lottery and the budget of the Ministry of Culture, these are insufficient to fund large-scaled conservation projects. Due to the limited state budgets, it could be an important way to re-function a part of the industrial buildings and structures within the landscape in terms of a Build-Yield and Operate model. Therefore, to balance the loss and gain for the sustainability of the industrial heritage and for public benefits, some of the buildings and structures should function as profit-making structures, while some of them should be conserved completely for public-use.

In this context, instead of demolishing the industrial heritage within the site in order to construct a shopping mall complex[326], as desired by the Greater City Municipality of Ankara, it would be more feasible and rationalistic to re-use the landscape as an "industrial archaeology park", which might be considered as part of the Station complex, railway museum and Maltepe Flour Factory. In this park, due to technical reasons, some buildings and structures, including the industrial machinery, might be preserved *in situ* without any re-functioning. The preservation of these objects as "shells" or "industrial sculptures" is important for the cognition of the industrial identity of the Maltepe Gas and Electric Factory and for sustaining the nature of the industrial landscape. Besides, re-constructing some demolished industrial buildings and structures, such as the extensions of the railway lines and gasholder buildings, by using modern construction materials to differentiate them from the original industrial buildings and structures, could be an important tool for attracting the society to this park, and thus for the consumption of the landscape. It could also be image-wise, educative and entertaining to consider the newly created railway structure as a functioning system, which would operate within the industrial archaeology park: between the Station, railway museum, gas and electric factory and flour factory. Re-functioning the rest of the buildings and structures, on the other hand, is crucial not only in terms of sustainability, management and finance purposes of the landscape,

[326] In Ankara, large-scaled shopping malls are being moved out of the inner city and relocated around major highways.

but also for starting a spatial, economic and social regeneration within Maltepe and downtown Kızılay.

The best way to re-function the production spaces and the open spaces is to re-use them for public purposes because of their spatial features. Industrial buildings and structures, which are technically possible to re-use, could be re-functioned to industrial heritage museums, galleries, showrooms, libraries, music and theatre halls within an industrial park concept. In this sense, while part of the buildings and structures may be used for flexible purposes based on the demand that would come from the consumers, part of the buildings and structures may be permanently used as libraries, music halls, etc. Furthermore, part of the buildings and structures might be rented to private companies as part of the BYT agreement due to financial shortages of the State. An example for this model could be the renting of the music hall spaces to a private company functioning as a music school, or renting of the galleries to a private company that would take the responsibility of the management of the museum(s) as in the TATE Modern case in London Docklands. However, privatization of the industrial spaces should be considered only in a part of the in-door spaces due to democratic reasons. In contrast to the privatization of several industrial buildings and structures, open spaces should be accessible to the whole society for maintaining the democracy of the landscape. Playgrounds, plazas, recreation and entertainment areas, which would function harmoniously with the in-door spaces, could be crucial tools for attracting the society to this landscape. This publicness will not only increase the awareness to the industrial archaeological heritage, but also help create a public realm in an urban setting where spaces of socialization are scarce.

In addition to the preservation or re-functioning of the spaces of production, auxiliary buildings and structures, such as the laborer's housings, bath, mosque and dining hall, should be re-used as part of the industrial park. If possible, the best way to sustain the industrial identity of the landscape is to promote the continuation of the original functions of the buildings and structures. In this sense, the old administrative building located along the Toros Street, could be re-used as a conference center and

exhibition space, due to its architectural character and behavior pattern. On the other hand, the old Bomonti Casino, which is presently used as a dining hall could be re-used as a restaurant and café of the industrial park. Additionally, while the laborer's houses located on Toros Street and at the junction point of Tok Street and GMK Boulevard could be re-used for housing purposes, the old guesthouse building, which is presently used for administrative purposes, could be re-functioned to its original use: to accommodate the visitors and users of the landscape. Similarly, the bath and mosque buildings should be continued to be used as their original purposes.

In contrast to the preservation and re-functioning projects, some buildings and structures, such as the buildings that were constructed after 1970s (Fig. 60), should be demolished in order to increase the consumption of the landscape. These buildings not only hinder the perception of the industrial identity of the landscape, but also destroy the silhouette of the industrial landscape. Therefore, to sustain the identity of the Maltepe Gas and Electric Factory, the best way to use part of these spaces is for recreative purposes. Part of the landscape, on the other hand, should be re-used for open-air public car-parking purposes. One of the best potential usable areas, which will be the new car-parking area, is the site where the multi-floor car park of EGO is situated today. Unfortunately, this building hinders the visual perception of the landscape and forms contrast with the architectural vocabulary of the site. For this reason, constructing an underground parking building in this area, which would be the only car parking space of the industrial park, is a more rationalistic and image-wise solution for the conservation of the site.

Funding such a project only with State budgets and BYT agreements may not be possible. For the funding of those industrial archaeological buildings located within the Maltepe Gas and Electric Factory site, sponsorships, charitable private and public institutions, such as banks or important firms, can be good alternatives in addition to the state budgets, which are scarce in amount. A good way to increase the state budget in this sense may be to constitute a revolving fund mechanism. This mechanism will send back the money to the users with a greater amount, which was returned to the system by the previous users with some small interest rates that were

taken in the form of loans from this system. This option will safeguard the landscape of the Maltepe Gas and Electric Factory from the privatization attempts.

After persuading the property owners for such a public-oriented project, the next step that should be performed is to start the land reclamation processes. Thus, in order to rescue the industrial archaeological heritage in the focused landscape, environmental factors, which threaten their survival, must be removed first. Only after this land reclamation process, can the buildings be re-functioned into other purposes and the heritages be preserved.

As a last remark, fortunately, it was declared in the year 2006 that all of the branch-departments of the Greater Ankara Municipality, which includes EGO and has been spatially dispersed within the urban macro-form, would be re-located under a single complex in another place.[327] Without any doubt, the abandonment of EGO's administrative functions from the landscape of the Maltepe Gas and Electric Factory will trigger the regeneration actions. However, if EGO and the Greater Ankara Municipality are not persuaded for the conservation of the industrial archaeological heritage within the site, this process will be an imminent danger for the survival of the heritage. At this point, chambers, public and private agencies, intellectual scholars, and conscious citizens should become aware of their "shared" industrial heritage, and thus, should immediately start a collective struggle to rescue their collective memories, disappearing public lives, and their tools, which educate and guide throughout their individuation and socialization.

[327] Ankara Bülteni (4-10 May), Sayı: 26, pp. 10

BIBLIOGRAPHY

1. Aerschot, V. S. (1986), "**Communaute Flamande de Belgique: Patrimoine Industriel et Inventaire du Patrimoine Architecturel**", pp. 69-80, in Inventaire General des Monuments et des Richesses Artistique de la France, Les Inventaires du Patrimoine Industriel: Objectifs et Methodes, Paris: Inventaire General (Cited in Alfrey, J. and Putnam, T. (1992): 137)
2. Ahunbay, Z. (2002), "**20. Yüzyılın Mimari ve Endüstri Mirasının Korunması Sempozyumu**", Mimarlık Dergisi", Sayı: 308, pp. 42-43
3. Aktüre, S. (1978), "**19. Yüzyıl Sonunda Anadolu Kenti Mekansal Yapı Çözümlemesi**", ODTÜ Mimarlık Fakültesi Baskı Atölyesi, Ankara
4. Aktüre, S. (2001), "**1830'dan 1930'a Ankara'da Günlük Yaşam**", in Yavuz, Y. (ed.) (2001), "Tarih İçinde Ankara II", Proceedings of the seminar held in 1998, ODTÜ Mimarlık Fakültesi Yayınları, pp. 35-74
5. Albanese, F. (1988), "**Message from the Secretary General of the Council of Europe**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp.9
6. Alfrey, J. and Putnam, T. (1992), "**The Industrial Heritage: Managing resources and uses**", Routledge, London and New York
7. Altınoluk, Ü. (1998), "**Binaların Yeniden Kullanımı**", Yapı Endüstri Merkezi Yayınları, İstanbul
8. Altınoluk, Ü. (2000), "**Endüstri Arkeolojisi Kapsamındaki Binalarda İşlev Dönüşümü**", Mimarlık Dergisi, Sayı: 292, pp. 7-8
9. Alvarez, J. L. (1988), "**Taxation and Heritage Development**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 98-107

10. Ancient Monuments Board for England, "**Twenty-first Annual Report 1974**", HMSO, 1975, Appendix 3, paragraphs 2 and 3 (Cited in Dobby, A. (1978): 43)
11. Ankara, Nr. 641,3 1885, pp.1-2 (Cited in Ortaylı, İ. (2000): 207)
12. Ankara Belediyesi (1954), "**Ankara Şehri Yeni İmar Planına Ait İmar Komisyonu Raporu**", Doğuş Matbaası, Ankara
13. Ankara Bülteni (4-10 May), Sayı: 26, pp. 10
14. Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, Gaz Dairesi Başkanlığı (1985), "**Ankara Şehrinde Artan Gaz Talebinin Karşılanması ve Hava Kirliliğinin Önlenmesi İçin Doğal Gaz Kullanımına Geçilmesi Hakkında Ön Rapor**", November 1985
15. Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, Ulaşım Planlama ve Raylı Sistem Dairesi (1991), "**TEK ve EGO Maltepe Tesisleri Fotoğraf Albümü**", unpublished document
16. Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, UPRS Dairesi Başkanlığı (1991), "**TEK ve EGO Maltepe Tesisleri Arazi Kullanım Haritası**" (in Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu Büro Müdürlüğü, Kayıt No: 294, 21.22.1991, Dosya No. 06/06/72; Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960): 8)
17. Ankara Büyükşehir Belediye Başkanlığı EGO Genel Müdürlüğü, Ulaşım Planlama ve Raylı Sistem Dairesi Başkanlığı (February 20, 1991), Official Communication Report, Sayı: UPM-07-01/116-2982
18. Ankara Belediyesi Elektrik Gaz ve Otobüs İşletme Müessesesi Genel Müdürlüğü, "**Naftaya Dayalı Şehirgazı Üretim Tesisi Fizibilite Etüdü**"
19. Ankara Chamber of Commerce (1998), "**Ankara: From the Past to the Present**", December 1998, pp. 54, 94
20. Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi, "**Havagazı Fabrikası Hakkında Genel Bilgiler**", Unpublished Document, in the Archives of Nazmi Fındıkçıoğlu
21. Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1960), "**Havagazı Tesisleri Hakkında Genel Bilgiler**", Sanat Matbaası, Ankara

22. Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi (1973), "**Cumhuriyetimizin 50. Yılında Ankara Elektrik, Havagazı ve Otobüs İşletme Müessesesi**"
23. Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi, İkmal ve Tesis Dairesi Başkanlığı, 14 Etüd Proje Müd., 20.5.1991, Official Communication Report, 16-7985, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
24. Ankara EGO Genel Müdürlüğü, "**Maltepe Eski Havagazı Fabrikasının Son Durumu Hakkındaki Komisyon Raporu**", Site Survey Report, Sayı: M.06.1.EGO.065.02.02/105-21583, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
25. Ankara EGO Genel Müdürlüğü, "**Tarihçe**", http://www.ego.gov.tr, January 24, 2006
26. Ankara Greater City Municipality Archives, "**EGO Sahasının Yeniden Düzenlenmesi**", Plan No: 75 180/A, Evrak No: R_5453/82, Dosya No: 7369/1
27. Ankara Koruma Kurulu Büro Müdürlüğü (1991), Official Communication Report, Kayıt No:1003, 06.06/72
28. Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, 12.12.2003, Board Decision, Karar No: 8894, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
29. Arar, (1969), pp.32 (Cited in Tankut (1993), "Bir Başkentin İmarı Ankara: (1923-1939)", Anahtar Kitaplar Yayınevi, pp.47)
30. Arguner, Ş. (2000), "**Lands in Metamorphosis**", M Domus, December-January 2000, pp. 72-74
31. Asatekin, G. (1995), "**Kültür Varlıklarının Korunması ve Mimarlıkta Uzmanlaşma**", Mimarlık Dergisi, Sayı: 265, pp. 12-13
32. Ashworth, G. (1974), Opening Address, "**The Future of British Landscape**", Seminar held by the RTPI and RIBA in Newcastle-upon-Tyne, April 24, 1974 (Cited in Dobby, A. (1978): 25)
33. Aslanoğlu, İ. (2001), "**Erken Cumhuriyet Dönemi Mimarlığı: 1923-1938**", ODTÜ Mimarlık Fakültesi Yayınları

34. Atagök, T. (2000), "**Sanayi Mekanlarından Sanat Mekanlarına**", Mimarlık Dergisi, Sayı: 292, pp. 9-14
35. Bademli, R. (1985), "**Sanayi'nin Yer Seçimi Süreçleri**", in Ankara Büyükşehir Belediyesi EGO Genel Müdürlüğü, "Ankara 1985'den 2015'e", ODTÜ Şehir ve Bölge Planlama Bölümü Çalışma Grubu, pp. 49-54
36. Bademli, R. (1985), "**Ankara Merkezi İş Alanının Gelişimi**", in Ankara Büyükşehir Belediyesi EGO Genel Müdürlüğü, "Ankara 1985'den 2015'e", ODTÜ Şehir ve Bölge Planlama Bölümü Çalışma Grubu, pp. 154-162
37. Bakanlar Kurulu Kararı (TCBCA 030.18.1.1/30.61.10 (1) and its attachment; 162-24) (Cited in Cengizkan, A. (2004): 100)
38. Bakanlar Kurulu Kararı (TCBCA 030.18.1.1/29.32.9(1) and its attachment, May 16, 1928, Issue No: 6634 (Cited in Cengizkan, A. (2004): 101)
39. Baker, D. (1999), "**Contexts for Collaboration and Conflict**", in Chitty, G. and Baker, D. (1999), "Managing Historic Sites and Buildings", Routledge, London, pp. 1-22
40. Basatemür, B. (2001), "**Kıyı Şeridi Docklands**", XXI Dergisi, Mart-Nisan 2001, Sayı 7, pp. 146-161
41. Baş, S. (2003), "**Bu Görüntüye Katlanacaksınız**", Sabah Gazetesi, March 30, 2003, pp. 23
42. Başkent Elektrik Dağıtım A.Ş. Genel Müdürlüğü, Ticaret Malzeme Yönetim Müdürlüğü, 4.2.2002, Official Communication Report, Sayı: B.15.2 BAŞKENT A.Ş. 4.06.00-223, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
43. Baudrillard, J. (2002), "**Tüketimin Tanımına Doğru**", in "Mimarlık ve Tüketim", Boyut Yayın Grubu, May 2002, İstanbul, pp. 67-72
44. Bayındırlık Bakanlığı (1928), Sayı: 06E15, (TCBCA 230/5.17.1(80)) (Cited in Cengizkan, A. (2004): 100)
45. Berggren, G., İstanbul Alman Arkeolojisi Enstitüsü Harita ve Fotoğraf Arşivleri (Cited in Cengizkan, A. (2004): 16, 17)
46. Blockley, M. (1999), "**Preservation, Restoration and Presentation of the Industrial Heritage: A Case Study of the Ironbridge Gorge**", in Chitty, G.

and Baker, D. (1999), "Managing Historic Sites and Buildings", Routledge, London, pp. 141-156

47. British Parliamentary Papers, (Papers and Accounts), "**Consular Reports from Angora for the year 1891 and 1893**", pp.8 (Cited in Ortaylı, İ. (2000): 210)
48. Cantacuzino, S. (1989), "**Re-Architecture: Old Buildings New Uses**", Abbeville Pr (Cited in Ökem, S. (2000), "Çelik Altarlı Tapınaklar", Mimarlık Dergisi, No. 292, pp.16)
49. Carr, S., Francis, M., Rivlin, L. G. and Tone, A. M. (1992), "**Public Space**", Cambridge University Press
50. Carta, M., "**Palermo: the City of Opportunities**", http://www.unipa.it/~mcarta/industri.html, January 24, 2006
51. Castells, M. (1983), "**The City and the Grass Roots**", University of California Press, Berkeley and Los Angeles, pp. 4 (Cited in Soja, E. W. (2000), "Postmetropolis: Critical Studies of Cities and Regions", Blackwell Publishers, Massachusetts, pp. 95)
52. Cengizkan, A. (2002), "**Modernin Saati: 20. Yüzyılda Modernleşme ve Demokratikleşme Pratiğinde Mimarlar, Kamusal Mekan ve Konut Mimarlığı**", Boyut Yayın Grubu
53. Cengizkan, A. (2004), "**Ankara'nın İlk Planı: 1924-25 Lörcher Planı**", Ankara Enstitüsü Vakfı, Ankara
54. Cengizkan, N. M. (2002), "**Endüstri Arkeolojisinde Mimarlığın Yeri: Sanayinin Terkettiği Alanlarda 'Yeniden-Mimari'**", Mimarlık Dergisi, Sayı: 308, pp. 40-41
55. Centorrino, M. (1988), "**Economic Effects of a Renovation Programme**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 23-25
56. Chitty, G. and Baker, D. (1999), "**Managing Historic Sites and Buildings**", Routledge, London
57. Church A. (1998), "**A Shining Example, Missed Opportunity or a Redevelopment Disaster**", in http://www.latymer-upper.org/geog/sixth/docklands.htm, November 11, 2002

58. Cimcoz, N. (2002), "**Viyana'da Simmering Gazhanesi: Gazometreden Heterojen Yapı Tarzına Geçiş**", Arredamento Mimarlık Dergisi, July-August 2002, pp. 124-128
59. Conversation with Gökçek, M. (Cited in Sabah Gazetesi, "Kaldırın Bu Kararı", March 28, 2003, pp. 21)
60. Croft, C. and Harwood, E. (1999), "**Conservation of the Twentieth-Century Buildings: New Rules for the Modern Movement and After?**", in Chitty, G. and Baker, D. (1999), "Managing Historic Sites and Buildings", Routledge, London, pp. 157-172
61. Cuinet, V. (1890-1895), "**La Turquie d'Asie**", E. Leroux, Paris (Cited in Aktüre, S. (1978), "19. Yüzyıl Sonunda Anadolu Kenti Mekansal Yapı Çözümlemesi", ODTÜ Mimarlık Fakültesi Baskı Atölyesi, Ankara, pp.114)
62. Çıkış, Ş. E. (2001), "**Türkiye'de Modern Korumacılık: İlkeler ve Etikler**", Arredamento Mimarlık Dergisi, December 2002, pp. 84-89
63. DBR Dergiler Grubu (2004), "**Sokak Sokak Ankara Şehir Planı**"
64. Dobby, A. (1978), "**Conservation and Planning**", Hutchinson of London, London
65. Docter, R. (1987), "**Les Pays Bas: Developpement d'une Politique Gouvernementale Pour l'inventaire et la Protection des Monuments et des Paysages Urbaines de l'epoque Contemporain**", Inventaire General des Monuments et des Richesses Artistiques de la France, Les Enjeux du Patrimoine Architectural du Xxieme Siecle, Paris: Ministere de la Culture et de la Communication (Cited in Alfrey, J. and Putnam, T. (1992): 137)
66. DoE (1989), "**Sustaining Our Common Future: A Progress Report by the United Kingdom on Implementing Sustainable Government**", London: HMSO (Cited in Baker, D. (1999): 6)
67. English Heritage, "**Kings Cross Gasholders, London**", http://www.eng-h.gov.uk/archrev/rev96_7/kcgas.htm, January 24, 2006
68. Erder, C. (ed.), "**Selected Readings in Architectural Conversation**", Middle East Technical University, Faculty of Architecture, Department of Restoration of Historic Monuments

69. Erder, C. (1977), "**Venedik Tüzüğü Tarihi Bir Anıt Gibi Korunmalıdır**", in ODTÜ Mimarlık Fakültesi Dergisi, No. 2, Fall 1977
70. Erder, C. (1986), "**Our Architectural Heritage: From Consciousness to Conservation**", UNESCO
71. Ergenç, Ö. (1990), "**XVI. Yüzyılda Ankara**", Ankara Dergisi, October 1990, Cilt: 1, Sayı: 1, pp. 55-60
72. Ergin, N. (1927-8; 1996), "**İstanbul Şehreminleri**", pp.579 (Cited in Cengizkan A. (2004): .97)
73. Ferraro G. (1988), "**Experience of the Savings Bank of the Sicilian Provinces**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 4-8
74. French, D. H. (1992), "**Yün Ticareti ve Ankara'da İngiliz Tüccarlar**", Ankara Dergisi, Ocak 1992, Cilt: 1, Sayı: 3, pp. 29-31
75. Fulleman, V. (1987), "**Keeping the National Heritage Alive: Helping to Restore Buildings as a Major Activity of the UBS Jubilee Foundation**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp.87
76. Glancey, J. (1999), "**20th Century Architecture**", Carlton, London
77. Gordon, R. B. and Malone, P. M. (1994), "**The Texture of Industry: An Archaeological View of the Industrialization of Nort America**", Oxford University Press, New York
78. Gökçe, B. (2004), "**Planlı Gelişme Sürecinde Ulaşım Politikaları-Yaya İlişkileri Bağlamında Kızılay**", in TMMOB Mimarlar Odası Ankara Şubesi and TMMOB Şehir Plancıları Odası Ankara Şubesi (2004), "Kızılay'da Yayalar ve Yaya Ulaşımı: Sorunlar, Sebepler ve Süreçler", Ankara
79. Güneş Gazetesi, "**Bir Hatıranın Sökümü Üzerine**", 27.12.1990
80. Hahn, M. (1999), "**Historiche Umnutzungen**", A Doctoral Thesis submitted to Berlin Technical University (Cited in, Köksal, G. (2000), "A New Lease of Life for Industrial Buildings", M Domus, December-January 2000, pp. 70)
81. Hamilton, W. (1842), **Researches in Asia Minor, Pontus and Armenia**", John Murray, London, pp.418 (Cited Yavuz, E. (2000): 197)

82. Haskel, T. (1993), "**Caring for Our Built Heritage: Conservation in Practice**", E&FN Spon, London
83. Hewison, R. (1987) "**The Heritage Industry**", London: Methuen (Cited in Palmer, M and Neaverson, P. (1998): 150)
84. Hodder, I. (1982), "**Symbols in Action**", Cambridge University Press (Cited in Palmer, M. and Neaverson, P. (1998): 4)
85. ICOMOS (1965), "**Venice Charter: International Charter for the Conservation and Restoration of Monuments and Sites**", Venice, in Madran, E.; Özgönül, N. (1999), "International Documents Regarding the Preservation of Cultural and Natural Heritage", METU Faculty of Architectural Press
86. "**İki ABD Kurumu: HABS ve HAER**", Arredamento Mimarlık, Eylül 2001, pp.101
87. İnan, A. (1972), "**Devletçilik İlkesi ve Türkiyenin Birinci Sanayi Planı: 1933**", Türk Tarih Kurumu Basımevi, Ankara
88. İncirlioğlu, G. (1991), "**Ankara Havagazı Fabrikası**", Arkitekt Dergisi, February 1991, pp.80-84
89. Jansen, H. (1937), "**Ankara İmar Planı Raporu**", Trans. Yenen, M., Aleaddin Kıral Basımevi, İstanbul
90. Kansu, I. (1991), "**Fabrikanın Ne Havası Kaldı Ne de Gazı**", Cumhuriyet Gazetesi, 18.3.1991
91. Karabekir, K. (2001), "**Sanayi Projeleri: 'Ülkemiz Kuvvetli Bir Türkiye'dir'**", Emre Yayınları, İstanbul (Cited in Cengizkan A. (2004): 98)
92. Keeble, L. (1964), "**Principles and Practice of Town and Country Planning**", 3rd edition, Estates Gazette, pp.315-316 (Cited in Dobby, A. (1978): 15)
93. Kiper, P. (2004), "**Küreselleşme Sürecinde Kentlerimize Giren Yeni Tüketim Mekanları ve Yitirilen Kent Kimlikleri**", Planlama Dergisi, TMMOB Şehir Plancıları Odası, Sayı: 4, pp. 14-18
94. Kostof, S. (1999), "**The City Assembled: The Elements of Urban Form Through History"**, A Bulfinch Press Book

95. Kotan, B. (2003), "**Sanki Tarihi Eser!**", Sabah Gazetesi, March 27, 2003, pp. 21
96. Köksal, T. G. (2000a), "**The Lost Industrial Heritage and Some Proposals**", M Domus, December-January 2000, pp. 52-55
97. Köksal, T. G. (2000b), "**A New Lease of Life for Industrial Buildings**", M Domus, December-January 2000, pp. 68-71
98. Köksal, T. G. (2002), "**Endüstri Mirasında Çağdaş Sanatlar; Kazanımlar, Kayıplar…**", Mimarist Dergisi, No.4, pp. 86-89
99. Leymarie, G. (1988), "**The Cartier Foundation**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 97
100. Lichfield, N. (1987), "**Achieving Value for Money in Conservation of the Cultural Built Heritage**", Paris: ICOMOS Information, (Cited in in Lichfield, N. (1988): 14)
101. Lichfield, N. (1988), "**Level of Investment and Cultural Value of Built Heritage**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 11-18
102. Lipe, W. D. (1984), "**Value and Meaning in Cultural Resources**" (Cited in Palmer, M. and Neaverson, P. (1998): 141)
103. Madran, E.; Özgönül, N. (ed.) (1999), "**International Documents Regarding the Preservation of Cultural and Natural Heritage**", METU Faculty of Architectural Press
104. Manisalı, E. (1982), "**Gelişme Ekonomisi**", Ar Yayın Dağıtım, İstanbul
105. Mantoux, P. (1961), "**The Industrial Revolution in the Eighteenth Century: An Outline of the Beginnings of the Modern Factory System in England**", Harper & Row Publishers, New York
106. Maravanszky, A. (2001), "**İzler ve Aura: Mimarlığın Eskilik Değeri, Yenilik Değeri ve Geçicilik**", Arredamento Mimarlık, Eylül 2001, pp.91
107. McIntosh, A. (1997), "**The Experience and Benefits Gained by Tourists Visiting Socio-industrial Heritage Attractions**, unpublished doctoral thesis, Open University, Milton Keynes (Cited in Blockley, M. (1999): 149)

108. Merighi, G. (1988), "**Contribution by the Instituto Bancario San Paolo di Torino Towards Architectural Heritage Restoration**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 26-29
109. Minchinton (1970), "**Industrial Archaeology**", pp.99 (Cited in Raistrick, A. (1986): 10)
110. Ministry of Public Affairs, No. 06E6, April 25, 1928 (TCBCA 230/4.14.1(140)) (Cited in Cengizkan, A. (2004): 100)
111. Miser, B. (2003), "**Bunlar Korunmalı!**", Sabah Gazetesi, March 29, 2003, pp. 21
112. Nijhof, P. (1990), "**Cultural Heritage: The Netherlands**", European Environmental Yearbook, Milan: Institute of Environmental Studies (Cited in Alfrey, J. and Putnam, T. (1992): 137)
113. Official Gazette of Turkey (1988), "**Doğalgazın Kullanımı Hakkında Kanun Hükmünde Kararname**", December 9, 1988, No. 20014
114. Ongan, H. (1957), "**Ankara'nın Eski Esnafını Açıklayan Bir Vesika**", Türk Etnografya Dergisi, Sayı 2, pp.58
115. Orak (1946) (Cited in Cengizkan, A. (2004): 114)
116. Orbaşlı, A., "**Conservation and Tourism in Turkey: A Review of Legislation and Practice**", A Working Paper that has been Prepared as a part of the TEMPER project, in http://catal.arch.cam.ac.uk/temper/doc_view.asp?doc_id=70, January 24, 2006
117. Ortaylı, İ. (2000), "**19. Yüzyıl Ankara'sında Ekonomik Hayatın Örgütlenmesi ve Kentiçi Sosyal Yapı**", in Yavuz, Y. (ed.) (2000), "Tarih İçinde Ankara I", Proceedings of the seminar held in 1981, ODTÜ Mimarlık Fakültesi Yayınları, pp. 207-220
118. Ökem, S. (2000), "**Çelik Altarlı Tapınaklar**", Mimarlık Dergisi, Sayı: 292, pp. 15
119. Ökçün, A. G. (1971), "**1929-1930 Yılları arasında Kurulan Türk Anonim Şirketlerinde Yabancı Sermaye**", Ankara Siyasi Bilgiler Fakültes (Cited in Tekeli, İ. (1982): 59)

120. Özel, M. (ed.) (1991), "**Ankara Album**", Ministry of Culture, General Directorate of Fine Arts
121. Palmer, M. and Neaverson, P. (1994), "**Industry in the Landscape: 1700-1900**", Routledge, London and New York
122. Palmer, M. and Neaverson, P. (1998), "**Industrial Archaeology: Principles and Practice**", Routledge, London and New York
123. Pickard, R. D. (1996), "**Conservation in the Built Environment**", Longman, Edinburgh
124. "**Projects: Londra'da Bir İsviçreli**", M Domus, December-January 2000, pp. 101
125. "**Projects: Viyena Gazhaneleri**", in M Domus, December-January 2000, pp. 134-139
126. Raistrick, A. (1986), "**Industrial Archaeology: An Historical Survey**", Paladin Grafton Books, London
127. REMAX, http://www.remax-turk.com, July 10, 2005
128. Report from the Select Committee appointed to consider the State of Woolen Manufacture in England (1806), p.8 (Cited in Mantoux, P. (1961): 38-39)
129. Riegl, A. (1982), "**The Modern Cult of Monuments: Its Character and Its Origin**", Oppositions, No: 25, New York, Rizzoli (Published originally in Alois Riegl, Gesammelte Aufsate Augsburg-Vienna: Dr. Benno Filser, 1928) (Cited in Cengizkan, A. (2002): 240-241; Soğancı, N. M. (2001): 29-30; Maravanszky, A. (2001): 91)
130. Rix, M. (1955), "**Industrial Archaeology**", The Amateur Historians, 2, 8, pp.225-229 (Cited in Palmer, M. and Neaverson Peter (1998): 1)
131. Saner, M. (2004), "**Transformation of Old Industrial District of Ankara and Political Actors**", A Thesis Submitted to the Graduate School of Natural and Applied Sciences of Middle East Technical University, June 2004
132. Savaşır, G. (2002), "**Ankara Havagazı Fabrikası'nı Kavramlarla Dönüştürmek**", Mimarlık Dergisi, Sayı: 308, pp. 52-53
133. Smith, D. (1965), "**Industrial Archaeology of the East Midlands**", Dawlish: David & Charles (Cited in Palmer, M. and Neaverson, P. (1998): 14)

134. Soğancı, N. M. (2001), "**Architecture as Palimpsest: Re-functioning of Industrial Buildings within the Scope of Industrial Archaeology**", A Thesis Submitted to the Graduate School of Natural and Applied Sciences of the Middle East Technical University
135. Soja, E. W. (2000), "**Postmetropolis: Critical Studies of Cities and Regions**", Blackwell Publishers, Massachusetts
136. Steinglass, M., "**The Machine in the Garden**", Mtropolis Magazine, http://www.eng-h.gov.uk/archrev/rev96_7/kcgas.htm, January 24, 2006
137. Stratton, M. and Trinder, B. (2000), "**Twentieth Century Industrial Aechaeology**", E & FN SPON, London
138. Summerson, J. (1949), "**Heavenly Mansions**", Cresset, pp. 219 (Cited in Dobby, A. (1978): 33-34)
139. Şimşir, B. N. (1988), "**Ankara... Ankara: Bir Başkentin Doğuşu**", Bilgi Yayınevi, Ankara
140. Tağmat, T. S. (2003), "**Modern Mimarlık Ürünlerinin Korunması**", Mimarlık Dergisi, Sayı: 312, July-August 2003, pp. 17-19
141. Tankut, G. (1993), "**Bir Başkentin İmarı Ankara: (1929-1939)**", Anahtar Kitaplar Yayınevi, İstanbul
142. Tankut, G. (2001), "**Ankara İmar Planı Uygulamasının 1929-1939 Arasındaki Dikkat Çeken Verileri**", in Yavuz, Y. (ed.) (2001), "Tarih İçinde Ankara II", Proceedings of the seminar held in 1998, ODTÜ Mimarlık Fakültesi Yayınları, pp. 9-16
143. Tanyeli, G. (2000), "**A New Lease of Life for Industrial Buildings**", M Domus, December-January 2000, pp. 68-71
144. Tanyeli, G. (2000), "**Conservation of Industrial Archeological Sites and Assigning New Functions**", M Domus, December-January 2000, pp. 50-51
145. Tanyeli, G. and Aslan, D. (2001), "**Kadıköy-Hasanpaşa Gazhanesi**", Arredamento Mimarlık Dergisi, September 2001, pp. 105-115
146. Tarih IV (1933), Devlet Matbaası, pp.297 (Cited in Aslanoğlu, İ. (2001): 22)
147. T.C. Ankara Belediyesi İmar Müdürlüğü, "**EGO Sahasının Yeniden Düzenlenmesi**", Plan, Plan No: 75 180/A, Evrak No: R_5453/82, Dosya No: 7369/1, in Ankara Greater City Municipality Archives

148. T.C. Ankara Belediyesi İmar Müdürlüğü, Evrak No: 5563/65, Dosya No: 2569-14, Plan No: 55950, Pafta No: C-6, C-6, C-7, M-124, N-124, O-124
149. T.C. Ankara Belediyesi İmar Müdürlüğü, Plan No: 55950, Evrak No: 5563/65, Dosya No: 2569, in the Ankara Greater City Municipality Archives
150. T. C. Başbakanlık Cumhuriyet Arşivi (TCBCA) (Cited in Cengizkan, A. (2004): 41, 101, 247)
151. T.C. Danıştay, Altıncı Daire, 22.6.1994, Court Decision, Esas No: 1993/3899, Karar No: 1994/2657, in the Archives of the Chamber of Architects
152. T.C. Danıştay, Yedinci Daire, 13.1.1993, Court Decision, Esas No: 1991/687, Karar No: 1993/19, in the Archives of the Chamber of Architects
153. T.C. Danıştay, Yedinci Daire, Court Decision, Esas No: 1994/1356, Karar No: 1995/1281, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
154. T.C. Gazi Üniversitesi, Fen-Edebiyat Fakültesi Dekanlığı, Sanat Tarihi Bölüm Başkanlığı, 12.11.2003, Expert Report, B.3.2.GÜN.0.13.00.00.10/05-210-4000 ve B.30.2.Gün.0.13.00.00.14-059/224, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
155. T.C. Gazi Üniversitesi, Mühendislik-Mimarlık Fakültesi (April 2004), "**Bacaların Konum Emniyeti İncelemesi Bilirkişi Raporu**", Expert Report, Ankara, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
156. T.C. Kültür Bakanlığı, Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, 13.11.1990, Board Decision, Sayı: 1477
157. T.C. Kültür Bakanlığı, Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, 19.3.1991, Board Decision, Sayı: 1679
158. T.C. Kültür Bakanlığı, Kültür ve Tabiat Varlıklarını Koruma Genel Müdürlüğü, 10.4.2002, Official Communication Report**,** Sayı: B.16.0.KTV.0.10.00.01/720-114, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage
159. T.C. Kultur Bakanlığı, "**2863 Sayılı (5226 Sayılı Kültür ve Tabiat Varlıklarını Koruma Kanunu ile Çeşitli Kanunlarda Değişiklik Yapılması Hakkında Kanun ile Değişiklik) Kültür ve Tabiat Varlıklarını Koruma**

Kanunu", Kanun No: 2863, Kabul Tarihi ve Sayısı: 14.7.2004/5226, in http://www.kultur.gov.tr, January 24, 2006

160. Tekeli, İ. (1973), "**Evolution of Spatial Organisation in the Ottoman Empire and Turkish Republic**", in Brown, C. L. (ed.), "From Medina to Metropolis", The Darwin Press, Princeton, New Jersey, pp.244-277)
161. Tekeli, İ. (1977), "**Başkent Ankaranın Öyküsü**", in Tekeli, İ. (1982), "Türkiye'de Kentleşme Yazıları", Turhan Kitabevi Yayınları, Ankara, pp. 49-81
162. Tekeli, İ. (1985), "**Ankara Kent Makroformunun Değerlendirilmesi**", in Ankara Büyükşehir Belediyesi EGO Genel Müdürlüğü, "Ankara 1985'den 2015'e", ODTÜ Şehir ve Bölge Planlama Bölümü Çalışma Grubu, pp. 170-181
163. Tekeli, İ. (1994), "**Ankara'da Tarih İçinde Sanayinin Gelişimi ve Mekansal Farklılaşması**" (Cited in Batur, E. (ed.) (1994), "Ankara Ankara", Yapı Kredi Yayınları, İstanbul, pp.178)
164. Temelkuran, E., "**Ankara'nın Belleği Çürüyor**", Milliyet Gazetesi, in Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası", Mimarlar Odası Ankara Şubesi
165. The Norms of Quito, "**Final Report of the Meeting on the Preservation and Utilization of Monuments and Sites of Artistic and Historic Value**", December 2, 1967, Organization of American Stated, in Madran, E.; Özgönül, N. (1999), "International Documents Regarding the Preservation of Cultural and Natural Heritage", METU Faculty of Architectural Press
166. Timur, T. (1968), "**Tarihi Türk Devrimi Anlamı ve Felsefi Temeli**, Ankara, pp.104 (Cited in Aslanoğlu, İ. (2001): 24)
167. TMMOB Mimarlar Odası Ankara Şubesi, "**TMMOB Mimarlar Odası Ankara Şubesi'ne Rapor (EGO Konusu)**", Official Communication Report, in Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası", Mimarlar Odası Ankara Şubesi
168. TMMOB Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu (1991), "**Ankara Havagazı Hakkında Şube Görüşü**", in Mimarlar Odası Ankara Şubesi, Dosya: "Bir Cumhuriyet Tenığı: Ankara Havagazı Fabrikası"

169. TMMOB Mimarlar Odası Ankara Şubesi, "**Doğal ve Kentsel Çevre Komisyonu Çalışma Raporu**", in TMMOB Mimarlar Odası Ankara Şubesi, "Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası""
170. TMMOB Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu (1990), "**Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu müdürlüğüne Gönderilen Şube Yazısı**", Official Communication Report, Date: 2.11.1990, No: 822, in TMMOB Mimarlar Odası Ankara Şubesi, "Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası""
171. TMMOB Mimarlar Odası Ankara Şubesi, Doğal ve Kentsel Çevre Komisyonu Raporu (1990), "**EGO Maltepe Havagazı Tesislerinin Sökülmesi İşlemlerine Niçin Karşı Çıkıyoruz?**", Site Survey Report, October 1990, in Mimarlar Odası Ankara Şubesi, Dosya: "Bir Cumhuriyet Tanığı: Ankara Havagazı Fabrikası"
172. Uçkan, Ö, (2000), "**From 'Conservation' to the 'Allocation of New Functions': The Sustainable City**", M Domus, December-January 2000, pp. 36-37
173. UN (1992), "**Earth Summit' 92**", United Nations Conference on Environment and Development, Rio de Janeiro 1992, London: Regency (Cited in Baker, D. (1999): 6)
174. UNESCO, "**Recommendation Concerning the Protection, at National Level, of the Cultural and Natural Heritage**", November 15, 1972, Paris, in Madran, E.; Özgönül, N. (1999), "International Documents Regarding the Preservation of Cultural and Natural Heritage", METU Faculty of Architectural Press, pp.109
175. UNESCO, "**Industrial Heritage**", http://whc.unesco.org/sites/industrial.htm, January 24, 2006
176. Ure, A., "**Philosophy of Manufactures**", p. 14 (Cited in Mantoux, P. (1961): 38-39)
177. Vardar, A. (1989), "**Başkent'in İlk Planları**", Planlama Dergisi (1989/2-3-4), pp. 38-50

178. Venice Charter (1964), "**International Charter for the Conservation and Restoration of Monuments and Sites**", ICOMOS, in Erder, C. (1986), "Our Architectural Heritage. From Consciousness to Conservation", UNESCO
179. VEKAM Archives (Cited in Ankara Chamber of Commerce (1998), "Ankara: From Past to the Present")

180. Wehdern, M. (Trans. By: Tağmat, T., S.) (2002), "**Viyana'daki Gazometre Binalarının Yeniden Kullanımı**", Mimarlık Dergisi, Sayı: 308, pp. 49-51
181. WCED (1987), "**Our Common Future**", World Commission on Environment and Development, Oxford: Oxford University Press (Cited in Baker, D. (1999): 6)
182. Welgraven, A. (1988), "**Subsidation, Not the Only Way to Attain Conservation**", in "New Ways of Funding the Restoration of the Architectural Heritage", Architectural Heritage Reports and Studies, No.13, pp. 30-46
183. West, B. (1988), "**The Making of the English Working Past: A Critical View of the Irınbridge Gorge Museum**", in Lumley, R. (ed.), "The Museum Time Machine", Putting Cultures on Display", London: Comedia/Routledge, pp. 6-62 (Cited in Blockley, M. (1999): 150)
184. Yavuz, E. (2000), "**19. Yüzyıl Ankara'sında Ekonomik Hayatın Örgütlenmesi ve Kentiçi Sosyal Yapı**", in Yavuz, Y. (ed.) (2000), "Tarih İçinde Ankara I", Proceedings of the seminar held in 1981, ODTÜ Mimarlık Fakültesi Yayınları, pp. 195-206
185. Yıldırım, H. (2001), "**Ankara Sanayiinin Gelişimi ve Mevcut Potansiyeli**", in Yavuz, Y. (ed.) (2001), "Tarih İçinde Ankara II", Proceedings of the seminar held in 1998, ODTÜ Mimarlık Fakültesi Yayınları, pp. 3-8
186. Yırtıcı, H. (2002), "**The Ideology of the Spatial Organization of Consumption**", in "Mimarlık ve Tüketim", Boyut Yayın Grubu, May 2002, İstanbul, pp. 9-38
187. Yücel, N. (1992), "**1957 Ankara İmar Planı**", Ankara Dergisi, Vol. 1, No: 4, October 1992, pp. 17-38
188. Yüzyıl Gazetesi, "**Ankara Müzelik Olmadan…**", August 26, 1990, pp. 50-51
189. Ziyaoğlu, R. (1971), "**İstanbul Kadıları, Şehreminleri Belediye Reisleri ve Partileri Tarihi**", İstanbul, pp. 295 (Cited in Tekeli, İ. (1982): 57)

APPENDIX A

INDUSTRIAL BUILDINGS IN ANKARA IN 1954

Flour mills (8 units)

- Ankara Değirmencilik Ltd. Şirketi
- Yıldırım Un Fabrikası Kom. Şirketi
- Yemak Ltd. Şirketi
- Cumhuriyet Un Fabrikası
- Bozkurt Un Fabrikası
- Boğaziçi Un Fabrikası
- Köprüköy Un Fabrikası
- Polatlı Un Fabrikası

Macaroni and Crushed Wheat Factories (3 units)

- Yayla Makarna Fabrikası
- Ankara Makarna Fabrikası
- Maltepe Bulgur Fabrikası

Milk and Butter Factories (3 units)

- Devlet Üretme Çiftlikleri
- Ragıp Alemdağ Tereyağ Fabrikası
- Enver İren ve Ortağı Pastörize Süt Fabrikası

Wineries and Beer Factories

- Ankara Bira Fabrikası
- Kavaklıdere Şarapları Fabrikası Ltd. Şirketi
- Hayyam Şarapları İmalathanesi
- Niğde Bağları Şarapları İmalathanesi
- Dikmen Şarapları İmalathanesi
- Dimnit Şarapları İmalathanesi

Biscuit Factories (2 units)

- Avni Çıngıllı
- Mehmet San

Soda Pup Factories (7 units)

- Münire Kutsal
- Mustafa Ökmen
- İrfan Hamamcı
- Halil Beşev
- Hüseyin Ünal
- Mehmet Erbek
- Mehmet Yavuz

Cement, Clay and Stone Factories (3 units)

- Ankara Çimento Fabrikası Ltd. Şirketi
- Mümtaz Yağcıoğlu ve Ortakları İlmut Toprak Sanayii Kol. Ş.
- Ahmet, Hayri, Hamdi Özoğlu Her Nevi Taş Kırma Kol. Ş.

Marble Factories (5 units)

- Sadettin Bulduk
- Rüştü Bulduk
- Hüsamettin Bozkurt
- Süleyman Akalın
- Mehmet Celal Hamamcı

Cold Iron Processing Workshops (10 units)

- Hersek Kardeşler
- Hüseyin Başaran
- Nurettin Demirkol
- Şaban Diri
- Ahmet Örs
- Mustafa Özdemir
- Mehmet İlatan
- H. Nail Seden
- Hüseyin Kemal Metinel
- M. Emin Örs

Casting Workshops (7 units)

- Ahmet Döker
- Kazım Gürcan
- İsmail Özipek
- Salih Dökmeci
- Celal Doruk
- Arif Kumcu
- Müştak Akgül

Lumber and Woodwork Workshops (20 units)

- İhsan Alanya
- Mehmet Çetinkaya
- Kasım Dağlıoğlu
- Mehmet Yılmaz
- Mehmet İnal
- Mehmet Emin
- Aki Yüksek
- Ziya Birbilen
- Ahmet Elsev
- Hasan Berkalp
- Süleyman Uyanık
- Ömer Yıldız
- Osman Birbilen
- Tahsin Dolgun
- Ziya Yalazı
- Arslan Acar
- Sabri Adalı
- Ömer Aydın
- Hakkı Başarır
- Mustafa Çetinkaya

Rubber Workshops

- Tarım Bakanlığı Kauçuk İstasyonu
- İhsan Yalçınlı
- Tahsin Fesatan
- Nurettin Manyas
- Hacı Nuri Köksal
- Hikmet İlkray
- Mustafa Arıca

- Mahmut Yetim
- Ali Erdem

Oxygen Factories

- Koç Ticaret T.A.Ş.

Electric Energy, Machine and Chemical Industry

- Elektrik, Havagazı ve Otobüs İşletmesi Müessesesi
- Makine ve Kimya Endüstrisi Kurumu
- Mask, cartridge, automobile and carpentery factories

Source: Ankara Belediyesi (1954), "Ankara Şehri Yeni İmar Planına Ait İmar Komisyonu Raporu", Doğuş Matbaası, Ankara, pp. 71-72

APPENDIX B

BOARD DECISION (DECEMBER 1990)

KÜLTÜR BAKANLIĞI
ANKARA KÜLTÜR VE TABİAT VARLIKLARINI
KORUMA KURULU

KARAR

Toplantı Tarihi ve No. : 13.11.1990 136
Karar Tarihi ve No : 13.11.1990 1477

Toplantı Yeri :
ANKARA

Ankara İli, Çankaya İlçesi, Maltepe Havagazı Fabrikası tesislerine ilişkin, TMMOB Mimarlar Odası, Ankara Şubesinin 7.11.1990 gün ve 822 sayılı yazısı okundu, ekleri incelendi, yapılan görüşmeler sonunda;

Ankara İli, Çankaya İlçesi, Maltepe Havagazı Fabrikası Tesislerinde EGO Genel Müdürlüğü ve Büyükşehir Belediyesince başlatılan yıkım işlemlerinin durdurulmasına, konunun Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu Büro Müdürlüğü elemanlarınca mahallinde incelenebilmesi için söz konusu tesislerin korunması plan üzerinde işaretlenerek Kurulumuza iletilmesine karar verildi.

Aslı Gibidir.
Gülce GÜNEL
Müdür

Prof.Dr.Güner TANKUT
BAŞKAN

Filiz OĞUZ
BAŞKAN YARDIMCISI

Üye	Üye	Üye	Üye	Üye
TANKUT(Güner)	OĞUZ(Filiz)	ERENDA(Güsael)	TOKLU(Gürkan)	YILMAZER(Enver)

Üye	Üye	Üye
SÖNMEZ(Müesser)	ENER (Semra)	
Çankaya Bld.	Büyükşehir Bld.	
Bşk.Mimarı	Bşk.Temsilcisi	

Source: T.C. Kültür Bakanlığı, Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, 13.11.1990, Board Decision, Sayı: 1477, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

APPENDIX C

OFFICIAL COMMUNICATION REPORT TO THE ANKARA CHAMBER OF ARCHITRECTS (NOVEMBER 1990)

İMMOB MİMARLAR ODASI ANKARA ŞUBESİ'NE RAPOR (ECO KONUSU)

6.12.1990

1. SAYISAL VERİLER

A) ALAN MÜLKİYET DURUMU:

Toplam Alan 57.270 m2

TEK Payı	17.775 m2	% 30
ECO Payı	31.139 m2	% 55
Ank.Beled.	9.300 m2	% 15

Not: Aşağıdaki bilgiler 20.8.1981 tarihli 5990 nolu Röleve'den(Plan'dan) çıkarıldı.

B) KORUNMASI İSTENİLEN YAPILARIN İŞGAL ETTİKLERİ YÜZÖLÇÜMÜ

Silindirler (Gazometreler)	2450 m2
Altıgenler (Soğutma Kuleleri)	1420 m2
Jeneratör Grubu	3150 m2
İdyapı Grubu	1400 m2
Toplam	9820 m2

C) İNŞAATA MÜSAİT ALAN YÜZÖLÇÜMÜ Toplam 23.000 m2
(Ort.3 kat 50.000 m2)

D) YEŞİL ALANA MÜSAİT ALAN YÜZÖLÇÜMÜ Toplam 17.500 m2

F) SONUÇ (OLASILIK ORANLARI) Toplam alan 58.000 m2 = %100

. İnşaat Alanı	23.000 m2	% 45
. Yeşil Alan	17.500 m2	% 30
. Korunacak Alan	10.000 m2	% 18
. Fire	8.000 m2	% 7
		%100

2. DEĞERLENDİRMELER

A) Alan üzerine şimdiye dek yapılan çalışmalar (toplantılar)'dan ECO Maltepe Havagazı Tesisleri geleceği hakkında iki değil üç görüş olduğu ortaya çıkmıştır.

1. Ankara Belediyesinin görüşleri
2. Mimarlar Odasının görüşleri
3. Şehir Plancıları Odasının görüşleri

Mimarlar Odası burada mevcut 'kentsel değerlerin' mutlak bir şekilde korunurken, dönemin koşullarından dolayı Büyükşehir Belediyesinin 'hareket' alanını 'yok var sayacak' çözümler yerine 'kontrol' edilebilecek 'modeller'i savunmalı. Daha doğrusu 'model'i : Belediyenin 'Rant' istemlerini çevreye 'strüktürel' zarar vermeyecek bir büyüklük ve içeriğe çeknek.

Şehir Plancıları Odası ısrarla çok hızlı yaşanan 'karar verme' süreçlerini görmezlikten gelerek (Büyükşehir Belediyesinin şimdiye dek benimsediği sürdürdüğü davranış biçimini) bu süreçleri adeta donduracak bir populist 'katılım' ve'halkçılık' fetişizmini içeren 'Model' i savunuyor. Ankara Belediyesi rahatlıkla bu 'populist' tavra dahil olur gibi gözükerek diğer görüşü fiilen tasfiye edebilir (Mimarlar Odasını)

B. Sayısal veriler alan içinde kentsel değerlere dokunmadan, zarar vermeden yeşil alanları hariç 40.000 m2 civarında inşaata (eklenmeye) izin vermektedir. Kızılayla olan bağlantı karakteri çözönüne alındığında bu rakam bile Maltepe Meydanı civarına azımsanamayacak bir 'yoğunluk' yüklemektedir. Sonuç olarak ; Havagazı Fabrikası Tesisleri yıkılırsa boşuna yıkılmış olacaktır. Çünkü burada alan 'tertemiz' yapılsa bile 100.000 m2'yi 'tatmin edecek' işlevler bulup yüklemek kentsel tasarım açısından zordur. Ölü 'mağaralar' oluşur. Yarışma programı 40-45 bin m2 üzerine kurulması sakıncasızdır. Bu miktarın %30'u Kültür-REkreasyona reserv edilmelidir.

C. Atölyeler arkası mutlaka (1/500) yada (1/1000) bazında olsa da yarışmaya dahil edilmelidir.

D, Mimarlar Odası Asli Jüri Üyeliği için baskı yapmalıdır. Danışman Jüri üyeliği yalnız başına yarışmanın 'içeriğini' etkilemeyecektir.

E. (D)de zikredilen fikir kapsamında, destekleyici mahiyette bir Mimarlar Odası teşvik ödülü (ödülleri) konulmalıdır. Belediye, ikna edilmeli 'mevzuat' izin vermiyorsa, duruma bir 'form' bulunmalıdır. Bu ödül tüm yarışmacıların dikkatini mevcut tesislere çevirmesi açısından hayatidir.

3. GENEL GÖRÜŞ

EGO Maltepe Havaçazı Fabrikası tesislerini koruyabilmek üzere yürütülecek politikalar artık bu aşamadan itibaren "Büyükşehir Belediyesi Yöneticileri" ya da Jüri'yi değil, yarışmacıları hedeflemelidir. Alanda yıkım yapmadan belediyenin rant isteğini tatmin etmek imkanı vardır. Fakat kentlerde bu tür alanların biçimlenişinde yöneticilerin alanı 'günahlarından arındırma' dan iş yapmama gibi bir geleneği var ve bu durumun 'psikolojisi' ni kırmak çok güç -

Source: TMMOB Mimarlar Odası Ankara Şubesi (1990), "TMMOB Mimarlar Odası Ankara Şubesi'ne Rapor 'EGO Konusu'", 12.11.1990, in the Archives of Ankara Chamber of Architects

APPENDIX D

BOARD DECISION (MARCH 1991)

KORUMA KURULU

KARAR

İş Tarihi ve No. : 19.3.1991 155
Tarihi ve No. : 19.3.1991 1679

Toplantı Yeri :
ANKARA

Ankara kentiçi gaz hizmetinde doğalgaz kullanımına geçilmesi ile işlerliğini yitiren EGO Maltepe Havagazı Fabrikasının yanısıra çok katlı otopark binası, TEK Elektrik Fabrikası arazisini içeren alanda Ankara Büyükşehir Belediyesi tarafından açılması düşünülen "Mimari Proje Yarışması" üzerine TMMOB Mimarlar Odası Ankara Şubesinin 2.11.1990 gün ve 822 sayılı yazısı, Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulunun 13.11.1990 gün ve 1477 sayılı kararı üzerine Kurulumuzun konuyla ilgili olarak 29.1.1991 günlü toplantısında alanın var olan yapısına ilişkin daha ayrıntılı bilgi gereksinimi üzerine Ankara Büyükşehir Belediye Başkanlığı EGO Genel Müdürlüğünün 20.2.1991 gün ve UPK.07.01/116-2982 sayılı yazısı okundu, yazı ekleri ve TMMOB Mimarlar Odası Şubesinin hazırladığı dosyadaki döküman incelendi;

Ankara Büyükşehir Belediye Başkanlığı İmar Daire Başkanının, Ankara Büyükşehir ve Çankaya Belediye Başkanlığı temsilcilerinin, TMMOB Mimarlar odası Ankara Şubesi Başkanının, TMMOB Şehir Plancılar Odaları Ankara Şubesi Başkanının, Kurul Büro Müdürlüğünün konuyla ilgili raportörlerinin sözlü açıklamaları dinlendi, yapılan görüşmeler sonunda;

Tarihi değeri olmayan değersiz ve çevreye uyumsuz yapıları yıkıp çevresel özelliklere uygun çağdaş mimari ile bütünleştirilerek yeni tasarımlarla çevrenin mimari niteliğinin yükseltilmesi ve çağdaş toplum gereksinimlerinin karşılanacağı kentsel mekanlar oluşturulması amacıyla;

Kararımız eki krokide gösterildiği gibi;

Ankara İli, Çankaya İlçesi, EGO Maltepe Havagazı Fabrikasını içeren alanda;

Ekli krokide kırmızı ile gösterime alınan Havagazı üretim tesisleri ile taşıma borularının, soğutma kulesinin vinç ve demiryolundan oluşan ve topluca bir bütünlük arzeden kuzeydoğu bölgesindeki sistemin Teras Sokağa cepheli konut yapısıyla yerinde korunmasına, verilecek işlevlerin ve gerekli koruma alanlarını yarışmacı tarafından önerilmesine,

o/oo

ANKARA KÜLTÜR VE TABİAT VARLIKLARINI
KORUMA KURULU

KARAR

Toplantı Tarihi ve No. : 19.3.1991 155
Karar Tarihi ve No. : 19.3.1991 1679

Toplantı Yeri :
ANKARA

- 2 -

Turuncu ile gösterime alınan Havagazı Deposunun (gazometro), elektrik üretim tesisleri bacalarının ve pompa istasyonun taşınarak korunabileceğine,

Sarı ile gösterime alınan kükürt arıtma tesisleri ve EGO Genel Müdürlüğü Binalarının korunmalarının önerilmesine ancak kararın yarışmacıları görüşlerine bırakılmasına,

Ayrıca;

Koruma konusuyla ilgili duyarlı girişimlerinden ve sağlıklı karar alınması konusunda birçok bilgi ve belge içeren titizlik içinde özenle dosya hazırlamalarından dolayı TMMOB/Mimarlık Odası Ankara Şubesi Doğal ve Kentsel Çevre Komisyonuna; TMMOB Şehir Plancıları Odaları Ankara Şubesine;

Kurulumuzun 29.1.1991 günlü toplantısında kendilerinden sözlü olarak istenilen belgeleri eksiksiz ve özenle hazırlayarak Kurulumuza sunan Ankara Büyükşehir Belediye Başkanlığı EGO Genel Müdürlüğü, Ulaşım ve Raylı Sistem Dairesi Başkanlığına teşekkür edilmesine karar verildi.

Prof.Dr.GÖNÜL TANKUT
BAŞKAN

FİLİZ OĞUZ
BAŞKAN YARDIMCISI

Üye TANKUT(Gönül) Üye OĞUZ(Filiz) Üye RENDA(Günsel) Üye TOKLU(Gürkan) Üye YILMAZER(Enver)

Üye SÖNMEZ(Müesser)
Çankaya Bld.Eğk.
Temsilcisi
Üye Üye

Source: T.C. Kültür Bakanlığı, Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu, 19.3.1991, Board Decision, Sayı: 1679, in the Archives of Ankara Chamber of Architects

APPENDIX E

OFFICIAL COMMUNICATION REPORT ABOUT THE MALTEPE GAS FACTORY

Sermayesi : 1.250.000.000 TL.
Adres : Toros Sok. No. 26 - Ankara

İNMAL İNŞAAT VE TESİS DAİRESİ BAŞKANLIĞI

14 Etüt Proje Müd.

16 - 7985

Maltepe Havagazı Fab.
Tesisleri Hk.

T.C. KÜLTÜR BAKANLIĞI
ANKARA KÜLTÜR VE TABİAT VARLIKLARINI KORUMA KURULUNA

İlgi : 24.4.1991 gün ve 552 sayılı yazınız ve ekli 19.3.1991 tarihli 1679 sayılı kurul kararı

İlgi yazınız ekli kurul kararında Maltepe ZGO arasılsında kurulan koruma altına alınan yapılar belirtilmektedir.

Ancak bu yapıların korunması için kuruluğunuza başvuruda bulunulmadan önce Genel Müdürlüğümüzce yapılmış olan yıkım ihalesi neticesinde, bu yıkım Genel Müdürlüğümüzle İdari Emeğimizce durdurulana kadar, üstlenici firma bazı yapılarda söküm ve yıkım işlemini büyük ölçüde yapmış ve sökülen malzemeyi götürmüştür.

Kararınızda bu söküm ve yıkım işlemine uğramış bazı yapılarında korunması istenilmektedir.

Şöyleki, koruma kararınızda belirtilen yapılardan:

1. Gaz üretim ocaklarının tuğlaları ve iç tesisatı büyük ölçüde sökülmüştür. Bu yıkılmış durumdan dolayı bu yapılar şu anda tehlikeli bir durum göstermektedir.

2. Kararınızda korunması istenilen demiryolu hattının 65 mt.'lik bir bölümü müteahhit tarafından sökülmüş ve malzemesi götürülmüştür.

3. Kararınızda korunacak ancak yeri değiştirilebilir olarak belirtilen gazometrenin yerden 30-40 cm'den üstü müteahhit tarafından sökülmüş ve malzemesi götürülmüştür.

4. Kararınızda korunması istenilen vinç, boru hattı (Flanjlar ve vanalar hariç) ve Genel Müdürlük Lojmanı ile, korunması kararı yarışmacılara bırakılan kükürt arıtma tesisleri ve Genel Müdürlük Binası sağlam vaziyettedir.

5. Korunması istenilen su soğutma kulesi ile Elektrik Fabrikası Bacaları EGO arazisinde değil TEK arazisinde bulunmaktadır. Ve bunların korunması konusunda Genel Müdürlüğümüzün yapabileceği birşey yoktur.

Yukardaki açıklamalar ışığında uyulmasına olanak olmayan koruma kararınızın kaldırılmasını, bu olmadığı takdirde şu andaki gerçek duruma uyacak şekilde değiştirilmesini arz ederiz.

EK: Mevcut durumu gösterir
Kroki (1 Ad.)

C.Cihan ALTINÖZ
Genel Müdür

Emin ATASOY
Genel Müdür Yrd.

ÜRETİM OCAKLARI VE DİĞER ÜNİTELER
~~HAFTANIN İMİŞ~~

1-4 OCAKLAR

1. Bu ocakların alt gaz giriş KOLLEKTÖRLERİ ile GAZ AYAR VANALARI söküldü. Bir kısmı parçalanıp satıldı.(Bir kısmı fabrika sahasında)
2. Ocak üstü kamara KAPAK ve KASNAK'larının tamamı yerinden söküldü
3. Gaz çıkış DEVEBOYNU BORULARI ile FORLAGE ÇANAKLARI'nın bir kısmı tamamen söküldü. Bir kısmı yerindedir.(Sökülenler satıldı.)
4. Ocak üstü REKİPRATÖR kısmının tuğlaları ile KAMARA tuğlalarının büyük bir bölümü söküldü. Tuğlaları altında bekletiliyor.

5-6 OCAKLARDA

1. Jeneratör gazı giriş KOLLEKTÖRLERİ ile GAZ AYAR VANALARI söküldü ve satıldı. (Bir kısmadı fabrika sahasında)
2. Alt gaz çıkış boruları söküldü. (satılmıştır.)
3. Ocak üstü KAMARA KAPAK ve KASNAKLARI söküldü.(satılmıştır.)
4. Ocak üstü deveboynu ile gaz çıkış ara borularının tamamı söküldü bir kısmı satılmış, bir kısmı fabrika sahasında.

7-8 OCAKLARDA

1. Jeneratör gaz giriş ANA KOLLEKTÖRLERİ ile GAZ AYAR VANALARI söküldü ve ocak altında fabrika sahasındadır.
2. Arka alt gaz çıkış boruları söküldü. (satılmıştır.)
3. Ocak üstü Deveboyunlarının 5 tanesi daha ocaklar işletmede iken tarafımızdan sökülerek diğer ocaklarda kullanılmak için alınmıştı Diğer kalan 5 tanesi (ulaca firma tarafından) söküldü alında.
4. Ocak üstü REKÜPRATÖR TUĞLALARI'ndan bir kısmı söküldü, tuğlası ocak altındadır.

9-10 OCAKLARDA

1. Bu ocağın ~~sadece~~ alt JENERATÖR GAZ Giriş KOLLEKTÖRLERİ söküldü. Fabrika sahasında.

~~2. Ocak üstü KAMARA KAPAKLARI alındı~~

~~3. Bunun JENERATÖRÜNÜN BİR~~ kısmı söküldü. Fabrika sahasındadır.

831 28.5.83

DİĞER ÜNİTELER

1. Fabrika sahasında bulunan 3 adet GAZOMETRE'den her üçüde sökülerek sahaya dönüştürüldü.
2. Ocaklardan çıkan Makina Dairesi ile EMİCİLER arasındaki büyük emiş hattı borularının tamamı yerinde, ancak eklem yerlerindeki civataları söküldü.
3. Fabrika sahasındaki 4 adet GAZ SOĞUTUCULARI yerinde olup, bir kısmının içindeki petekleri dışarı alınarak kesilmiştir. (kapakları dahil) fabrika sahasında.
4. EMİCİ DAİRESİNDE bulunan 2 Elektrikli, 1 buharlı emici tam kapasite faal vaziyette durmakta, ancak gaz çıkışı (dış kısmındaki) basınç boruları söküldü, bir kısmı fabrika sahasında.
5. 2 tane KATRAN AYIRICI'dan büyük olanı sistemleri ile birlikte (yüklenici) firma tarafından İZMİR-ESHOT Genel Müdürlüğüne satıldı. Diğer küçük KATRAN AYIRICI tam faal durmakta olup, çıkış ara boruları kesilip alındı.
6. 2 tane NAFTALİN AYIRICI ve donanımı yerindedir.
7. 2 tane AMONYAK AYIRICI'dan küçük olan 1 tanesi (dışarıda olanı) kesilip parçalandı ve satılmıştır. Diğer büyük bir tanesi tam sistem durmaktadır.
8. KÜKÜRT TUTMA kasalarından üst 2 tane kapak alındı, alt sifon sistemleri söküldü, gaz giriş ve çıkış boruları kesildi, yerlerinde (altlarında) durmakta
9. 2 tane GAZ SAYACI tam faal ve sistemleri ile yerinde duruyor.
10. Fabrika sahasında şehir gaz çıkışları ile gazometreler arası paralel vanaları ve depo giriş-çıkış vanaları ile direkleri yerlerinden söküldü, sökülen parçalar fabrika sahasındadır.
11. Kömür vinci bırakıldığı şekli ile tam sistem yerindedir.
12. Demiryolu raylarının bir bölümü söküldü, sökülenler satılmış olup, diğer bir bölümü yerinde durmaktadır.
13. Fabrika içerisindeki ve tüm ünitelerdeki ELEKTRİK MOTORLARI daha ihaleden önceleri fabrika elemanlarına söktürülüp depolarımıza alınmıştı.
14. Fabrika içerisinde bulunan tüm elektrik sayaçları sökülerek tutanakla TEK'e teslim edildi.
15. 25.10.1990 tarihinden itibaren şifai sözle durdurulması istenen yerlerde hiçbir kesim, söküm işlemleri yapılmamıştır.

M.Selim ERİK
Komisyon Başkanı

Source: Ankara Elektrik Havagazı ve Otobüs İşletme Müessesesi, İkmal ve Tesis Dairesi Başkanlığı, 14 Etüd Proje Müd., 20.5.1991, Official Communication Report, 16-7985, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

APPENDIX F

PHOTOGRAPHY ALBUM

AERIAL PHOTO

AERIAL PHOTO

AERIAL PHOTO

AERIAL PHOTO

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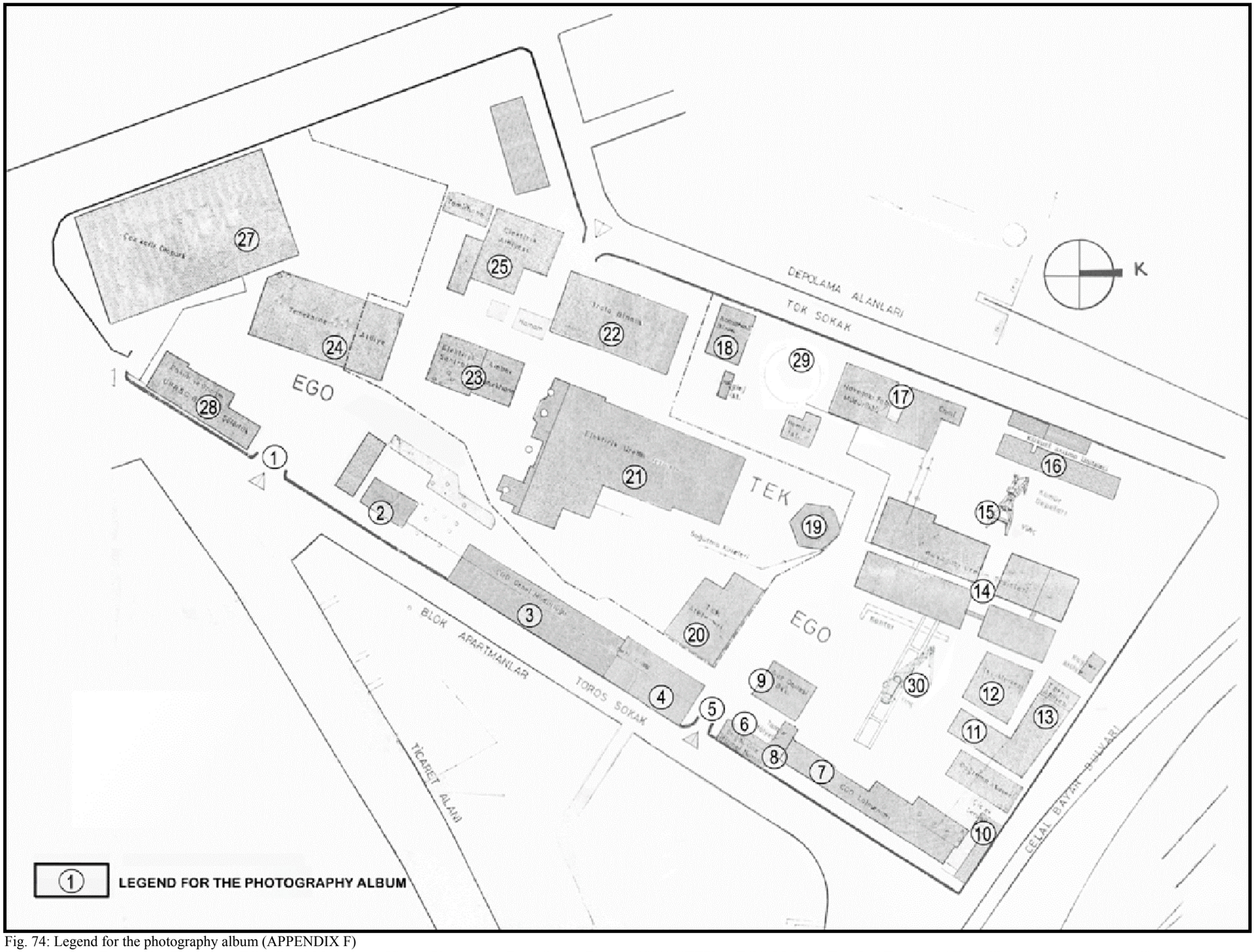

Fig. 74: Legend for the photography album (APPENDIX F)
Source: Ankara Büyükşehir Belediyesi, EGO Genel Müdürlüğü, Ulaşım Planlama ve Raylı Sistem Dairesi (1991), "**TEK ve EGO Maltepe Tesisleri Fotoğraf Albümü**", in the Archives of the Chamber of Architects

APPENDIX G

COURT DECISION (JANUARY 1993)

T.C
A N K A R A
7.İDARE MAHKEMESİ
ESAS NO :1991/687
KARAR NO :1993/19

DAVACI : EGO Genel Müdürlüğü
VEKİLİ : Av.Necmi Kuzucu,
Toros Sok.No:20 Sıhhiye-ANKARA
DAVALI : Kültür Bakanlığı-ANKARA

DAVANIN ÖZETİ : Davacının,Kültür Bakanlığı,Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulunun 19.5.1991 gün ve 1679 sayılı kararının iptali istemine ilişkindir.

SAVUNMANIN ÖZETİ : Savunma süresinde verilmemiştir.

TÜRK MİLLETİ ADINA

Hüküm veren Ankara 7.İdare Mahkemesince önceden belli edilen 15.4.9 günündeki duruşmaya davacı kurum vekili Av.Necmi Kuzucu ile davalı idare temsilcisi hukuk müşaviri Feyriye Çallının geldikleri görülerek taraflara usulüne uygun söz verilip dinlendikten sonra duruşmaya son verilip ve 9.7.1992 günlü keşif sonucu bilirkişilerce düzenlenen rapor ve dosya incelenerek gereği görüşüldü:

Dava,T.C.Kültür Bakanlığı,Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulunun davanın özeti bölümünce tarih ve sayısı yazılı kararının; koruma altına alınan Meltepe Havagazı fabrikası üretim tesislerinin 2863 sayılı yasanın 7(a) 1.ve 5.maddelerine girmediği,işlemini sürdüremiyecek ölçüde harap durumdaki tesisin korunmaya alınmasının Ankara'yı güzelleştirme çabalarına aykırı düştüğü koruma kararından önce,söz konusu tesislerin yıkıldığı ve tekrar yerine getirilmesinin mümkün bulunmadığı iddialarıyla iptali istemiyle açılmıştır.

Mahkememizce uyuşmazlık konusu yerle ilgili olarak alınmış bulunan dava konusu kararın ve bu karara konu tesisin sanat ve mimarlık tarihi, korunması gerekli kültür ve tabiat varlığı olma açısından durumunun ve tesisin bu günkü durumu bakımından Ankara'nın kent olma karakteri kültü etkinliğinin tesbiti bakımından mahallinde keşif ve bilirkişi incelemesi yaptırılmasına karar verilmiş ve yapılan inceleme sonucu,Dil ve Tarih Coğrafya Fakültesi Sanat Tarihi Bölümü Öğretim Üyeleri olan bilirkişiler Dr.Kıymet Giray (Cumhuriyet Dönemi Sanat Tarihi),Yrd.Doç.Dr.Mehmet Tunç ve Yrd.Doç.Dr.Bozkurt Ersoy (mimarlık tarihi)tarafından düzenlenen ve bir nüshası dosyaya konulan 1.12.1992 havale tarihli raporda özetle; fabrikanın EGO mülkiyetinde bulunan üniteleri,özellikle tesisat aksamı olmak üzere kısmen söküldüğü,bir kısmının ise uzun yıllar bakımsızlık sonucu

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A N K A R A
7. İDARE MAHKEMESİ
ESAS NO :1991/687
KARAR NO :1993/19

oluşan harabiyetin yanısıra söküm işlemleri sırasında tahrip olduğu,b
haliyle fabrika işlerliğini gösterebilecek nitelikteki fonksiyonel il
kilerin ortadan kalktığı ancak bu tesisin ithal bir teknoloji olarak
rihi perspektif içerisinde Ankara ve şehircilik itibariyle önemli bir
tesis olduğunda kuşku bulunmadığı,bazı bölümleri tahrip olsa da halen
mevcut bölümlerden seçilmiş bir kısmının korunmasıyla dahi,zamanında
havagazı üreten bu fabrikanın kent çelişiminde oluşturduğu basamak ye
seçimi ve fiziki çehresiyle açıkça algılanabileceği gibi,kurulduğu dö
nün bilim ve teknik seviyesini yelecek kuşaklara aktarma görevini de
yükleneceğinden yeni bir fonksiyon ve hayatiyat kazanacağı,görüşlerin
yer verilmiştir.

Taraflara tebliğ edilen bilirkişi raporuna davacı kurum tarafında
itiraz edilmiş ise de,bilirkişi raporu ile yapılan değerlendirme ve v
rılan sonuç Mahkememizce de yerinde görülmüştür.

Bu durumda dava konusu Ankara Kültür ve Tabiat Varlıklarını Korum
Kurulu raporunda hukuka aykırılık görülmemiştir.

Açıklanan nedenlerle davanın reddine,yargılama giderlerinin davac
Üzerinde bırakılmasına,artan posta giderinin istendiğinde davacıya iad
sine,danıştay yolu açık olmak üzere 13.1.1993 gününde oybirliği ile k
rar verildi.

BAŞKAN	ÜYE	ÜYE
ŞEVKET ATALAR	HAYRETTİN ÖZDEMİR	BİRİZ GÜRSU
26381	26447	27396

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Source: T.C. Danıştay, Yedinci Daire, 13.1.1993, Court Decision, Esas No: 1991/687, Karar No: 1993/19, in the Archives of the Chamber of Architects

APPENDIX H

COURT DECISION (JUNE 1994)

T.C
D A N I Ş T A Y
Altıncı Daire
Esas No:1993/3899
Karar No:1994/2657

Temyiz İstemnde Bulunan : EGO Genel Müdürlüğü

Vekili : Av. Necmi Kuzucu-Toros Sok. No:20 Sıhhiye/ANKARA

Karşı Taraf : Kültür Bakanlığı

İstemin Özeti : Ankara 7. İdare Mahkemesinin 13.1.1993 günlü, E:1991/687, K:1993/19 sayılı kararının usul ve yasaya aykırı olduğu öne sürülerek bozulması istenilmektedir.

Savunmanın Özeti: Temyiz edilen kararda bozma nedenlerinden hiçbiri bulunmadığından, usul ve kanuna uygun olan kararın onanması gerektiği savunulmaktadır.

Tetkik Hakimi Ayhan Arıkan'ın Düşüncesi : Dosyanın incelenmesinden, dava konusu işlem ile korunmasına karar verilen sanayi tesisinin kültür varlığı olarak bir özellik taşımadığı, bu hususun bilirkişi kurulunca da belirlenmesine karşın tesisin Sanayi Arkeolojisi kavramı kapsamında değerlendirilmesi ve bu kapsamca korunması gerektiğinin belirtildiği, ancak bu kavramın açıklanmadığı ve 2863 sayılı Yasa çerçevesinde değerlendirmesinin yapılmadığı gibi tesisin bulunduğu konum itibariyle kamu yararı açısından incelemeye yapılmadığı anlaşılmaktadır.

Bu durumda, eksik incelemeye dayalı bilirkişi raporu esas alınarak verilen İdare Mahkemesi kararının bozulması gerektiği düşünülmektedir.

Savcı Orhan Çıkbaş'ın Düşüncesi : Dosyanın incelenmesinden, Ankara'da doğalgaz kullanımına geçirilmesi nedeniyle, davacı E.G.O. Kurumunun Güvercinlik ve Maltepe havagazı fabrikalarının üretim dışı kaldığı, buradan çıkacak malzemenin satışına sokulmasının bir firmaya verilmesine karar verildiği ve büyük bir kısmının da yıkıldığı anlaşılmaktadır. Ayrıca davacı tarafından havagazı deposu (gazometre) taşınarak korunmaya alınmıştır.

Bu tesisin bir bina olmadığı ve sanatsal ve mimari bir özelliğinin bulunmadığının kabulünün uzman olmaya gerek bulunmadığı tabiidir. Güzel sanatlar bakımından bir kıymet ifade etmediğinin ve buradan tesisin kalkmasıyla yerine rant getirecek bir yapının da, inşa edilebileceğinin kabulü gerekir.

T.C
D A N I Ş T A Y
Altıncı Daire
Esas No:1993/3899
Karar No:1994/2657 -2-

Bu nedenlerle, hukuka uygun bulunmayan, mahkeme kararının bozulmasının uygun olacağı düşünülmektedir.

TÜRK MİLLETİ ADINA

Karar veren Danıştay Altıncı Dairesince Tetkik Hakiminin açıklamaları dinlendikten ve dosyadaki belgeler incelendikten sonra işin gereği görüşüldü:

Duruşma yapılmasına gerek görülmedi.

Dava, Çankaya ilçesi, EGO Maltepe Havagazı fabrikasını içeren alanda bir kısım yapının korunması yolundaki 19.3.1991 günlü, 1679 sayılı Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu kararının iptali istemiyle açılmış; İdare Mahkemesince, yerinde yaptırılan keşif ve bilirkişi incelemesi sonucu düzenlenen rapor ile dosyadaki bilgi ve belgelerin incelenmesinden, fabrikanın özellikle tesisat aksamı olmak üzere kısmen söküldüğü, bir kısmının ise uzun yıllar bakımsızlık sonucu tahrip olduğu, bu haliyle fabrika işlerliğini gösterebilecek nitelikteki fonksiyonel ilişkilerin ortadan kalktığı, ancak bu tesisin ithal bir teknoloji olarak tarihi perspektif içerisinde Ankara ve şehircilik itibariyle önemli bir tesis olduğunda kuşku bulunmadığı, bir kısmının korunmasıyla dahi zamanında havagazı üreten bu fabrikanın kent gelişiminde oluşturduğu basamak, yer seçimi ve fiziki çevresiyle açıkça algılanabileceği gibi, kurulduğu dönemin bilim ve teknik seviyesini gelecek kuşaklara aktarma görevini de yükleneceğinden yeni bir fonksiyon ve hayatiyet kazandıracağı, bu durumda dava konusu işlemde hukuka aykırılık görülmediği gerekçesiyle davanın reddine karar verilmiş, karar davacı idare tarafından temyiz edilmiştir.

Dava konusu işlem ile EGO havagazı fabrikası alanında, havagazı üretim tesisleri ile taşıma borularının, soğutma kulesinin, virç ve demiryolundan oluşan ve topluca bir bütünlük arzeden kuzeydoğu bölgesindeki sistemin Toros sokağa cepheli konut yapısıyla yerinde korunmasına, havagazı deposunun, elektrik üretim tesisleri bacalarının ve pompa istasyonunun taşınarak korunabileceğine, kükürt arıtma tesisleri ve EGO Genel Müdürlüğü binalarının korunmalarının önerilmesine, ancak kararın yarışmacıların görüşlerine bırakılmasına karar verilmiştir.

Bilirkişi raporunun incelenmesinden, dava konusu işlem ile korunmasına karar verilen yapıların türü, şekli, sanat ve mimarlık açısından özellik taşıyıp taşımadıklarının incelenmediği ve bu hususların değerlendirmede esas alınmadığı, ayrıca tesislerin bulunduğu konum itibariyle üstün kamu yararı yönünden de inceleme yapılmadığı anlaşılmaktadır. Öte yandan, tesislerin kavram ve terim olarak yeterli seviyeye ulaşamadıkları, mevzuata da açık bir ifadeyle

T.C
D A N I Ş T A Y
Altıncı Daire
Esas No:1993/3899
Karar No:1994/2657

girmemiş oldukları belirtilmesine rağmen genel bir ifade ile Sanayi Arkeolojisi olarak belirtilen kavram kapsamında değerlendirilmek suretiyle korunmaları gerektiği sonucuna varılmış, ancak Sanayi Arkeolojisi terimi de 2863 sayılı Yasa hükümleri gözönünde bulundurularak değerlendirilmemiştir.

Bu durumda, sözkonusu sanayi tesislerinin yapı olarak sanat ve mimarlık açısından önem taşımadığı anlaşıldığından, bir başka yere taşınarak diğer taşınabilir bölümlerle birlikte değerlendirilebilmesinin mümkün olup olmadığının yukarıdâ belirtilen hususlar da gözönünde bulundurulmak suretiyle araştırılıp sonucuna göre karar verilmesi gerekmektedir.

Açıklanan nedenlerle temyize konu Ankara 7. İdare Mahkemesinin 13.1.1993 günlü, E:1991/687, K:1993/19 sayılı kararının BOZULMASINA, 38.400 lira karar harcı ile fazladan yatırılan 28.700 lira harcın temyiz isteminde bulunana iadesine, dosyanın adı geçen mahkemeye gönderilmesine 22.6.1994 gününde oybirliğiyle karar verildi.

Başkan	Üye	Üye	Üye	Üye
Gürbüz	Salim	Yaşar Selim	Tülay	Bekir
ÖNBİLGİN	TANSUK	ASMAZ	TUĞCU	AKSOYLU

KA

Source: T.C. Danıştay, Altıncı Daire, 22.6.1994, Court Decision, Esas No: 1993/3899, Karar No: 1994/2657, in Archives of the Chamber of Architects

APPENDIX I

COURT DECISION (1995)

ESAS NO : 1994/1356
KARAR NO: 1995/1281

DAVACI : EGO Genel Müdürlüğü
VEKİLİ : Av.Necmi Kuzucu
Toros Sok. No: 20 Sıhhiye-ANKARA
DAVALI : Kültür Bakanlığı-ANKARA
DAVANIN ÖZETİ : Davacının, Kültür Bakanlığı, Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulunun 19.3.1991 gün ve 1679 sayılı kararının iptali istemine ilişkindir.
SAVUNMANIN ÖZETİ : Savunma süresinde verilmemiştir.

TÜRK MİLLETİ ADINA

Hüküm veren Ankara 7.İdare Mahkemesince Danıştay Altıncı Dairesinin 22.6.1994 gün ve E:93/3899, K:94/2657 sayılı bozma kararına uyularak 13.1.1995 gün ve E:91/587, K:93/19 sayılı kararımız kaldırılıp, 24.4.1995 günlü keşif ve bilirkişi raporu ile dosyadaki belgeler incelenip gereği görüşüldü:

Dava, T.C.Kültür Bakanlığı; Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulunun davanın özeti bölümünde tarih ve sayısı yazılı kararının; koruma altına alınan Maltepe Havagazı fabrikası üretim tesislerinin 2863 sayılı yasanın 2 (a) 1.ve 6.maddelerine girmediği, işlevini sürdüremeyecek ölçüde harap durumdaki tesisin korumaya alınmasının Ankara'yı güzelleştirme çabalarına aykırı düştüğü koruma kararından önce, söz konusu tesislerin yıkıldığı ve tekrar yerine getirilmesinin mümkün bulunmadı iddialarıyla iptali istemiyle açılmıştır.

Mahkememizce uyuşmazlık konusu yerle ilgili olarak alınmış bulunan dava konusu kararın ve bu karara konu tesisin sanat ve mimarlık tarihi, korunması gerekli kültür ve tabiat varlığı olma açısından durumunun ve tesisin bu günkü durumu bakımından Ankara'nın kent olma kerekteri kültürel etkinliğinin üstün kamu yararı yönünden tesbiti ile söz konusu tesislerin başka bir yere taşınarak taşınabilir diğer bölümlere birlikte değerlendirilmesinin mümkün olup olmadığı yönlerinden mahallinde keşif ve bilirkişi incelemesi yaptırılmasına karar verilmiş ve yapılan inceleme sonucu Serbest Mimar (Sanatçı) Mükremin Fungan, Baş Mimar Oya Halbantoğlu, Yüksek Mimar Planlama ve Sanat Tarihçi Erol Ersen tarafından düzenlenen ve bir nüshası dosyaya konulan 18.5.1995 havale tarihli raporda aynen; "-Maltepe Havagazı fabrikası T.C.Kültür Bakanlığı Kurul kararına rağmen kararı izleyen süreçte fabrikanın ve müştemilatlarının inşai ve fiziki müdahalelerde bulunulmuş bu nedenlede yapıldığı sürecin teknolojik vasıf ve özelliklerini yansıtan bölümlerinin tahrip edilmesine, yıkılma

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sına neden olmuştur. 2863 nolu yasanın 9.maddesi ihlal edilmiştir.

a) Bu sürecin ne zaman yapıldığı konusunda kesin veri yoktur.

b) Bu tesbit 24.04.1995 günündeki keşif ve incelemede tesbit edilmiştir.

c) Yakın döneme kadar işlerini yerine getiren fabrikanın kısmen yapılan söküm sırasında da tahrip edildiği tesbit edilmiştir.

Yukarıdaki açıklamalara bağlı olarak uzun yılların bakımsızlığından, söküm işleri sırasında tahribat yapılmasına rağmen ve son durumu ve görünümüyle fabrika tesislerinin yapı birimleri arasındaki görsel işlev ve ilişkiler algılanmaktadır. Birimler içinde gerek sökümlerin artıkları gerekse sonradan oraya atılmış boru, makina parçaları yapıları hurdalık görünümüne büründürülmüşse de bu haliyle fabrikanın teşkil yapılan ve aralarındaki ilişkilerin bütünlüğü bozulmamıştır. Hizmet dışı bırakılmış ve bakımı yapılmayan teknolojik her yapıda görülebilecek bir durum arzetmektedir.

- Genç Cumhuriyetin Başkenti Ankara için Havagazı üretme, aydınlatma ve yan ürünleri ile yapıldığı günün en ileri teknolojisi ile oluşturulan fabrika yapısı ve tesislerinin makina ekipmanı günün teknolojisini yansıtmakla birlikte ilgili firmaların imalat ekipmanlarında isimlerini taşımaktadır.

a) Ankara kentinin ilk dönemlerinde kent dışında yer alan bu yapı günümüzde her ne kadar odak noktalarından birinde yer alsada Ankara kent ve şehircilik gelişmesinin de önemli nirengi noktalarındanbiridir. Bulunduğu şehir parçasını yapı kitlesi ile tariflemektedir. Bu nedenle genç Cumhuriyetin mimarlık tarihi açısından belirli endüstriyel yapılar kategorisinin önemli değerlerinden biri olup Cumhuriyetin bu yolda aldığı teknolojik ilerlemeyi ispatlayan yapılardandır.

b) Üniversite kenti olan Ankara'nın makina, kimya, endüstriyel tasarım ve mimarlık eğitimi veren akademik kurumlar için araştırma ve canlı müze olarakta örnek teşkil edecek nitelliktedir.

c) Ülkemizde Maltepe Havagazı Fabrikası özelliğinde sanayi tesisleri yenilemeler nedeniyle yitirilmiştir. O dönemini yansıtması bakımından benzeri tesislerin azalmış olması nedeniyle bu ve benzer fabrika ve tesislerin makina ve yapı birimlerinin korunması gereklidir.

d) Endüstri çağına gelmiş dünya ve ülkemizde sanayi gelişmesinin nedeni, makina ve ekipmanlarının bile kendi çevrelerinde korunması teknoloji ve bilim tarihinin canlı kanıtları olarak korunmakta, yaşatılmakta ve ilgililerine sunulmaktadır. Bu gerekçeyle Maltepe Havagazı Fabrikası

.../...

bu özellikleri ile "Sanayi Arkeolojisi" olarak literatürde tanımlanan yapıya uyuşmaktadır.

-Mekan ve yapı tarihi içerisinde gözlenen ve nitleştirilen yapı evreleri toprak, ahşap, taş ve çelik yapılardır. Ülkemizde bu bağlamda özgün yapılar vardır. Keltepe Uçaksavar Fabrikası ve tesisleri konstrüktif yapı itibariyle pişirilmiş toprak, ahşap, metal konstrüksiyonların işlevleri gereği oluştuğu günün özelliğini ve imalat tarzını sergilemektedir. Söz konusu yapı elemanları bir bütünlük içinde kullanılmıştır.

a) Her yapı kendi işlevinin biçim ve estetiğini taşımaktadır.

b) Bağımsız yapılar işlevlerinin sonucu olarakda birbirleriyle ilişkilidir ve bir bütünlük oluşturmaktadır.

c) Ankara kentindeki yapı tarzları yönünden de farklı ve işlevine uygun bir kişiliği ve oluşumu vardır.

Yukarıdaki nedenlerle yapı işlevindeki bütünlük malzeme seçimi günün yapı tekniği ve işçiliğini kanıtlaması bakımından estetiktir ve sanat değeri vardır.

- Keltepe Uçaksavar Fabrikası başka bir mekana ve mekanlar dizisine taşındığında;

a) Sökülmesindeki zorluklar ve ekipman sayısı büyük olacaktır. % 70'ine yakını yitirilecektir.

b) Sökün işlemleri yapıldığı dönemin işçiliğini gerektirmektedir. Bu anlamda da işçi ve uzman ekip yoktur.

c) Taşıma maliyetleri yüksektir ve ekonomik değildir.

d) Montaj maliyeti yüksektir ve ekonomik değildir.

e) Kent mekanındaki konumu, ifadesi ve ifadelendirilmesini yitirecektir.

f) EGO'ya ve TEK'e ait birimlerin ve tesislerin taşınması söz konusudur.

h) Yeralt ekipmanlarının sökülmesi sırasında büyük yangın ve güvenlik önlemleri gereklidir. Önlemler alınsa bile tümünün sökülüp götürülmesi olası değildir.

SONUÇ

-Keltepe Uçaksavar Fabrikası 2863 sayılı yasa kapsamındaki değerlerdendir.

-Cumhuriyet dönemimin teknolojisini ve mimarisini yansıtan bir yapı bütünlüğüdür.

-Mimari yönden dönemin tarihi ve estetik anlayışını taşımaktadır.

ESAS NO : 1994/1356
KARAR NO: 1995/1281

yerde teşhiri için yapılacak harcamaların ekonomik değeri birbirine yakındır." görüşlerine yer verilmemiştir.

Taraflara tebliğ edilen bilirkişi raporuna davacı kurum tarafından itiraz edilmiş ise de; bilirkişi raporu ile yapılan değerlendirme ve varılan sonuç Mahkememizce de yerinde ve karar vermeye yeterli bulunmuştur.

Bu durumda dava konusu Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu kararında hukuka aykırılık görülmemiştir.

Açıklanan nedenlerle davanın reddine, yargılama giderlerinin davacı üzerinde bırakılmasına, artan posta giderinin başvuru halinde davacıya iadesine, 12.10.1995 tarihinde oybirliği ile karar verildi.

Başkan	Üye	Üye
Şevket ATALAK	Biriz [illegible]	Semra ŞENTÜRK
26381	27396	27048

Source: T.C. Danıştay, Yedinci Daire, Court Decision, Esas No: 1994/1356, Karar No: 1995/1281, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

APPENDIX J

EXPERT REPORT ABOUT THE MALTEPE GAS FACTORY (NOVEMBER 2003)

T.C.
GAZİ ÜNİVERSİTESİ
FEN-EDEBİYAT FAKÜLTESİ DEKANLIĞI

ANKARA
21 KASIM 2003

Sayı : B.3.2.GÜN.0.13.00.00.10/05-210-
Konu :

BAŞKENT ELEKTRİK DAĞITIM A.Ş.
GENEL MÜDÜRLÜĞÜNE

İLGİ:04.11.2003 tarih ve TED.5.01.1538-029472 sayılı yazınız.

Müdürlüğünüze ait harabe durumunda olan Elektrik Fabrikası bacaları ile ilgili olarak Fakültemizden bilirkişi olarak görevlendirilen öğretim üyelerinin raporu yazımız ekinde gönderilmektedir.

Bilgilerinizi rica ederim.

Prof.Dr.Cemil YILDIZ
DEKAN

Ek:2

T.C.
GAZİ ÜNİVERSİTESİ
FEN-EDEBİYAT FAKÜLTESİ DEKANLIĞI
SANAT TARİHİ BÖLÜM BAŞKANLIĞI

Sayı: B.30.2.GÜN.0.13.00.00.14-059/224 ANKARA
Konu: 17.11.2003

FEN-EDEBİYAT FAKÜLTESİ DEKANLIĞINA

İLGİ : 01.11.2003 tarih ve B.15.2.TED.5.01.1538 sayılı yazınız ;

Başkent Elektrik Dağıtım A.Ş.Genel Müdürlüğü, Sistem İşletme Müdürlüğü 'nce Bölümümüzden istenilen ve bilirkişilerce verilen ortak bilirkişi raporu ilişikte sunulmuştur.
Gereği bilgilerinize saygılarımla arz olunur.

Prof. Dr. Hakkı ACUN
BÖLÜM BAŞKANI

Eki :

1- 2 Sayfa Bilirkişi Raporu

Ortak Bilirkişi Raporu

Genel Müdürlüğünüz Maltepe Tok sokak No : 6 adresinde bulunan, kömür ısıs ile elektrik üreten ve 1983 yılında çalışmalarına son verilen Elektrik Fabrikasına ait bacaların sökülerek kaldırılmasına yönelik yazınız ekindeki dosya ve rapor ile bacalar yerinde incelenerek kişisel görüş ve düşüncelerimiz aşağıda sunulmuştur.

Başkent Elektrik Dağıtım A.Ş Genel Müdürlüğü'ne ait olan G.M.K. Bulvarı Tok sokak No : 6 adresinde yer alan, kömürle elektrik üreten fabrika, kuzeydoğusundaki Havagazı Fabrikasıyla birlikte Alman Dicier firması tarafından 1929 yılında tamamlanarak, üretime başlamıştır. Uzun yıllar Ankara'nın bir bölümünün elektriğini sağlayan fabrika ' da kömürle elektrik üretimine 1983 yılında son verilmiştir.

Fabrika, kuzeydoğu - güneybatı aksında dikdörtgen planlı santral binası ile bunun batısında yaklaşık iki metre yükseklikteki kuzeybatı - güneydoğu aksında dikdörtgen beton bir platform üzerinde yer alan üç baca ile bunların alt kısımlarında yer alan pompa istasyonlarından oluşmaktadır. Bacalar 43 m. yüksekliğinde ve yaklaşık 2 m. çapında saçtan yapılmıştır.

1983 yılında üretime son verildikten sonra hiçbir şekilde kullanılamayan fabrika ve bacaları bugün oldukça harap durumdadır. Gerek fabrikanın içi gerekse pompa istasyonu ve bacalar, hem yıllardır kullanılmadıkları, hem de belli aralıklarla yapılması gereken bakım ve onarımların yapılamaması vb. nedenlerle yıkılma tehlikesi ile karşı karşıyadır. Özellikle fabrika içinde ve dışındaki metal aksam, borular, pompa istasyonu ve bacalar, açıkta oldukları için sürekli maruz kaldıkları, ısı ve soğuk gibi kötü hava şartları, yağmur, kar ve rüzgar gibi doğal sebepler yüzünden yoğun korozyona uğradığı için yer yer çürümeler görülmektedir. Buna bağlı olarak da özellikle bacalarda açılmalar ve delikler oluşmuştur. Bunların dışında şehir merkezinde yer alan ve çevredeki diğer bazı yapılardan da yüksek olan fabrika ve bacalar, üretim olmamasına rağmen, korozyon ve açılmalar nedeniyle çevre ve görüntü kirliği de yapmaktadır.

Ayrıca, yukarıdaki nedenlerden dolayı çürümeye başlamış ve yıkılma tehlikesi ile karşı karşıya olması, kuvvetli rüzgarlı ve kötü hava şartlarında aşırı derecede sallanmasının nedeniyle böyle kötü havalarda çürüyen ve açılan aksamın kopması vb. sebeplerle hemen yanında yer alan Türkiye Elektrik İşletmeleri A.Ş. Genel Müdürlüğüne ait Gaz İzoleli Trafo Merkezi, kuruma ait yemekhane binası, Yük dağıtım İşletme Müdürlüğü binası, EGO Genel Müdürlüğü gibi işyerleri, hemen yakınındaki konutlar, sokakta park etmiş araçlar ve buralarda çalışan personel, konutlarda yaşayan halk, sokakta oynayan çocuklar ve geçenler için tehlike yaratmaktadır.

Sonuç olarak, Gazi Mustafa Kemal Bulvarı Tok Sokak No: 6 adreste yer alan Elektrik Fabrikası (Santrali) na ait pompa istasyonu ve bacaları, kullanılmamak, gerekli bakım ve onarımın yapılmaması vb.

meydana gelen doğal tahribat ve korozyon nedeniyle meydana gelecek yıkılma, çökme ve kopmalar sebebiyle oluşacak can, mal ve ekonomik kayıpların yanı sıra daha önceden yapılan boya vb. işlemlerin yapılmasına rağmen, korozyon, açılma ve yıkılmalar nedeniyle estetik olarak çirkin bir görüntü yaratması, çevre ve görüntü kirliliğine de neden olmaktadır. Şehir merkezinde yer alan harap yapı ve bacalar şehir siluetini de olumsuz yönde etkilemektedir. Eski eser niteliği de yoktur.

Kurum tarafından farklı branşlardaki mühendislere hazırlatılan raporda da belirtilen sebepler nedeniyle ve T. C. Kültür Bakanlığı Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu'nun 19. 3. 1991 - 155 ve 19. 3. 1991 - 1679 sayılı kararını içeren raporun ikinci sayfasında belirtilen Havagazı Deposunun (gazometre), elektrik üretim tesisleri bacalarının ve pompa istasyonunun taşınarak korunabileceğine yönelik kararda dikkate alınarak, can ve mal kaybının yanı sıra estetik olarak şehir siluetini bozmaları, eski eser niteliği olmaması nedeniyle ; bacaların rölöve ve diğer çizimlerinin yapılması, fotoğraf ve dialar nın ve kamera çekimlerinin ve gerekli notların alınarak en iyi şekilde belgelendikten sonra, çevreye zarar vermeden konunun uzmanı mimar ve mühendislerin denetiminde en kısa zamanda sökülmeleri uygundur.

Yrd. Doç. Dr. Mehmet İBRAHİMGİL

Yrd. Doç. Dr. Muhammet GÖRÜR

Arş. Gör. Hakan ÇETİN

Source: T.C. Gazi Üniversitesi, Fen-Edebiyat Fakültesi Dekanlığı, Sanat Tarihi Bölüm Başkanlığı, 12.11.2003, Expert Report, B.3.2.GÜN.0.13.00.00.10/05-210-4000 ve B.30.2.Gün.0.13.00.00.14-059/224, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

APPENDIX K

EXPERT REPORT ABOUT THE MALTEPE ELECTRIC FACTORY (APRIL 2004)

TS 498 ' e göre beklenen rüzgar hızları;

0	8,00	m için	28 m/san
9	20,00	m için	36 m/san
21	100,00	m için	42 m/san

olup, izin verilebilir (V = 30 m/san)
değeri aşılmaktadır. (h = 0 – 40m., V_{zn} = 37,5 m/san.) Kaldı ki; bu sınır değer, bacaların rüzgâr etkisinde dinamik davranışlarını (titreşim ve galope salınım) da kapsamaktadır.

4- SONUÇ :

a) İki kenar bacaya ve bunlara ait pompa gruplarına mesnet oluşturan b.a. platformlar bozunup harap olmuş, mesnet oluşturma görevini emniyetli bir şekilde sürdüremiyecek hale gelmiştir.

b) Her üç bacada da, iç ve dış korozyon toplamı en iyimser yaklaşımla saç kalınlığının %25 ine uluşmış, baca gövdelerinde, konum emniyeti üzerinde etkili korozyon hasarları oluşmuştur.

c) Bacaların, Ankara için olası depremlere karşı (quasi statik) basit deprem irdelemesi, gerilme yaklaşımı ile yeterliliğe işaret ediyor ise de, bu yanıltıcı sonuç, deprem halinde bacaların yer aldığı zemin ortamı gereği beklenmesi gereken amplifikasyonu ve period çakışması nedeniyle kaçınılmaz olan rezonans davranışını kapsamamakta, bacaları deprem güvenli denilememektedir..

d) Rüzgâr etkisi olası deprem etkisinden daha da kritiktir.
TS 498 in (9 –20 m) yükseklikli yapılar için öngördüğü rüzgâr yükleri etkisinde bile emniyet sınırlarını aşan gerilmeler oluşabilmektedir.
Kaldı ki; (43 m) yükseklikli bu narin bacaların rüzgâr etkisinde (titreşim-salınım-golepe) davranışları da söz konusudur.

Yaklaşık (21 yıldır) kullanılmayan, (43,00 m yüksekliğe ve (2,00 m) çapa sahip, açık ortamda meteorolojik etkilere terkedilmiş, her türlü bakım ve onarımdan yoksun, ikisinde mesnet platformları da tükenmiş bu bacalar, hali durumları ile ayakta duruyor görünseler de, Ankara'da her zaman etkimesi olası deprem ve rüzgara karşı konum emniyetine sahip değildirler.

Herhangi birinin veya her üçünün konum emniyetini yitirmesi halinde, bulunduklar yer ve çevrelerindeki yapılaşma ve insan trafiği nedeniyle mal ve can kaybının meydana geleceği ise tartışmasızdır.

Gereği için ilgililerin bilgilerine sunulur.

Ankara, Nisan 2004

Bilirkişi Kurulu
(Gazi Üniv.- Müh.ve Mim. Fak.)

Prof.Dr.Hüsnü CAN
İnşaat Y.Müh.-Öğretim Üyesi

Yrd.Doç.Dr.Şefaattin YÜKSEL
Makina Y.Müh. –Öğretim Üyesi

Dipl.İng.Ünsal SOYGÜR
İnş.Y.Müh.-Öğretim Görevlisi

Source: T.C. Gazi Üniversitesi, Mühendislik-Mimarlık Fakültesi (April 2004), "**Bacaların Konum Emniyeti İncelemesi Bilirkişi Raporu**", Expert Report, Ankara, in the Archives of the Ankara Board of Preservation of Cultural and Natural Heritage

APPENDIX L

OFFICIAL COMMISSION REPORT ABOUT THE LAST SITUATION OF THE MALTEPE GAS FACTORY (2004)

T.C
ANKARA BÜYÜKŞEHİR BELEDİYE BAŞKANLIĞI
EGO GENEL MÜDÜRLÜĞÜ

Birim : APK DAİRESİ BAŞKANLIĞI
Sayı : M.06.1.EGO.0.65.02.02./ 10-5-21583
Konu : Ankara İli Çankaya İlçesi
Maltepe Havagazı Fabrikası.

06.05.2004

T.C.
KÜLTÜR VE TURİZM BAKANLIĞI
ANKARA KÜLTÜR VE TABİAT VARLIKLARINI
KORUMU-KURULU MÜDÜRLÜĞÜNE

İLGİ : a) 05.04.2004 tarih ve B.16.0.KTV.4.06.00.00/06.06/72-671 sayılı yazımız.
b) Bakanlığınız Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulunun 12.12.2004 tarih ve 3894 sayılı kararı.

İlgi (a) ve (b) yazılarımızla Ankara İli Çankaya İlçesi Maltepe Semtinde yer alan Kuruluşumuza ait eski Havagazı Fabrikasının Ankara Kültür ve Tabiat Varlıklarını Koruma Kurulu tarafından koruma altına alınması nedeniyle son durumları dikkate alınarak çevre için tehlike oluşturup, oluşturmadığı konusunda düzenlenecek raporların gönderilmesi istenilmektedir.

İlgi (a) ve ilgi (b) yazılarımız gereğ. Eski Maltepe Havagazı Fabrikasının son durumunun tesbiti için kuruluşumuzca oluşturulan Teknik Komisyon çalışmalarını tamamlamıştır.

Konu ile ilgili oluşturulan Teknik Komisyonun raporu yazımız ekindedir.

Bilgi edinilmesini ve gereğini arz ederiz.

EK: Komisyon Raporu (3 sayfa)

Erhan ÜLKDAĞ
Genel Müdür Yrd.

Kazım USTA
Genel Müdür

KÜLTÜR VE TURİZM BAKANLIĞI
Tarih: 06.05.04
Sayı: 5031

(GSN : 7530 - EG - 050 - 0060)

MALTEPE ESKİ HAVAGAZI FABRİKASININ SON DURUMU HAKKINDAKİ KOMİSYON RAPORU

Gayri faal, üretimi durdurulmuş, dış görünüşü harda olan ve aynı zamanda çevresinde bile bulunmanın insan can ve mal güvenliğini tehdit eden EGO Genel Müdürlüğü ve bir ünitesinin de BEDAŞ Genel Müdürlüğü sahası içinde kalan Maltepe Havagazı fabrikasının son durumunu öğrenmek ve taşıdığı riskleri incelemek için fabrikanın ilk önce tanınması gerekmektedir. Fabrika dört ana kısımdan oluşmaktadır.

1. Taşkömürü ve üretim ocakları (5 ocak, 75 kamara),
2. Gaz temizleme ve depolama tesisleri,
3. Merkezi jeneratör (4 adet),
4. Yüksek basınç kompresörleri dir.

1. Taşkömürü ve üretim ocakları :

Beş ayrı üretim ocağı kamaralarına doldurulan taşkömürü (200 Ton/gün) havasız ortamda destile edilerek 16 saat sonra 1200°C ile 1700°C arasındaki sıcaklık sonucunda kraking ve kuru kuruya damıtma yoluyla ham gaz elde edilmekte ayrıca bu kimyasal işlemler sonucunda da yan ürün olarak kok kömürü, katran, amonyak, kükürt ve naftalin üretilmekteydi.

Havagazı üretiminde kullanılan 75 kamarada şu anda hareket görmeyen (ölü) gaz, soğutma çanaklarında ve toplama borularında katran ve amonyak artıkları mevcut olup herhangi bir sebepten alev alması halinde önlenemeyecek ölçülerde yangın tehlikesi arzetmektedir.

2. Gaz temizleme ve depolama tesisleri :

80°C civarındaki ocak gazı 4 adet soğutucudan (amonyaklı su ile) geçirilerek 16-17 °C ye kadar soğutulur. bu işlem esnasında gaz içerisinde bulunan maddelerin safsızlıkların (katran, kükürt,amonyak, naftalin) büyük bir kısmı bu safhada gazı terk eder.

Gazın soğutulmasında kullanılan NH3 li su (amonyaklı su) için yaklaşık 10-15 m. Yükseklik ve tahminen 20 m. Genişliğinde katran ve su kuyularında tonlarca katran ve amonyak artıkları bulunmakta ve büyük bir tehlike arz etmektedir. Gaz temizleme üniteleri altında bulunan kuyuların açılen üzeri açılarak toprak ve benzeri maddelerle doldurularak köreltilmesi gerekmektedir.

3. Merkezi Jeneratör

Havagazı üretimi esnasında yan ürün olarak çıkan kok kömürünün jeneratörde yakılması sonucunca jeneratör gazı üretilir. Bileşimi %25 CO, % 5 CO2, %58 N2, %12 H2 dir. Bu bileşimdeki gaz zehirleyici özelliğe sahip olup, kamara kanallarında yakılarak havagazı üretiminde kullanılmaktaydı.

Kok Kömürü; Vinç ile jeneratör üzerinde bulunan silolara aktarılmakta buradan bantlarla ocaklara doldurulmakta idi (siloların kapasitesi 70 ton'dur.) Şu anda siloların, jeneratörlerin ve üretim ocaklarına giden boruların içinde "JENERATÖR GAZI" mevcut olup zehirleyici ve patlayıcı özelliktedir.

4. Taşıyıcı elemanların durumu :

Üretim binaları ve diğer ünite binalarının yatay ve düşey taşıyıcı sistemleri, dolu gövdeli çelik, birleşim noktaları perçinli sistem, cepheler ise çelik konstrüksiyon, araları çimento harçlı ½ tuğla ile yapılmıştır. Döşemeler dolu gövdeli kirişlerle yapılmış, kiriş araları ise betonarme plaklardan teşkil edilmiştir. Ünitelerde ve üniteler arasındaki bağlantıyı sağlayan merdivenler ve taşıyıcı elevatörler çelik malzemeden yapılmıştır. Çatılar çelik makas üzerine oluklu galvaniz çatı örtüsü ile kapatılmıştır. Üretim üniteleri yüksekliği 16.50 m. Diğer üniteler ise 4-6 m. Arasında değişkenlik arz etmektedir.

Kiriş kolon birleşim noktalarında birleşim bayraklı yapılmıştır. Bayraklı bileşimi tutan perçinlerin kalınlıklarının azaldığı, görülmüştür.

Döşemede bulunan dolu gövdeli kirişlerin alt başlıklarının tamamına yakın kısmının çürüdüğü dolayısı ile kirişler arasındaki döşemeler emniyetsiz bir şekilde kendini zor taşımaktadır.

Binalarda bulunan sıvalar ve betonların tamamı asit, don, su buharı gibi yapı elemanlarının düşmanı olan etmenlerden dolayı özelliklerini kaybetmişlerdir. İstenilmeyen ölçülerde dökülmeler zayıflamalar devam etmektedir.

Çelik merdiven basamakları ve kömür taşıma elevatörleri korozyondan tamamen çökmüş işlevlerini kaybetmişlerdir. Bu da sistemin kendiliğinden çökmesine neden olacaktır.

Üretim ocakları ve jeneratör binalarının çökmesi durumunda, hareketsiz olan ölü gazın ve diğer artıkların tutuşmasına kesinlikle sebep olacaktır.

Sonuç Olarak :

1. Yukarıda arıtma tesislerinde de açıklandığı gibi arıtma ünitelerinin çalışması esnasında açığa çıkan kükürt, amonyak, naftalin ve katran gerek yer altında gerekse yer üstünde tortu ve saf halde bulunmaktadır. Bu durum oluşacak en ufak bir kıvılcımdan alev alması halinde büyük yangınların oluşmasına sebep olacaktır. Bu durum yer altı şebeke boruları yakınında bulunan Doğalgaz Şebekesi için de büyük tehlike arz etmektedir.

2. Sistemin bir yüzünün dönük olduğu Tok Sokak yakınında bulunan yeraltı arık depolarında çıkabilecek bir yangın, aynı sokaktan geçen doğalgaz şebekesi için de çok büyük bir tehlike arz etmektedir.

3. Mevcut beş ocaktaki kamara ve jeneratör gazı kanallarındaki ölü gazın her an büyük bir tehlike arz ettiği unutulmamalıdır. Dünyada bu tip patlama ve yangın örnekleri verilebilir. (Meksika, Fransa vb.)

4. Gazı alınmış kor halindeki kömürün koklaşması için verilen sudan dolayı çıkan su buharı, asit ve diğer kimyasal maddelerin etkisiyle taşıyıcı çelik aksamın tamamına yakını korozyondan dolayı çürümüştür. Tuğla ve sıva kısımları sıcak, soğuk, kar, yağmur ve buhardan dolayı tamamen deforme olmuş ve işlevlerini kaybetmişlerdir.

5. En önemli faktörlerden biri de; daha önce alınan söküm, demontaj kararından ve kısmen uygulanmasından dolayı sistem statik ve dinamik dengesinin bozulduğu tahmin edilmektedir.

6. 16.50 m.'ye varan yüksekliklerdeki fabrika ünitelerinde oluşan aşırı çürümelerden dolayı düğüm noktalarındaki rijitlik bozulmuş, şiddetli rüzgar tesiriyle sallanmalar gözlenmektedir.

7. Fabrikanın anlatılmaya çalışılan bu haliyle çevrenin estetik görünümünü bozduğu, zemininin pis ve kimyasal maddeler içeren su ile dolu olduğu bu nedenle çeşitli haşerelerin yaşayıp üremesine uygun ortamın oluştuğu çevre sağlığını ciddi bir şekilde tehdit ettiği, yıkılma, çökme, yangın, patlama vb. Olayların her an olabilme olasılığının yüksek olmasından fabrika içinde ve çevresinde çalışan personel, ve çevrede bulunan binalar için çok büyük bir tehlike arz etmektedir.

İstenilmeyen üzücü olayların meydana gelmemesi için mevcut enkaz durumundaki fabrikanın İvedi demontajının tamamlanarak alanın temizlenmesi gereklidir.

Veli ŞEKER
Makine Mühendisi
Üye

Reha ÜLGEN
İnşaat Mühendisi
Üye

Haydar SUMER
Mimar
Üye

M. Zeki KAYAPINAR
Kimya Mühendisi
Komisyon Başkanı

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