TOBB UNIVERSITY OF ECONOMICS AND TECHNOLOGY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

RECONSTRUCTION OF ESTABLISHMENT STRATEGIES ON THE CURRENT SITUATION OF THE ANKARA SUGAR FACTORY

MASTER OF ARCHITECTURE

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Supervisor: Assoc. Prof. Murat Sönmez

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DECLARATION OF THE THESIS

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Kevser Özkul

TEZ BİLDİRİMİ

Tez içindeki bütün bilgilerin etik davranış ve akademik kurallar çerçevesinde elde edilerek sunulduğunu, alıntı yapılan kaynaklara eksiksiz atıf yapıldığını, referansların tam olarak belirtildiğini ve ayrıca bu tezin TOBB ETÜ Fen Bilimleri Enstitüsü tez yazım kurallarına uygun olarak hazırlandığını bildiririm.

Kevser Özkul

ABSTRACT

Master of Architecture

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Sugar factories have brought significant achievements to the regions where they were established. These achievements, which we can define as establishment strategies, have versatile features such as providing industrial, rural, and agricultural development and supporting the modernization efforts of the society. In this thesis, the technical and social gains of sugar factories have been associated with Georg Simmel's concept of "the Stranger". Defined as one of the types of the social sphere, this concept removes the boundary between the private and public sphere and contributes to the continuous progress of society. However, sugar factories have lost these gains over time since the year they were established. One of the main reasons for this depreciation is the growth of cities as a result of rapid population growth and the fact that industrial areas remain in the center of the city. Ankara Sugar Factory, established in 1962, can be cited as an example of this situation. The factory established in the western corridor of the city has been torn between the dense urban fabric in time and has been subjected

to the pressure of rent. It also faces the threat of privatization, like so many sugar factories in Turkey. These issues, which threaten the sustainability of Ankara Sugar Factory as an industrial area, have been examined within the framework of Timothy Morton's concept of "Dark Ecology". This concept argues that human beings must coexist in the future together with the degradation they have created and that this decay cannot be ignored.

In this context, this thesis study has tried to establish the strategies of reconstructing the establishment strategies of sugar factories with current and contemporary architectural approaches. The proposed strategies were designed on the Ankara Sugar Factory campus area, as this industrial area has not yet been privatized. This study, which develops discourses about the future of the campus area, adopts the transformation strategies of IBA Emscher Park as a method. Located in the Ruhr region of Germany, IBA Emscher Park is not only an application area where industrial areas are re-functionalized but also a versatile transformation project where social and cultural renewal is fictionalized and continues to be constructed today. The project in question has a method based on industrial renewal and social and cultural renewal develops after transformational interventions.

As a result, strategies for the Ankara Sugar Factory, an industrial area remaining in the city center, to participate in urban life and space without losing its industrial and cultural values have been developed. This study sets out with the idea of re-functioning an industrial field, aims at social and cultural renewal in the long term and to establish a closer relationship with the city. With this thesis, it is aimed to present an academic study that discusses possible interventions to the campus area. Besides, the foundation has been prepared about the possible future use or situations of other sugar factories which are important elements of Turkey's industrial heritage.

Keywords: Industrial areas, Sugar factories, Ankara Sugar Factory, Re-functioning, Transformation strategies.

ÖZET

Yüksek Lisans Tezi

ANKARA ŞEKER FABRİKASININ MEVCUT DURUMU ÜZERİNE KURULUŞ STRATEJİLERİNİN YENİDEN KURULMASI

Kevser ÖZKUL

TOBB Ekonomi ve Teknoloji Üniversitesi
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Şeker fabrikaları kuruldukları bölgelere önemli kazanımlar getirmiştir. Kuruluş stratejileri olarak tanımlayabileceğimiz bu kazanımlar endüstriyel, kırsal ve tarımsal kalkınmayı sağlamak, toplumun modernleşme çabalarını desteklemek gibi çok yönlü özelliklere sahiptir. Bu tez çalışmasında, şeker fabrikalarının sahip olduğu teknik ve sosyal kazanımlar, Georg Simmel'in "Yabancı" kavramıyla ilişkilendirilmiştir. Toplumsal alan tiplerinden biri olarak tanımlanmış bu kavram, özel ve kamusal alan arasındaki sınırı kaldırmakta ve toplumun sürekli olarak ilerlemesine katkıda bulunmaktadır. Ancak, şeker fabrikaları kuruldukları yıldan beri zaman içerisinde bu kazanımlarını kaybetmiştir. Bu değer kaybının en temel sebeplerinden bir tanesi, hızlı nüfus artışı sonucunda kentlerin büyümesi ve endüstri alanlarının kentin merkezinde kalmasıdır. 1962 yılında kurulmuş olan Ankara Şeker Fabrikası bu duruma bir örnek olarak gösterilebilir. Kentin batı koridorunda kurulan fabrika, zamanla yoğun kent dokusu arasında kalmış ve rant baskısına uğramıştır. Türkiye'deki pek çok şeker fabrikası gibi özelleştirme tehdidiyle de karşı karşıyadır. Ankara Şeker Fabrikasının

bir endüstriyel alan olarak sürdürülebilirliğine tehdit olan bu konular, Timothy Morton'un "Karanlık Ekoloji" kavramı çerçevesinde incelenmiştir. Bu konsept insanoğlunun kendi yarattığı bozulma ile birlikte gelecekte bir arada var olması gerektiğini ve bu çürümenin göz ardı edilemeyeceğini savunmaktadır.

Bu çerçevede bu tez çalışması, şeker fabrikalarının kuruluş stratejilerini güncel ve çağdaş mimarlık yaklaşımlarıyla yeniden inşa etmenin stratejilerini kurmaya çalışmıştır. Önerilen stratejiler bu endüstriyel alanın henüz özelleşmemiş olması sebebiyle Ankara Şeker Fabrikası yerleşke alanı üzerinden kurgulanmıştır. Yerleşke alanının geleceğine dair söylemler geliştiren bu çalışma, IBA Emscher Park'ın dönüşüm stratejilerini yöntem olarak benimsemektedir. Almanya'nın Ruhr bölgesinde yer alan IBA Emscher Park yalnızca endüstri alanlarının yeniden işlevlendirildiği bir uygulama alanı değil, aynı zamanda toplumsal ve kültürel yenilenmenin de kurgulandığı ve günümüzde de kurgulanmaya devam ettiği çok yönlü bir dönüşüm projesidir. Söz konusu proje endüstriyel yenilenmeyi temel alındığı ve toplumsal, kültürel yenilenmenin dönüşüm müdahalelerinden sonra geliştiği bir yönteme sahiptir. Sonuç olarak, kent merkezinde kalmış bir endüstri alanı olan Ankara Şeker Fabrikası'nın endüstriyel ve kültürel değerlerini kaybetmeden kentin gündelik hayatına katılmasının stratejileri geliştirilmiştir. Bu çalışma bir endüstri alanının yeniden işlevlendirilmesi düşüncesiyle yola çıkmakta, uzun vadede toplumsal ve kültürel yenilenmeyi ve kent ile daha yakın bir ilişki kurmayı amaçlamıştır. Bu tez çalışması ile yerleşke alanına yapılacak olan olası müdahaleleri tartışan akademik bir çalışma ortaya koymak hedeflenmiştir. Ayrıca Türkiye'nin endüstriyel mirasının önemli unsurları olan diğer şeker fabrikalarının da gelecekteki olası kullanımlarına/durumlarına dair bir temel hazırlanmıştır.

Anahtar Kelimeler: Endüstriyel alanlar, Şeker fabrikaları, Ankara Şeker Fabrikası, Yeniden İşlevlendirme, Dönüşüm Stratejileri.

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ABBREVIATIONS

TSFAS : Turkey Sugar Factories Inc.
TICCIH : The International Committee for the Conservation of Industrial Heritage
OYK : High Council for Privatization
BYDK : Prime Ministry Supreme Auditing Board
OSTIM-OSSA : Organized Industrial Site
IBA : International Building Exhibition
SME : Small and Medium Enterprise

1. INTRODUCTION

Uncontrolled urbanization in cities that have not reached a certain level of economic, technological, cultural, and social development brings several problems. Although this situation has tried to be controlled by urban planning strategies in certain periods, the living standards and welfare levels of city users mostly have not been included in this process. Especially during the establishment period, the industrial areas built outside the city centers were spatially stuck in the city center due to increasing migrations and new user needs. In this study, the methods for the participation of Ankara Sugar Factory campus one of the industrial areas in the city center, as part of urban space again were investigated.

1.1 Definition and the Scope of the Study

Many different factors that affect the development process of cities. The most important of these can be listed as natural resources, political decisions, strategies, highway, or railroad routes. During periods in which the population was increasing, urban development was controlled by several planning interventions. However, in cases where population growth was unpredictable, industrial areas that were positioned inside the city walls as planned remained in residential areas over time and created large voids. In cities where the population is very dense, these voids are not used for the interest of city users and are seen as rent areas. One of the cities which have such voids is the capital city of Turkey, Ankara. According to the Hermann Jansen's report published in 1932 attached to his masterplan for Ankara, the industrial structures positioned in the western corridor of the city remained within the residential areas due to the inability of population growth to be adequately controlled by urban planning. The most important of these areas, which have become an urban void and are about to lose their industrial function, is the Ankara Sugar Factory campus area. This area, which has a size of 32 ha., could not be included in the urban spaces of the city. The most important reasons for this are; the fact that there is a closed social life circulation on the campus, the area has been severed from the continuity of the city with areas

such as the railway, the belt highway, the military area, and the security measures affect the access to the entire campus as the existing industrial structures continue to function. In this study, the inability of such a large void to be included in the daily life of the city in a location that could be called the center of Ankara, a crowded city, was identified as a problem. Yet it would be wrong to perceive this void as just an urban space and to develop such a solution. Because there are already ongoing units such as production, living, accommodation, and research facilities on the campus. At this point, it is necessary to understand the present value of the field and to evaluate the interventions within the framework of this sensitivity. For this reason, the historical development of sugar factories was examined, and the cultural and industrial values of these areas were investigated and uncovered in detail.

In the early Republic Period, sugar factories were one of the most important representatives of the modernization project in the field of industry. These settlements have caused profound changes in social, political, economic, cultural, and industrial areas throughout the country (Figure 1.1). With these changes, an unusual process of development and transformation took place in the urban and spatial equipment of all layers that make up the society. These transformation tools, which are very unfamiliar to the regions and periods in which they were founded, have been associated theoretically with “the Stranger”, one of the concepts that Georg Simmel used to describe the types of society. Sugar factories created a new social space in the areas where they were established, removing the line between the definitions of private space and public space, as in Simmel's definition of “the Stranger”. This type of society, defined as a social space, accelerated the modernization and industrialization of the country.

Figure 1 1: Women working in Sugar Beet fields (TOBB ETU Architecture Department Archive).

These areas, which had economic and social gains during the establishment period, began to lose their value over time. It has lost its economic gains due to spatial and functional inadequacies experienced as a result of technological developments; its social gains due to the inability to capture the pace of modernization experienced throughout the world and the inability to maintain the continuity of cultural organizations. Because of these reasons, sugar factories were included in the scope of privatization and faced the threat of destruction. In addition, some of the structural areas remained within the residential areas of the city as a result of uncontrolled urbanization and were spatially trapped. All the Sugar Factory campus areas in the urban centers or the city boundaries have been transformed to have an uncertain future. At this point, Timothy Morton's concept of "Dark Ecology", the depreciation of these fields, has been discussed in a theoretical framework. According to Morton, an area that has existed in the past should not be kept away from everyday life when faced with problems such as deterioration, decay, or unavailability of its integrity. In other words, it has been argued that the built environment and ecology of these areas should continue to exist within life and that methods for salvation should be sought. In this context, solutions to the problems faced by sugar factories should be developed and methods of maintaining their existence in life should be sought.

1.2 Purpose of the Study

Many academic studies have been carried out in our country in the field of industrial heritage. These studies include historical development analysis, conservation, and transformation decisions of industrial areas. In addition to these, there are more studies on the transformation and re-functionalization of industrial areas in academic literature. Within the scope of this thesis apart from all those studies conducted so far, sugar factories that have been implemented in different regions within similar conditions throughout Turkey have been studied. The establishment strategies identified as a result of these commonalities constitute the main structure of the thesis. In this context; The main purpose of this thesis is to search for the methods to include the Ankara Sugar Factory which is losing its value in its establishment strategies by avoiding the problems encountered in the current situation. Briefly, it is to re-construct the establishment strategies of the past with modern design tools. Other sub-objectives of this thesis, which is based on multidimensional evaluation and method can be listed as;

- Understanding the industrial and cultural values of sugar factories established throughout Turkey,
- Emphasizing the historical process of Ankara Sugar Factory and the differences between other campuses,
- Analyzing the characteristics of the surrounding area of the campus,
- Identifying infrastructure problems in the city and developing solutions,
- Reading the design criteria of a transformed industrial area.

1.3 Method of the Study

This study is divided into 5 main sections following the historical process. In the first section, the importance of sugar factories throughout the country, and the development process is examined in detail. The representation of the sugar industry as one of the tools of industrial and social development throughout the country has been discussed within the framework of the concept of “the Stranger”. Upon completion of the theoretical discussion, the economic and social gains made by sugar factories throughout the country were determined.

In the second section, the problems faced by sugar factories in the current situation, the privatization process, and its scope are examined. In this context, the depreciation experienced by sugar factories was evaluated through the concept of "Dark Ecology".

In the third section, an evaluation was made on the Ankara Sugar Factory, the architectural program of the area, its history, its relationship with its immediate surroundings were determined, and why this area was chosen was explained in detail. Also, the reasons for the transformation from the notion of "the Stranger" to "Dark Ecology" experienced in all other sugar factories were examined in detail in the Ankara Sugar Factory. In this context, the requirements of the re-introduction of "the Stranger" to the Ankara Sugar Factory campus were determined.

In the fourth section, IBA Emscher Park where the central part of the Ruhr, an industrial area, has been integrated into the city with the transformation projects that have been implemented over the years. It has become a new attraction center for all. Thus, the requirements for an urban-scale area to be included were determined. These identified requirements have been a means of developing an up-to-date perspective on the re-launch of the establishment strategies of the Ankara Sugar Factory.

In the conclusion section, the possible transformation strategies of the campus area, the requirements, and methods for creating these strategies have been developed in detail in line with all those perspectives mentioned above (Figure 1.2).

Within the scope of the study, literature research, interviews, documentation, on-site investigations, archival studies, and documentation methods were used. Literature research has been conducted to identify historical processes, concepts, and scopes. Archive scanning, documentation, on-site inspection, interviews are all based on Sugar Factories and its Archives. This research has proceeded in the scope of the project conducted by the Department of Architecture at TOBB University titled "Turkey Sugar Factories: Industrial Heritage/Structures, Research, Documentation, Evaluation, Conservation, and Transformation". Part of the said archive was created from the headquarters building, part from the Ankara Sugar Factory, and part from trips to Alpullu, Uşak, Eskişehir and Turhal Sugar Factories.

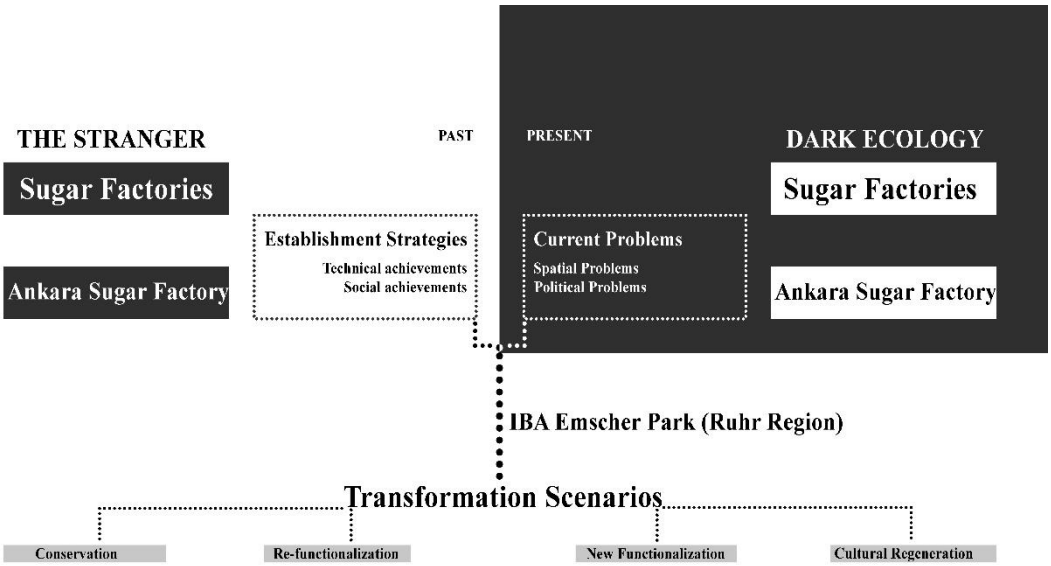

Figure 1 2: The Method Followed During the Thesis Study.

2. SUGAR FACTORIES AS "THE STRANGER"

The Republic of Turkey which gained its political independence and completed economic planning was necessary to capture global modernization efforts in the world. According to Kautsky, the main aim of modernization forces is to provide industrialization of the societies they affect (Kautsky, 1972, p. 55). In addition, sufficient economic development, and political independence must fulfill conditions in countries that the transformation from traditional to modernity (Köker, 2000, p. 51). As Kautsky stated, countries that come out of war such as Turkey fast recovered with the industrial areas. Turkey, as a requirement of the Kemalist revolutions[1] in the 1930s, was in balanced development and industrialization breakthrough, and it has established the fundamental national industries that the country needs in a modern and scientific way (Güven, 1998, p. 55). To reach the level and intensity of the global industrialization and modernization process taking place, one of the most important fields of industrialization in Turkey was the sugar factories. Sugar factories can be considered as a means of social and economic transformation in the regions and/or periods they were built in with their enriched architectural program (Figure 2.1). These factories were established to evaluate the Turkish farmers who produce sugar beet and their products, to increase the income of the villagers and to meet the sugar needs of the country (Güven, 1998, p. 53). In Turkey, the Republican regime has given national character to the attempts of establishing the sugar industry. This national character consciousness, which is essential for the survival of such enterprises, has been the target of the first movements leading to the accreditation of the sugar industry through

[1] While the modern movement claims to be the fate of architectural evolution everywhere, Kemalism presents itself as the last stage in the historical evolution of the Turkish nation. Both claimed to reflect the spirit of contemporary civilization in the twentieth century. ((Bozdoğan, 2015, p. 122).

the wide economic opportunities opened" by the Lausanne peace agreement signed on 24/7/1923 (Veldet, 1958).

> "The Government of the Republic of Turkey, on 3/2/1925, sent a law to the Grand National Assembly to take measures to encourage the development of the sugar industry and to ensure the industrialization has made an important contribution in our history and the sugar industry has given the goal and awareness of a formation" (Veldet, 1958).

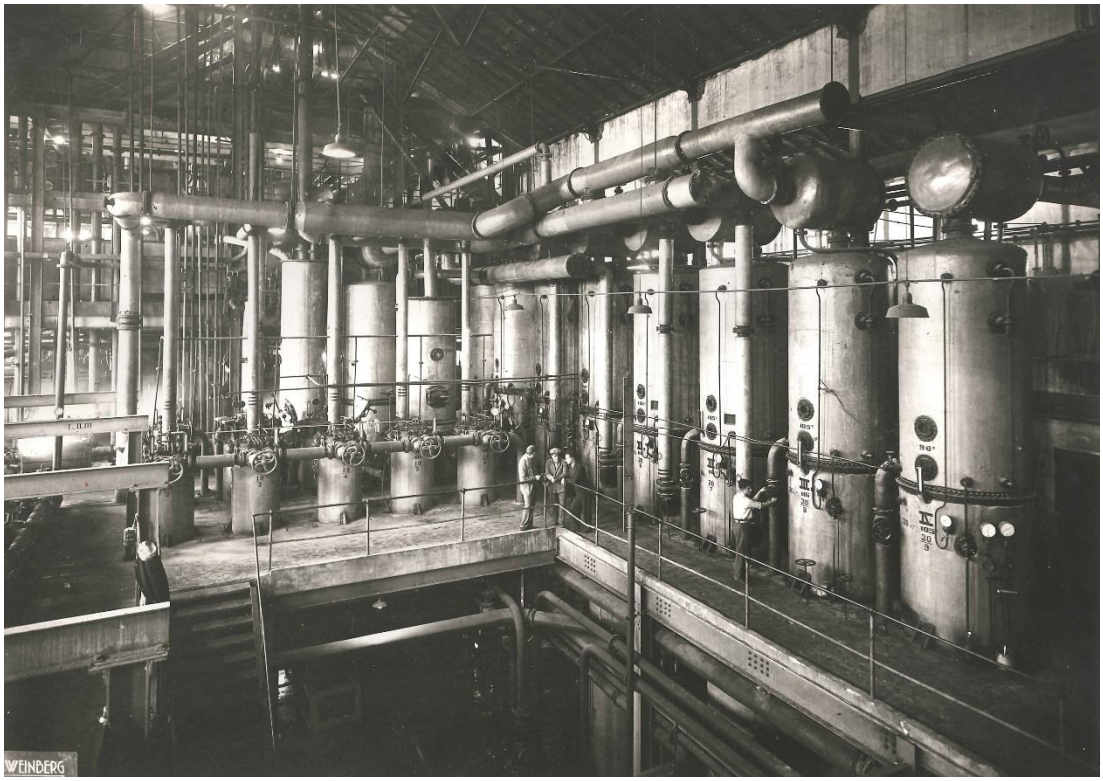

Figure 2. 1: Alpullu Sugar Factory (TOBB ETU Architecture Department Archive).

There is no doubt that Law No. 601 of 5/4/1925 had an important influence on the wake of the sugar industry and the industrialization movement and its linking with the national character. The construction of the sugar factories, which are proof of the industrialization process, has started (Figure 2.2). Sugar factories made significant contributions to urban identities in the period they were established. The factories have become not only the development of the industry but the representation of

modernization throughout the country, as well. In that period (1923-1950), a radical modernity project was conducted in Turkey (Tekeli & İlkin, 2010, p. 12)[2].

Figure 2. 2: Alpullu Sugar Factory (TOBB ETU Architecture Department Archive).

As a result of the organization in sugar factories' areas, the phenomenon of industrial society occurred in Turkey. This phenomenon transformed the social structure and showed similar characteristics in different parts of the world because they were nurtured by the universal science and technology (Kerr, Dunlop, Harbison, & Myers , 1962, p. 54). According to Raymond Aron an industrial society, seen only in Europe at the time of its emergence, is based on scientific thinking and is an example for the whole world. This globally developing society constitutes the inevitable end of all other societies because of the feature of European societies' development within the scope of a scientific organization. In brief, developing societies have no choice but to evolve into the industrial society to be accepted in the global world (Aron, 1973, p. 84). According to Durkheim, an industrial society is a form of society in which social

[2] Turkey's modernization efforts were occurred like that backward modernity project between 1839-1923, radical modernity project between 1923-1950, populist modernity project between 1950-1980 and the abrasion of the modernity project from 1980 to these days (Tekeli & İlkin, 2010).

differentiation and individuality increase due to the division of labor and organic solidarity being replaced by similar mechanical solidarities. (Bottomore & Nisbet, 2014, p. 202).

Figure 2. 3: Alpullu Sugar Factory (TOBB ETU Architecture Department Archive).

At this point, the process of industrialization and its relationship with modernization should be examined (Figure2.3). Many theories and definitions have been made about these concepts and conceptual relationships. In general, the definition of industry is a revolution in which factory production works with a social organization (Hirszowicz, 1985, p. 1). Ray Kiely considered industrialization as a social process. In other words, that is not simply arguing that the technical process of industrialization leads to a variety of social problems, such as urban poverty and environmental deterioration (Kiely, 1998, p. 17). While Kiely defined industrialization as a process of socialization,

Gavin Kitching evaluates it as a means of development. Kitching defends the view that "you have to industrialize if you want to develop" (Kitching, 1982, p. 6). This view was adopted by many different theorists in the 1950s and much of the 1960s when industrialization rapidly spread. Walt Rostow, perhaps the most important of these theorists, argues that industrialization is one of the most important tools for evolvement from a traditional to modern society (Rostow, 1985, p. 21). According to Jacques Van Doorn, modernization means cultural, moral, political, ideological values get waning while organizational, bureaucratic, technocratic, formalistic organization become prominent. The most outstanding field of this movement is the industrialization period which is occurred worldwide (Blokland, 2006, p. 2). Indeed, during England and Germany's industrialization period, modernist ideas such as rationalism, functionalism, and simplicity methods collected in those nations encounter new Republic concepts in Turkey. These ideas also constituted the primary thoughts for setting up sugar factories. These sugar factories are aimed to offer their workers, administrators, and staff better living conditions. Those places were considered settlements where long-term families can reside (Bozdoğan, 2015, pp. 15-28).

At this point, the theoretical framework was examined by the social organization created by the sugar industry and the modern social structure it provides. This frame consists of the social space identified by Hannah Arendt and Georg Simmel based on their definitions of private and public space.

Hannah Arendt, David Held, Richard Sennett, and Jürgen Habermas define the social realm as areas of independence. That the main point is the traditional line between the private and public realm (Çaha, 2005). Individuals have existed as groups in the public realm that has been built in the early Republican period and the concept of independence has not completely existed in the public realm, yet (Yıldırım , 2014, p. 28). The social structure that came from traditionalism and transformed into modernization has needed a new and more understandable definition. At this point, a closer look at Hannah Arendt's descriptions of the society might be used to clarify social structure in the sugar factories' campus areas.

> "We know that the contradiction between private and public, typical of the initial stages of the modern age, has been a temporary phenomenon which introduced the utter extinction of the very difference between the private and public realms, the submersion of both in the sphere of the social" (Hannah, 1958, p. 69).

As claimed by Hannah Arendt in the later periods especially in the late modern age, the line between private and public realm became blurred due to modernization, urbanization, and industrialization which has been added to this process afterward. As understood, Arendt emphasizes the sphere of society apart from the public realm and the private realm. The social realm has been located somewhere between public and private. It penetrates the public and private realm and locks and simulates the behavior of people. According to Arendt, human beings enrich themselves and their lives by being present in the social realm. She explains the social realm with two phenomena. First, everything that appears in the social realm can be seen and heard by everyone and has the widest possible clarity. Secondly, this phenomenon refers to a world that offers the same opportunities for all of us and is common (Hannah, 1958, pp. 50-73).

Georg Simmel, who also studied this issue, argues that maintaining the independence of the individual in modern life is one of the deepest problems. The main space of this existential effort is public realms (Simmel, 1950, p. 409). As a result of the dominant features of modernism, the desire of the individual to protect his/her private life has led to the formation of the private realm (Simmel, 1950, p. 410). When the sociological studies of Georg Simmel[3] was examined, the social structure constitutes an interrelated whole, such as the unity of an organic body as also stated by Tom Bottomore and Robert Nisbet. According to Simmel, individuals in the community consistently form interactions that affect each other (religion, attack, play, gain, etc.), and the interaction in an infinite number of social structures is a necessary condition for evaluating the phenomenon of society (Simmel, 2009, pp. 47-50).

Simmel defines communal relations within an area called the social realm. The most basic of the interaction forms contained in this social realm is "the Stranger". The stranger describes to sociological thinking does not depend on a certain point or

[3] Georg Simmel (1858-1918) is a German theoretician and sociologist. He studied the concepts of modern social life such as money economy, urban life, and poverty in a very original way.

distance from space. In Simmel's book titled “Individuality and Culture”, the concept of the stranger has been defined on the contrary to its usual meaning. He described that it comes today and does not go tomorrow. The spatial counterpart of the concept of the stranger is defined as developing discourses that remain within certain boundaries and become part of society. This is a specific form of interaction. The stranger can be interpreted not only as a part of the group but also as the one who develops discourse against the group. The stranger is freer in practice and examines cases with less prejudice in theory. It does not confuse religious concerns or past events with regards to the conduct of its activities. As such, the stranger is both close and distant at the same time. As something new to society, the stranger, has not been an individual case for a country, a city, or race since it has been perceived as a certain type rather than individually. It is an organic member of the group, although not organically added to the foreign community. Throughout its existence, it receives its share of the specific conditioning of this element. What adds to the stranger its uniqueness is the special proportion between its remoteness and proximity and the mutual feeding together to the society (Simmel, 2009, pp. 149-157).

These definitions indicate that sugar factories have gained social realm qualities in the regions where they were established thanks to the social and spatial qualities they have. The community has been rebuilt in campus areas where private and public realms coexisted. The modern lifestyle of the West was seen in sugar factories that became role models to the public who adopted the traditional way of life. This lifestyle on campus has always influenced and improved its environment. However, it was considered strange within the regions they were established, discourses that contradict the current situation were developed. This state of alienation can again be understood more clearly by Georg Simmel's concept of "the Stranger", which is one of the society types.

According to definitions given, sugar factories assume the role of the stranger in the regions where they are established. The construction techniques of the West and the modern social structure were considered as a different field throughout the country which has a traditional social structure. Sugar factories became a new and developer element for the new Turkish society, practically and theoretically, such as Simmel's stranger. These areas became new members of the society, developed discourses, and transformed the society in depth in the regions where they were established (Figure

2.4). When the daily life of the sugar factories was examined deeply, it was realized that there has been a meaningful relationship between Sugar society and the concept of “the Stranger" as Georg Simmel's definition of community types. There are many different units of production and social interaction in the sugar factories. Thanks to this difference, the campus area was undergone continuous development and transformation with internal dynamics. The interaction in the social structure spread out of the campus and provided development in social structure in the immediate sphere.

Figure 2. 4: Alpullu Sugar Factory (TOBB ETU Architecture Department Archive).

2.1 Spatial and Social Achievements of Sugar Factories

The campuses of sugar factories have blurred the hard-to-break boundary between tradition and modernity, thus transforming the private and public space into a social space. Examining the social space characteristics of sugar factories and their "the Stranger" characteristics is very important to determine how to use those areas in the future. In this context, the history of the sugar industry has been studied. After the declaration of the Republic in 1923, the main aim of the Republic of Turkey was to create a strong economy to establish a nation-state. The government established industrial formation in itself because of inadequate industrial production areas inherited from the Ottoman Empire and insufficient capital accumulation to enable the

development of the national industry (Kopar, 2013, p. 51). Therefore, industrial complexes were established with a fast and balanced development program accordingly with the needs of the country by following a rational, contemporary and scientific way in the 1930s (Güven, 1998, p. 55).

As the sugar industry is one of these industrial complexes, the first domestic sugar production started on November 26, 1926, with the opening of the Alpullu Sugar Factory (Figure 2.5). Immediately afterward, on 17 December 1926, Uşak Sugar Factory was opened (Figure 2.6). The Eskişehir Sugar Factory followed those two factories and was established on 5 December 1933 (Figure 2.7), and on 20 October 1934, the Turhal Sugar Factory was opened (Figure 2.8) (Veldet, 1958). For the coordination of these four factories, Turkey Sugar Factories Corporation (Turkish Sugar) was established in 1935. The purpose of this institution is to establish and operate sugar factories, to produce by-products of sugar production, and to engage in the related industry and machinery manufacturing (The Ministry of Industrial and Technology, 1973, p. 97). The Sugar Industry Extension Program was prepared in 1951 to develop the sugar industry. As part of this program, eleven new sugar factories were built and started production. In 1960, the number of factories reached 15, 30 in 2000, and 33 in 2010 (Table 1) (Sugar-Work Union, 2011). The function of the sugar factories is to produce sugar by processing the produced beet. These factories, where advanced technologies are used, carry out their duties as a training institution where technicians develop their skills and knowledge in the work. The operations of the sugar industry require a wide range of machinery and equipment and continuous maintenance. Therefore, large capacity machinery repair, maintenance and manufacturing factories and workshops were established within the sugar industry. These factories and workshops have developed so advance that they produced almost all of the machinery and equipment of recently established Ankara and Kastamonu sugar factories and have reached a level where they help other industries (The Ministry of Industrial and Technology, 1973, p. 102).

Figure 2. 5: Alpullu Sugar Factory (TOBB ETU Architecture Department Archive).

Figure 2. 6: Uşak Sugar Factory (TOBB ETU Architecture Department Archive).

Figure 2 7:Eskişehir Sugar Factory (TOBB ETU Architecture Department Archive).

Figure 2 8: Turhal Sugar Factory (TOBB ETU Architecture Department Archive).

Sugar Factories, 1926-2001	Establishment Year	Founder Companies
Alpullu Sugar Factory	26 November 1926	Bukau
Uşak Sugar Factory	17 December 1926	Skoda
Eskişehir Sugar Factory	5 December 1933	Bukau
Turhal Sugar Factory	20 October 1934	Bukau
Adapazarı Sugar Factory	24 September 1953	Bukau
Konya Sugar Factory	19 September 1954	Salzgitter
Amasya Sugar Factory	21 September 1954	Salzgitter
Kütahya Sugar Factory	24 November 1954	Bukau-B.M.A.
Susurluk Sugar Factory	28 September 1955	Salzgitter
Burdur Sugar Factory	23 September 1955	Salzgitter
Kayseri Sugar Factory	6 November 1955	Fives-Lille
Erzurum Sugar Factory	30 September 1956	Bukau
Erzincan Sugar Factory	30 October 1956	B.M.A.
Elazığ Sugar Factory	1 October 1956	Cail-Breguet
Malatya Sugar Factory	1 October 1956	Fives-Lille
Ankara Sugar Factory	15 October 1962	Tur. Sugar Fty. Inc.
Kastamonu Sugar Factory	14 October 1963	Tur. Sugar Fty. Inc.
Afyon Sugar Factory	28 October 1977	Tur. Sugar Fty. Inc.
Muş Sugar Factory	21 December 1982	Tur. Sugar Fty. Inc.
Ilgın Sugar Factory	28 December 1982	Tur. Sugar Fty. Inc.
Bor (Niğde) Sugar Factory	15 January 1984	Tur. Sugar Fty. Inc.
Ağrı Sugar Factory	12 October 1984	Tur. Sugar Fty. Inc.
Kahramanmaraş Sugar Factory	30 November 1985	Tur. Sugar Fty. Inc.
Erciş (Van) Sugar Factory	24 January 1989	Tur. Sugar Fty. Inc.
Ereğli Sugar Factory	15 March 1989	Tur. Sugar Fty. Inc.
Çarşamba (Samsun) Sugar Factory	8 December 1989	Tur. Sugar Fty. Inc.
Çorum Sugar Factory	4 October 1991	Tur. Sugar Fty. Inc.
Kars Sugar Factory	30 October 1993	Tur. Sugar Fty. Inc.
Yozgat Sugar Factory	20 December 1997	Tur. Sugar Fty. Inc.
Kırşehir Sugar Factory	17 January 2001	Tur. Sugar Fty. Inc.

Table 1: Establishment Dates of Sugar Factories Between 1926 and 2001 (Turkey Sugar Factories Inc., 2003.).

In a country, the most natural and appropriate industrial institutions are industrial branches that are dependent on raw material from its soil, taking the strength from their productiveness and are based on their resources. The establishment of the sugar industry in Turkey, thanks to the agricultural conditions and opportunities, was a natural result of agricultural traditions of Anatolia (Sugar-Work Union, 2011, p. 1). As a result of the using advanced technological developments, the sugar industry became one of the most important sectors that increase the level of agricultural knowledge, provide employment opportunities for all employees and their families, and maintain the population of rural areas (Figure 2.9) (Sugar-Work Union, 2011, p. 2)

Figure 2. 9: Turhal Sugar Beet Agricultural Fields (TOBB ETU Architecture Department Archive).

This enterprise was not only aimed at the production of sugar but also brought about a radical change in the social structure. Sugar factories were an important investment decision and architectural project reflecting the modernization process of the country as well as a comprehensive project planned to meet the housing, educational and social needs of the individuals and their families who worked in the factories (Figure 2.10) (Sönmez, Gürol Öngören, & Özkul, 2019, s. 29).

Figure 2. 10: Usak Sugar Factory Workers' Houses (TOBB ETU Architecture Department Archive).

The campus area of the factories has units for production such as sugar warehouses, workshops, office/administration building, workers' pavilions, automobile, and locomotive garages, weighbridge, ramps, railway line, highways, and squares, water, sewage, and electrical installations. Additionally, it has units for social and daily life such as restaurants, cinemas (Figure 2.12) and guest houses, mosque, canteens, and retail stores, civil servants and craftsmen, educational units (Figure 2.11) (nursery, primary, secondary and high school) health structures (Figure 2.13) (hospitals, infirmary, etc.), sports fields (football, basketball, tennis, golf, swimming pool (Figure 2.14), etc.) (Veldet, 1958).

Figure 2. 11: Alpullu Sugar Factory, Primary School (TOBB ETU Architecture Department Archive).

Figure 2. 12: Turhal Sugar Factory, Cinema Hall (TOBB ETU Architecture Department Archive).

Figure 2. 13: Alpullu Sugar Factory, Infirmary (TOBB ETU Architecture Department Archive).

The sugar industry was the first versatile, spatial, and social organization for new modern architecture. In this way, these initiatives had reconstructed cultural identity and community, and the social structure in the Republic of Turkey. Sugar factories have made many positive contributions to the regions in which they were established throughout the country (Gürol Öngören, Sönmez, & Özkul, 2019, s. 422). If we classify those contributions as technical and social;

Figure 2. 14: Turhal Sugar Factory, Swimming Pool (TOBB ETU Architecture Department Archive).

Technical achievement:

- to meet the growing sugar needs of Turkey,
- to reduce imports by supporting domestic production,
- to conduct scientific studies through established laboratories,
- the use of modern techniques and technological machines in sugar product (Figure 2.15),
- to provide significant contributions to Turkey's industrialization and modernization development.
- development of advanced agricultural techniques (irrigated farming was brought to Anatolia with sugar agriculture),
- the machinery and engine factories established within the sugar factories to support the production units are also beneficial to factories belonging to other sectors,
- dissemination of modern architectural approaches throughout the country by using contemporary construction techniques,
- establishment of companies for large-scale organizations (Şeker Sigorta Inc., Şekerbank Inc., Kömür İşletmeleri Inc., etc.),
- sustainable regulation of the internal dynamics of the production organization (use of the pulp, which has become idle as a result of processing sugar beet, as animal feed and the production of meat and dairy products from these animals, etc.).

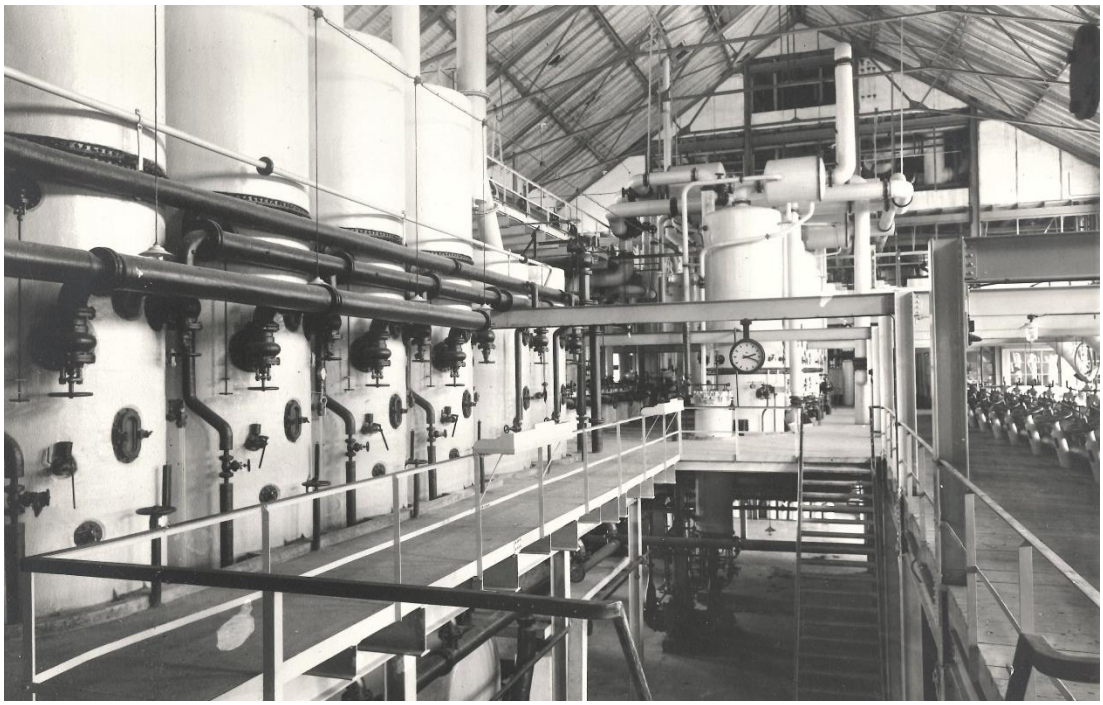

Figure 2. 15: Eskişehir Sugar Factory (TOBB ETU Architecture Department Archive).

Social achievement;

- to provide accommodation and basic needs to all individuals working in the factory,
- the existence of primary and secondary education and courses such as music and painting for the children of the employees and the people of the region,
- opening of educational and informative courses for employees' wife (evening girl's art school in Turhal Sugar Factory),
- film screenings in the cinema hall to strengthen social relations (Very high quality and new films of Istanbul was screened in the movie theaters of the factories in the most remote corners of the country, provided that they change once or twice a week (Tarus, 2018, p. 22),
- The most living spaces in the factory are the assembly rooms after the cinema. These places were used for prom (ball), festivities, trade union activities, congresses, and crowded meetings (Tarus, 2018, p. 22),
- Within the scope of modernization efforts, the organization of ball, music concerts, and theater performances in a la carte restaurants (Figure 2.17),
- the guesthouse structures in the campus area decorated with modern furniture for guests coming from upstate or abroad (Figure 2.18),

- factory employees and their families benefit from meat, dairy products, and fruit vegetables produced in farms and orchards established outside campus areas,
- providing employment opportunities for employees' children (training the girls in the accounting department or training the boys in the labor scales department),
- training professional athletes (archery, tennis, football teams, wrestling between factories) (Figure 2.16),
- application of different sports (swimming pool, mini-golf course) in regions where climatic conditions are suitable,
- availability of health services such as hospitals and infirmaries in the campus area,
- preventing problems such as internal migration and terrorism especially in Eastern Anatolia,
- publishing books, magazines, articles to emphasize the importance of sugar factories in the modernization and industrialization history in Turkey (30 in Turkey Sugar Industry book, Şeker (1951, November), Pancar (1951, October), etc.).

Figure 2. 16: Turhal Sugar Factory, Sports Competitions (TOBB ETU Architecture Department Archive).

Figure 2. 17: Eskişehir Sugar Factory, Assembly Hall (TOBB ETU Architecture Department Archive).

Figure 2 18: Ergene Villa Guesthouse (TOBB ETU Architecture Department Archive).

To establish a strong national pact within boundaries, the first field to be developed had been industrial areas in new Turkey. With the developments in science and technology along with industrialization, the formation of a more complicated division of labor became inevitable. Thus, society needed large-scale social organizations to support industrialization. Sugar factories have also contributed to the development of many different sectors in the newly developing country. For example, private enterprise, statism, protectionism, cooperatives, national economics, economic

activities, social policy were remarkable fields on issues related to human relations in terms of the sugar industry of Turkey's history (Veldet, 1958, p. 8). Moreover, with those technical and social benefits, it has become one of the most important areas in the history of industrialization and modernization of the country. Thanks to the achievements of the Turkey Sugar industry, those factories can be considered as application areas of the idea of the modern industrial city throughout the country. To achieve this multi-faceted development, the efficiency of each step was ensured at the highest level.

Scientific organizations and organic solidarity areas in Turkey could be considered as sugar factories because the daily campus life was based on constant motion and mutual support. While the workers and officers worked at the factory, their families lived in lodgings and their children went to schools on campus. At the end of working hours, they gathered and socialized in public areas such as the theatre in which screenings of films and plays were held. The families of the employees attended the courses opened within the factory and developed themselves culturally. Furthermore, proms were held on certain special occasions, and a modern way of life far beyond its period was lived on campus (Sönmez, Gürol Öngören, & Özkul, 2019).

İlhan Tarus traveled six thousand kilometers for two months and visited 15 sugar factories. As a result of these visits, he has written his experiences in sugar factories in his book titled "Long Jump". He generally describes the Sugar Factories as follows;

> "Sugar factories are not only a technological breakthrough, production explosion, foreign exchange savings, a source of prosperity, but one of the essential elements of a nation creation process and mechanism. Rivers are directed to give life to the plains and bring fertility. The peasant is taught machine farming, and machinery is given as gifts. The farmhand of the soil is converted into a worker and organized in a trade union. Schools, hospitals, and social facilities, especially movie theaters, are opened, sports clubs are established, and all the social life of the surrounding villages and towns is transformed and moved to modernity" (Tarus, 2018).

Tarus describes sugar factories as events that started a new history of civilization. He also mentioned that when a sugar factory was opened, the villagers learned everything from mechanization to clothing, etiquette to artistic activities there. Besides, Kenan Ipek who penned his memories of the Turhal Sugar Factory where his childhood passed, describes these areas as a model of social development in his book titled “Oh My Sugar Factories”. In addition, İpek describes sugar factories as a social

development project and social engineering practices targeting the entire nation. (İpek, 2020).

All this research shows that sugar factories have caused drastic changes throughout the country. Sugar factories applied throughout the country, which has a traditional social structure, are foreign to society in terms of construction methods, building sizes, forms of production, ways of life, and many more. However, this state of being a stranger can be considered as a guiding and developing factor for society. Reading well the characteristics of sugar factories as "The Stranger" in the past and re-evaluating them in today's conditions can be a method of transferring this culture, which we have seen in the social memory until today, to future generations.

2.2 A Stranger Realm: Ankara Sugar Factory

The 11 new sugar factories built between 1950-1960 were followed by the new factories opened in Ankara and Kastamonu in the 1960s. Ankara as the capital of the new nation-state established in 1923 is of great importance. Within the context of the modernity project implemented in Turkey at the time, Ankara was the capital of the new nation-state in the center of Anatolia, remote from the modernity formed by the internal dynamic of the West and the corrupting influence of the East. One of the most important criteria of this project, which aimed to regulate the socio-spatial transformation and reconstruction of the country, was the implementation of Ankara as a role model in the said modernity project. Another important criterion of the project was the establishment of a regular industrialization program (Tekeli, 2006, s. 7).

After the Republic, the new economic and social life policies of the state provided a privileged configuration service to the city. One of the most important steps to be taken as the provision of planned urbanization. When it became the capital in 1923, Ankara was in the appearance of a developed district. The rapid urbanization process was initiated, and in 1923, the first step was taken in planned urbanization. **The Lörcher Plan**, which included new central functions by Carl Christoph Lörcher, was implemented between 1923 and 1931. However, the Lörcher Plan failed to meet the pace of Ankara’s development, which had a growth rate of 6%. As a result, an international competition was organized for the planning of Ankara, and long-term solutions were developed for Ankara with H. Jansen winning the competition (Tekeli, 2006, s. 10). **The Jansen Plan** (Figure 2.19), which has an important place in Ankara’s

planning history, covers the period between 1930 and 1950 (Cengizkan, 2006). By the 1950s, the urbanization rate of Ankara, which had been planned as a representation venue of the "modernity project", continued to increase uncontrollably. New urban planning has been developed to control this growth.

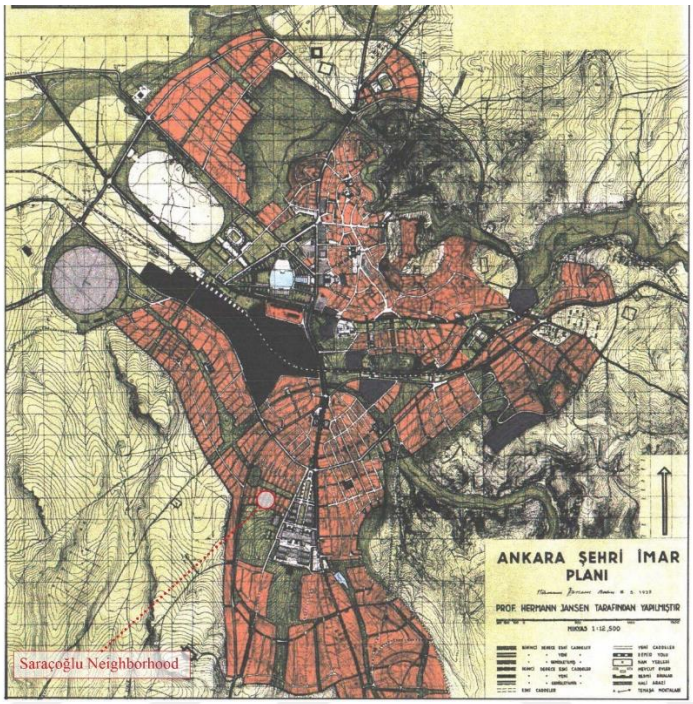

Figure 2. 19: Jansen Plan, 1932 (ABB, 2006, s. 55).

The Yücel-Uybadin Plan (1957-1970) (Figure 2.20), which aimed to unite the east-west axis of the city and to create residential areas on this line, intended to shape the city on a plan within the limited resources of the state. The said planning was constructed together with the Sugar Factory in the vicinity of Etimesgut, creating job opportunities and meeting the housing needs. The same kind of approach has been tried to be achieved with the Military Factories in Kayaş region. The main criterion of the Uybadin-Yücel Plan is the establishment of industrial buildings and residential areas together and the prevention of slums and unemployment. By the 1970s, existing planning had failed to meet the projections of population and settlement, and this planning was insufficient due to the transformation of Ankara into a metropolitan city (www.ankara.bel.tr, 2019). For this reason, **the Master Plan of Ankara** (1990-2006) (Figure 2.20) was developed to take the western corridor of the city as a base (Günay, 2006).

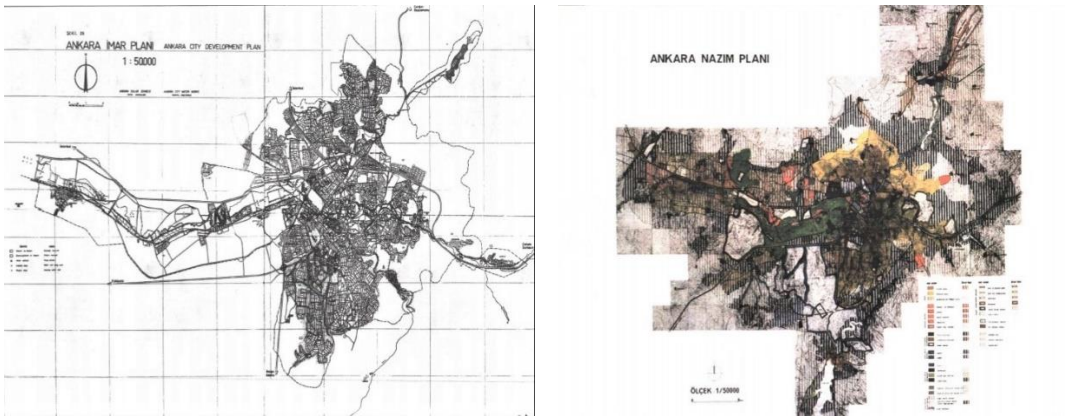

Figure 2. 20: Yücel-Uybadin Development Plan, 1957 & 1990 Ankara Development-Master Plan, 1982 (ABB, 2006, s. 56).

The industrialization process of Ankara started in the early Republican period. During this period, Ankara Forest Farm (1925), Ankara Cement Factory (1928), Gas Mask Factory (1935), Turkish Air Corporation Aircraft Factory (1941) and Aircraft Engine Factory in Etimesgut (1947) were opened. The rapid urbanization of the 1950s revived the construction and transportation sector, which led to the development of construction equipment and machinery maintenance-repair industries in Ankara. The number of factories established in the city increased to 51 between 1955-1959 (Yurt Ansiklopedisi, s. 607-611).

Ankara Sugar Factory was established in Etimesgut district on 14.11.1957 by the Turkey Sugar Factories Joint Stock Company, according to the Ministry of Industry's letter, dated 9.11.1957 and No.9033 and the first article of the law No.6747[4] (Figure 2.21). The factory site was built on a land of 4000-4500 acres, next to the railway network (opposite the Eryaman railway station) which provides transportation to all parts of Anatolia[5]. Also, the selection of the factory area was influenced by factors such as the fact that Ankara is located in the center of sugar beet production areas, the land is flat and suitable for development, the crossing of Çubuk Stream in the land. Ankara Sugar Factory started production on October 19, 1962. The vast majority of Ankara Sugar Factory's building materials were produced in Turkey, were assembled

[4] General Directorate of State Archives Cumhuriyet Archive, T.C. Application Laws and Decisions Investigation Department Directorate 4/9683.

[5] T. R. Industrial Attorney, Industry Department Directorate 80/9033 Annex 1.

by Turkish engineers. (Turgut Gültekin, 2016). When the development of the Sugar Industry is examined in three main periods, Ankara Sugar Factory has the distinction of being the first factory established in the last period, and it also contains a Machine Factory within the settlement (Figure 2.22). This factory was established to supply spare parts for the sugar industry and other industrial organizations. In addition to the Machine Factory, Seed Factory (1976) and Electromagnetic Tools Factory (1977) were established in the following years. Following the establishment of the Sugar Factory, there has been considerable progress in sugar agriculture in the region. The sugar beet plantation area was 175 hectares in 1950, and by the end of the 1970s, it was close to 9000 hectares (Anonim, 1982, s. 595).

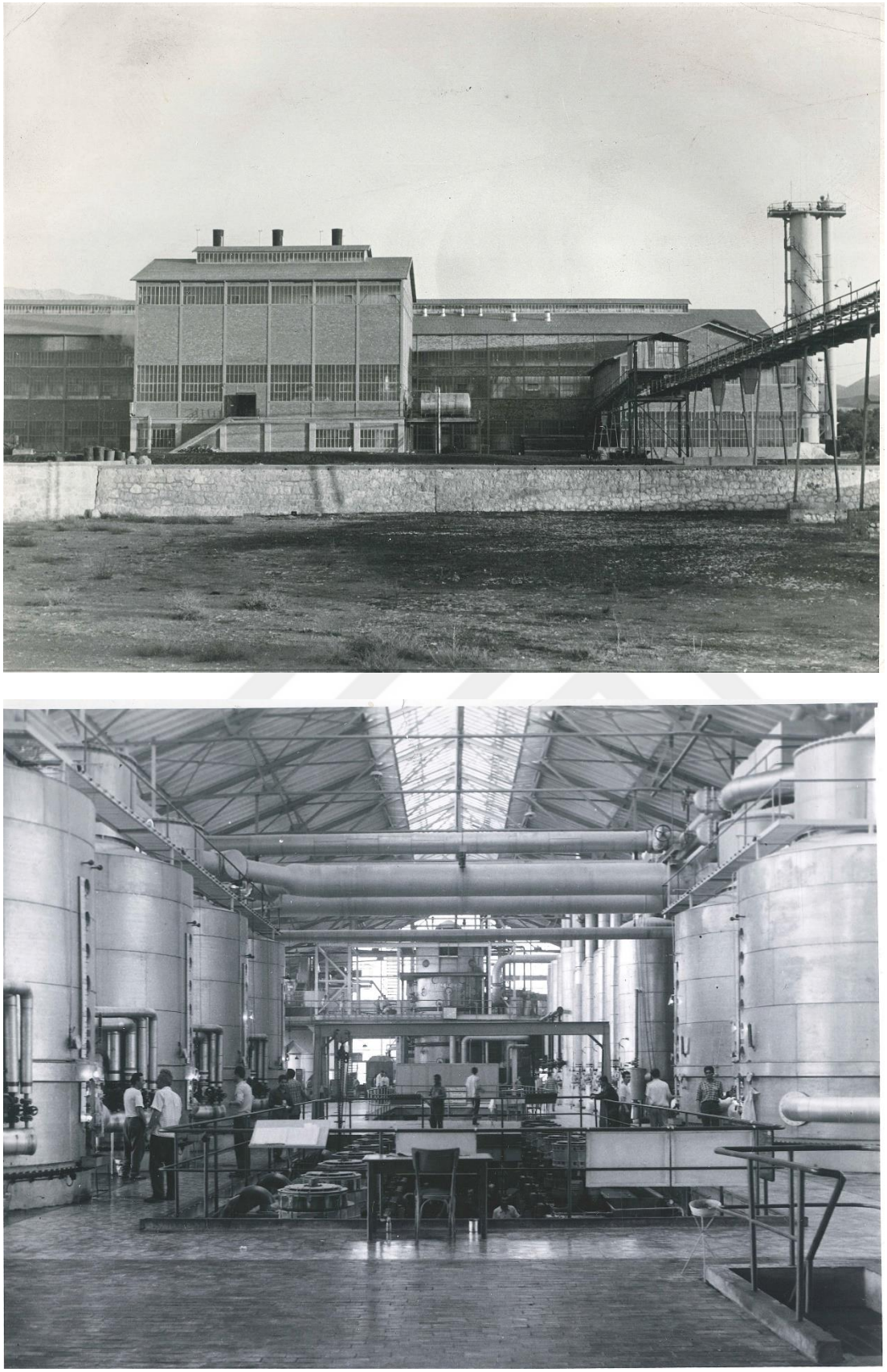

Figure 2. 21: Ankara Sugar Factory (TOBB ETU Architecture Department Archive).

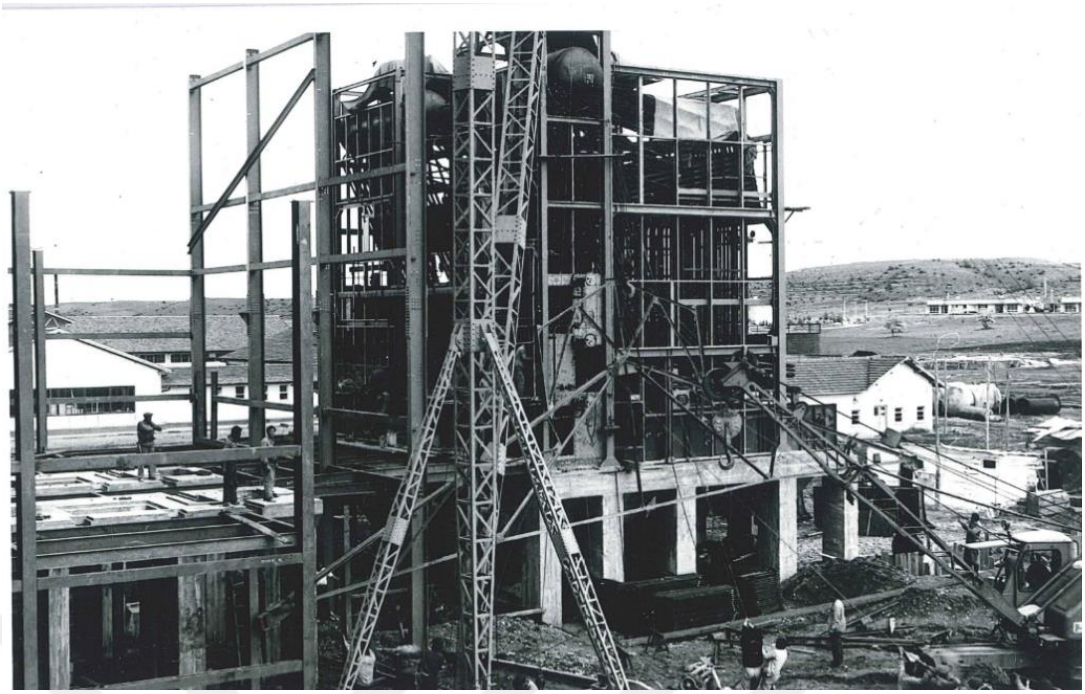

Figure 2. 22: The Machine Factory within the Settlement of Ankara Sugar Factory (TOBB ETU Architecture Department Archive).

The factory campus is located between Çubuk Stream and Atatürk Forest Farm and has ensured the continuity of the green line. In addition to all these physical features, there was a modern lifestyle on the factory campus. The factory had programs such as cinema, theater, gym, school, nursery, and guest house. However, the campus was located far from the city center. Therefore, residential areas have not taken advantage of this rich architectural program and this situation caused the campus area not to integrate with the city.

If this relationship is examined in the case of Ankara, it is seen that the Sugar Factory could not be included in urban life and the production and social movement were experienced only in itself. One of the most important reasons for this was the distance of the factory campus to the city center. According to the Jansen Plan Report published in 1932, it was emphasized that Ankara, under any circumstances, should not be an industrial city; and the industrial structures to be established should be located outside the city center and along the railway line. The main reason for this was that the city was to be left to public and green areas in the construction of a modern city. It is said that the new governmental center should be constructed with the landscape, climate, natural and historical structures and that the integrity of these areas should not be disturbed (Figure 2.23) (Ankara İmar Planı, 1937, s. 20-21). The Uybadin-Yücel Plan

was also created following this urban design principle. According to this plan, Ankara Sugar Factory and Etimesgut residential areas to be created have been constructed together. The Sugar Factory was planned to offer different spatial riches while providing employment opportunities to people living in the region. However, the fact that the factory area was surrounded by Atatürk Forest Farm, military areas, and other industrial areas resulted in this rich social content not being able to be a part of urban space. Furthermore, the railway and road extension between the factory campus and the Etimesgut residential areas failed to provide the expected social interaction.

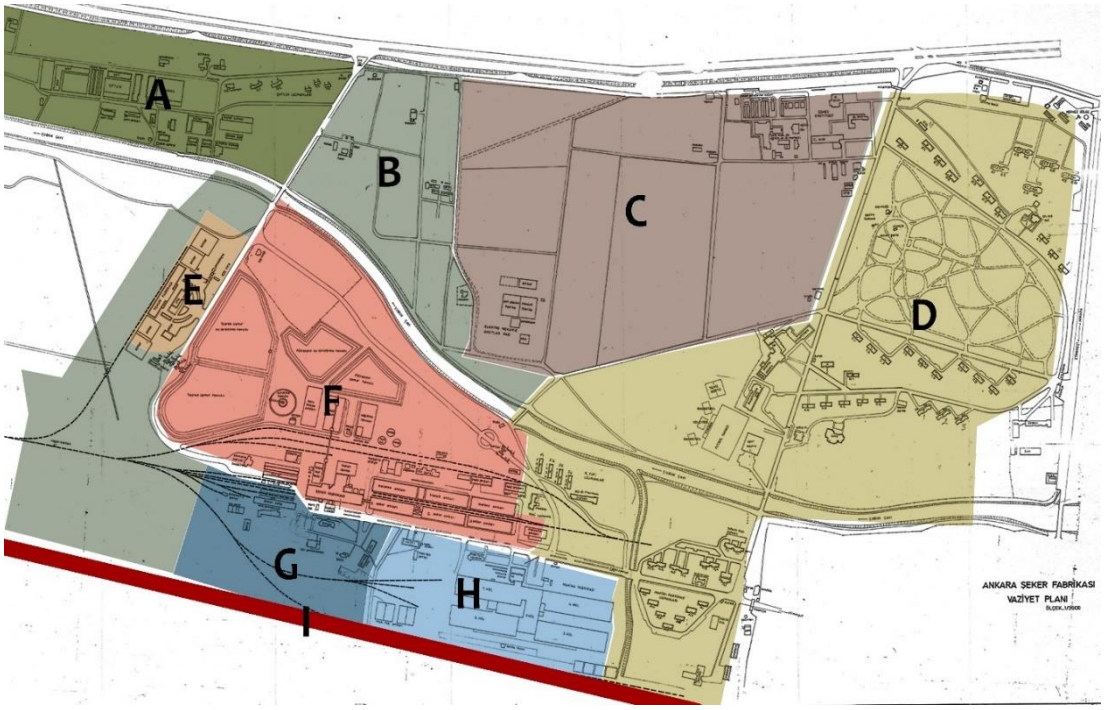

Figure 2. 23: Ankara Sugar Factory Layout Plan (TOBB ETU Architecture Department Archive).

A – Farm, B – Recreatıon Area, C – Instıtute, Education, Committee of Inspection, D – Dwelling House, E – Seed Factory, F – Sugar Factory, G – Storage, H – Machine Factory, I – Train Line.

Establishment strategies that take place throughout sugar factories have been tried to be implemented in Ankara, as well. However, the reasons such as the physical inaccessibility of the area and the city has reached a certain level of development and modernity resulted in the fact that the area could not be included in the urban use. This situation shows that the technical and social gains in the campus areas need to be renewed and updated over time. The campus area was mostly used by factory employees and their immediate families or senior managers. The fact that the factory employees can meet their daily needs in the campus and the surrounding people meet

the cultural needs in the very well-equipped city center, may explain why the interaction was inadequate. Because the Ankara Sugar Factory was built in a city which had almost reached a metropolitan level as of the date of factory's establishment. Therefore, the Ankara Sugar Factory was not able to fulfill the modernization ideology assumed by sugar factories.

3. SUGAR FACTORIES AS “THE DARK ECOLOGY”

The sugar industry has been encountering many different threats, especially for the last 20 years. Factory areas lost their past values because the campus areas were left in the city center and were considered as rent areas and quota applications for sugar production. The situation faced by those areas is full of darkness. At this point, a new perspective is required to eliminate uncertainties about the future of those areas. To define this confusion more clearly, Timothy Morton introduced the concept of dark ecology. Within the scope of this thesis, the approach of the philosopher Timothy Morton about to the dark areas remaining in the city centers was determined as a theoretical framework.

There are lots of methods and perspectives to acquire knowledge about everything. By using these methods our understanding of the present and the future can be clarified, yet in the present situation, these methods are not enough. New perspectives and methods should be developed to comprehend the future better and to discover different possibilities regarding the future. The philosopher Timothy Morton developed a new way of thinking about the future coexistence called "dark ecology" (Morton, 2016, p. 1). This phenomenon is developed from ecological awareness and is dark-depressing. The fact that once called nature or environment has become idle due to reasons such as deterioration, decay, or unavailability should not be a separate case in living space (Morton, 2016, p. 5). Dark ecology directs us at multilateral thinking system like that "life", "human", "society", "nature", "sense" etc. According to Morton, this phenomenon discusses that concertedness to ecological truth more exact than in daily life which includes the academy, media, and society (Morton, 2016, p. 159). Timothy Morton, in his other book about ecology, "Ecology without Nature: Rethinking Environmental Aesthetics", has rediscovered the ecological debate and has developed a new critical language that leads to developing a new way of doing ecological criticism. Ecology without nature argues that the very idea of nature will have to disappear in an ecological condition of human society. This paradoxical situation,

which is defined as dark ecology, tries to make ecological culture superior to the forms of philosophy, politics, and art. Dark ecology not only talks about plants, animals, and weather but investigates all types of thinking about place and space. And it also includes specific text, writers, composers, and artists. The first stage is an exploration of environmental art. And in the second stage, this book mentions the ideology and history of beliefs, practices, and concepts that gather current affairs about the environment in all its parts of culture such as, from experimental noise music to wildlife club calendars. In the last stage, finds out different ways of taking an artistic stand on environmental problems. The book progresses from an abstract discussion to a series of attempts to determine exactly what our connection to environmental art and culture could be, as social and political existence (Morton , 2007).

Morton visited the industrial city of Nikel, located on the border of Norway, to examine the reflections of the dark ecology concept in industrial areas (Figure 3.1). The classical Western idea of landscape implies the opinion that "humans" and "glance" should be evaluated separately. Yet Morton has changed this idea deeply with the concept of dark ecology. According to him, the environment that once existed in nature and ecology can no longer exist outside the social sphere. The natural environment has been changed by humans so that it can no more be affected by the production and consumption societies. As a result, the human sphere and ecology are deeply surrounded by each other. It has become commonplace to control the world with all its resources, to use it for its benefit, and to make basic criticisms of the information argument (Janike & Hemmersam, 2018, p. 95). Within the framework of the dark ecology, fundamental changes have taken place in nature, and the ecological environment has completely changed as industrial areas have built. Morton argues that the natural environment has gained a new definition and has become the place of production and communication. The ecology of these areas can now be defined not only by natural conditions such as vegetation, animals, weather but also by including everything produced by humans.

Figure 3. 1: Nickel in Nikel, Russia (Janike & Hemmersam, 2018, p. 71).

If we examine the dark ecology in terms of sugar factories, the campus areas, which have a magnificent ecological cycle in themselves, have lost their current features with many threats they encounter. As a result of the deterioration in the ecological cycle, daily life balances of campus areas change and lose their value. Questions about the evolutionary processes of all these dark ecologies, their current potential, the future ecological cycle of the areas should be answered. At this point, the discourse brought by this way of thinking is that we should not ignore those areas and continue to exist together with them as we cannot keep those areas out of the life cycle, or we cannot remove the ecology they create in their inner world from everyday life.

3.1 Current Problem of Sugar Factories

Although Sugar Factories had many achievements in various aspects of life in the past, they are facing many problems and threats today and those threats are now a part of its ecology. Studying the transformation reasons for factories and lifestyles into dark-depressing might help the potential reconstruction designs for the future of these areas, so it needs to be studied in detail. In Turkey, one of the industrial areas that remained in the city centers is the sugar industry. Today, factory campuses located in areas with high rent potential in urban centers face different problems. In addition, those problems are increasing in number due to reasons such as failure to meet supply-demand

balance, being unable to maintain their economic efficiency, to decrease sugar beet quotas, not keeping up with technological developments. Sugar factories have produced as being dependent on Turkey Sugar Factories Inc., from 1935 to date. Per the European Union membership process, TSFAS was subjected to the new sugar law numbered 4634 issued in 2001. With this process, production restrictions were imposed on the sugar industry and other related sectors, thereby paving the way for the privatization process. While the production was determined according to the domestic supply-demand balance before the law numbered 4634. With this law, structural changes were made, which led to the transition to alternative products (starch-based products) (Tüsiad 2008 104). In this context, the biggest change made by the law is that beet cultivation quotas have been transferred to alternative products included in the market (BYDK Report, 2001: VIII). The purchase quota of TSFAS has been narrowed and it has been decided to complete the empty quota with products such as corn, sunflower, soybean (BYDK reports, 2004: 59). The transition to alternative products has accelerated because of the decrease in sugar beet purchase prices and the decrease in production incentives determined by the Council of Ministers (Taşdoğan & Taşdoğan, 2012, p. 61).

The sugar industry, which has a history of about 84 years, has been taken from the status of "state economic organization" to the scope and program of privatization with the Law No. 4046 on Privatization Applications on 24/11/1994. After this process, a rapid privatization process was started by citing reasons such as the factories were operating with incomplete capacity and not making enough profit. In the decision dated 12/08/2008 and numbered 2008/50 of OYK's concerning TSFAS's privatization program, it was planned that TSFAS would be privatized as portfolio groups.

These portfolio groups as geographically based are;

- Portfolio A: Kars, Erciş, Ağrı, Muş ve Erzurum,
- Portfolio B: Elazığ, Malatya, Erzincan ve Elbistan,
- Portfolio C: Kastamonu, Kırşehir, Turhal, Yozgat, Çorum ve
- Portfolio D: Bor, Ereğli ve Ilgın,
- Portfolio E: Uşak, Alpullu, Burdur, Afyon ve Susurluk,
- Portfolio F: Eskişehir ve Ankara Sugar Factories

Although there is a production requirement for all factories to be sold or sold under privatization, the future of those areas is quite uncertain. This practice, which seems harmless at first, may have negative consequences in the long run. As a result of profit and loss comparisons, sugar industry areas that remain in the free market are in danger of being eliminated due to their position in the city center carrying annuities. In the event of such a possible scenario, the problems likely to be caused by this dangerous situation that would take place in chains and cause problems across the country can be listed as follows;

- Since the Sugar Industry economy is primarily a field based on agriculture, farmers will be the first to be affected by this process.
- If the farmer leaves the farmlands, many families who lost their income source in Anatolia will have to migrate to the cities.
- This situation threatens the sustainability of existing rural life.
- In the long term, environmental problems related to water and soil will be encountered in areas where agriculture is not practiced.
- Foreign dependence of a country that does not provide its adequacy in terms of production will become inevitable.
- Unemployment will increase with the end of the sector, which provides employment opportunities to 10 million people directly and indirectly.
- With an annual sales volume of approximately 3 billion TL, its contribution to the country's economy will be reduced.
- Because of the quota for sugar production, the sugar needs of the people will be supply on a starch basis and in this case will directly affect the public health.
- As a result of uncontrolled urbanization, campus areas that remain in high-income positions in urban centers will become areas where self-interest can be applied.
- The uncontrolled destruction of the structures in the campus areas will erase the traces of their architectural identity and cultural values in history.
- Research and development activities in the field of agriculture and industry that have been ongoing for many years and were based on their own internal experience will be stopped. (Sugar-Work Union, 2011, pp. 174-194).

Sugar factories turned into a dark area with current threats and future potential problems. State authorities claim that this dark situation will be solved by including

factories within the scope of privatization. But this method only serves the interests of certain legal entities. Solution suggestions regarding the future of the areas should be constructed with sustainable solutions, which take the foundation period achievements as an example and include current architecture discussions. The organization of the future situation might be possible by making the correct redefinition of the nature of sugar factories.

3.2 A Dark Realm: Ankara Sugar Factory

Industrial areas that bear witness to the history of industrialization of countries have lost their past values over time due to social and economic inadequacies. Those areas, which remain mostly in city centers, need to be reintroduced to the urban space. Ankara is one of the cities where industrial areas remain in the city center due to insufficient planning and uncontrolled population growth. After the declaration of Ankara as the capital, many successful urban planning strategies were developed to bring the rapidly growing population under control. However, as a result of uncontrollable urban growth in recent periods, industrial areas purposely placed on the city borders remained at the center of the residential areas. One of these areas is Ankara Sugar Factory. The factory campus area, located in the western corridor of the city, describes an important void within the dense urban fabric. This area, which cannot participate in the urban space in its current state, has many urban infrastructure potentials. The campus area was located to the west of the Gençlik Parkı and Atatürk Forest Farm, which were designed to make Ankara a modern capital city. The Ankara Sugar Factory, which supported areas designed to be a part of the modernization project of the Republic, also supported the creation of urban identity. For Ankara, which was planned as a modern society and capital, such tools of economic, cultural, and social transformation should be considered as an important tool of urban memory (Figure 3.2) (Uludağ & Aycı, 2016, p. 749).

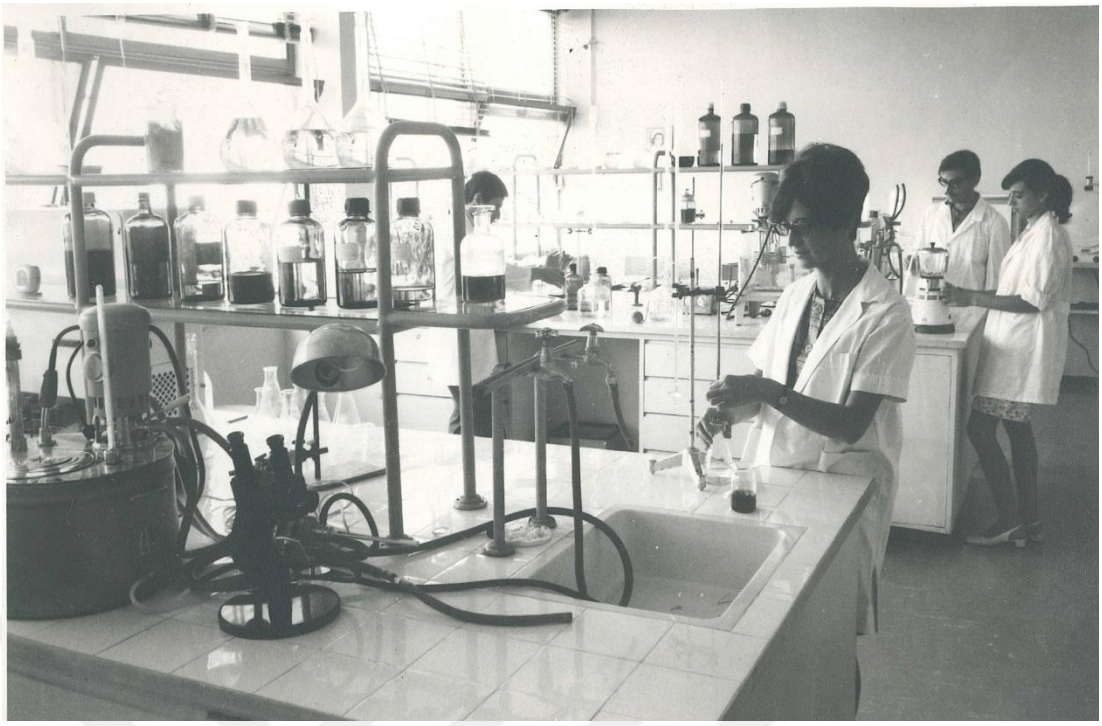

Figure 3. 2: Ankara Sugar Factory, Research Institute (TOBB ETU Architecture Department Archive).

Ankara Sugar Factory is one of the most important tools for creating a modern society with its physical and social facilities. If the definition of industrial heritage is to be examined, the technical equipment in the factory area, the production structures and the daily life of the campus and the collective formed in the city should be investigated and documented in this context. At this point, if different industrial heritage definitions examined; one according to The Nizhny Tagil Charter, published by TICCIH (The International Committee for the Conservation of the Industrial Heritage) in 2003, the industrial heritage is defined as follows;

> "Industrial heritage consists of the remains of industrial culture which are of historical, technological, social, architectural, or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to the industry such as housing, religious worship or education. Industrial archaeology is an interdisciplinary method of studying all the evidence, material and immaterial, of documents, artifacts, stratigraphy and structures, human settlements and natural and urban landscapes, created for or by industrial processes. It makes use of those methods of investigation that are most suitable to increase understanding of the industrial past and present" (TICCIH, 2003).

Furthermore, in Marily Palmer and Peter Neaverson's Industrial Archaeology, industrial archaeology is defined as the study of tangible proof of economic, cultural, social and technological process of the period since industrialization. According to Palmer and Neaverson, industrial areas are places of physical and cultural processes and are evidence of industrialization. Researching, analyzing, examining their context and typological structures should examine within the scope of industrial archeology. (Palmer & Neaverson, 1998). Another industrial heritage definition is made by Kudith Alfrey and Tim Putnam;

> "The progress of industry produces a scrapheap: of redundant products, machinery, building materials and 'waste' certainly, but also of projects, performances and ways of life. What is abandoned though is seldom without value; much find a new use, often in an unrecognizable form. What is leftover becomes the raw material of the industrial heritage" (Alfrey & Putnam, 2005, s. 3).

What is industrial heritage? What does manage the industrial heritage involve? We have put this question to many people in several countries and received diverse answers:

- piecing together the remnants of long-lost (or not so long-lost) industry to understand how it functioned;
- protecting and caring for buildings, sites and machinery because of their technical, historical or aesthetic interest;
- finding new uses for redundant but irreplaceable elements of the industrial landscape;
- restoring disused machinery and working practices to use;
- recording the knowledge, skills, and experience of industrial populations;
- using the results of the above to show how past generations lived and worked.

Each of those activities involves constituting a resource (selected traces and remains of previous activity) for one or more uses (study, care, representation). Thus, making the industrial heritage being involved in managing the relationship between a range of such potential resources and their possible uses (Alfrey & Putnam, 2005, s. 1).

Ankara Sugar Factory campus area should be included in the scope of industrial heritage by those definitions and, therefore, protection rules should be applied. Beyond protection, such large-scaled and valuable area in the city center should be brought into the everyday life of the urbanist. However, in today's conditions, the integrity of

the campus area, let alone industrial heritage protection, cannot be maintained. Especially after 1980, neoliberal urban policies negatively affected the campus area. The integrity of the factory area has been damaged by constructions such as the shopping center and train maintenance station. Also, the area has developed the aerospace and defense industries (such as ASELSAN, TAI, etc.) and subsidiary industries (such as OSTIM-OSSA) located in the west of the city in the last decade, and the logistics base opened in 2010 under conversion pressure to meet the demands of upper-income group workers for sheltered housing and urban space suitable for their social life practices (Figure 3.3) (Figure 3.4) (Turgut Gültekin, 2016, p. 929). The Ankara Sugar Factory is an important part of the Sugar Industry and Turkey's industrialization history. Thus, the heritage value of the production, everyday life, and social spaces that have survived to the present day must be preserved.

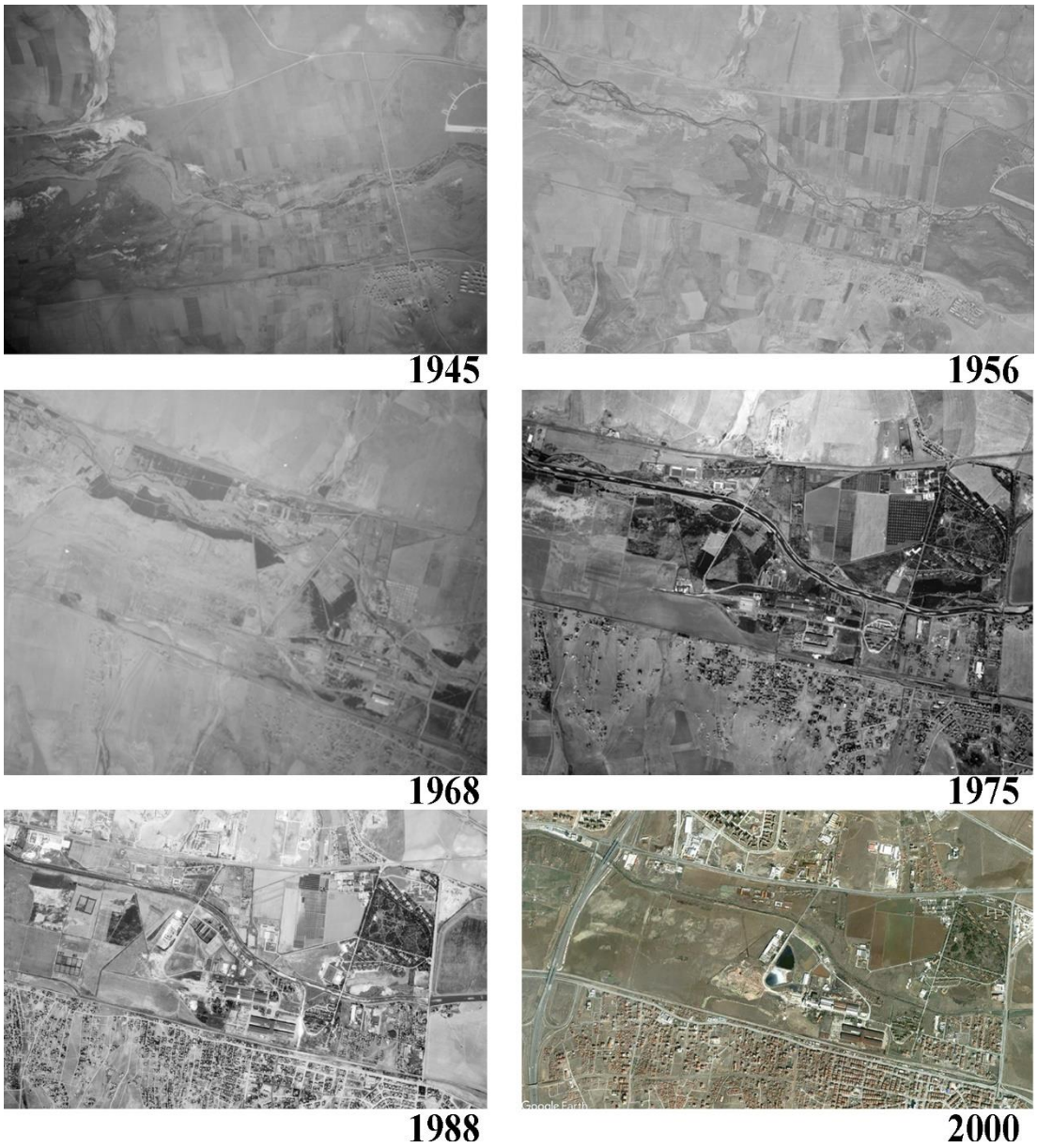

Figure 3. 3: Change of Ankara Sugar Factory and Its Near Surroundings Over the Years (General Directorate of Mapping Archive).

Figure 3. 4: Ankara Sugar Factory Campus Areas Aerial Photo (Google Earth Pro).

For this purpose, TMMOB Ankara branch applied to the cultural assets Protection Board No. 1 in Ankara on 25.12.2014 and with the decision No. 2033, Sugar Factory Main Building, A, B, C blocks of Sugar Research Institute[6] (Figure 3.4) (Figure 3.5), Cinema and Restaurant Building (Figure 3.6) and Management Building were registered in the campus area. This initiative, which protects the building scale, is quite inadequate for the general area of the campus. The urban image and cultural value of the area can only be achieved through the integrity of the campus. Although no steps have yet been taken to destroy the structures in the campus, its infrastructure of destruction is being formed. The greatest evidence of this is that a 16.6 ha portion of the campus was transferred to FDI and made a train maintenance station (2014) (Turgut Gültekin, 2016, p. 929). Also, a mall was built on the northwest aspect of the campus in 2004 (Ronesans.com, 2020).

[6] As a result of the architectural project competition held in 1961, the institute building is the first designs of DoğanTekeli-Sami Sisa (Bancı, 2006, p. 39).

Figure 3. 5: Sugar Research Institute (TOBB ETU Architecture Department Archive).

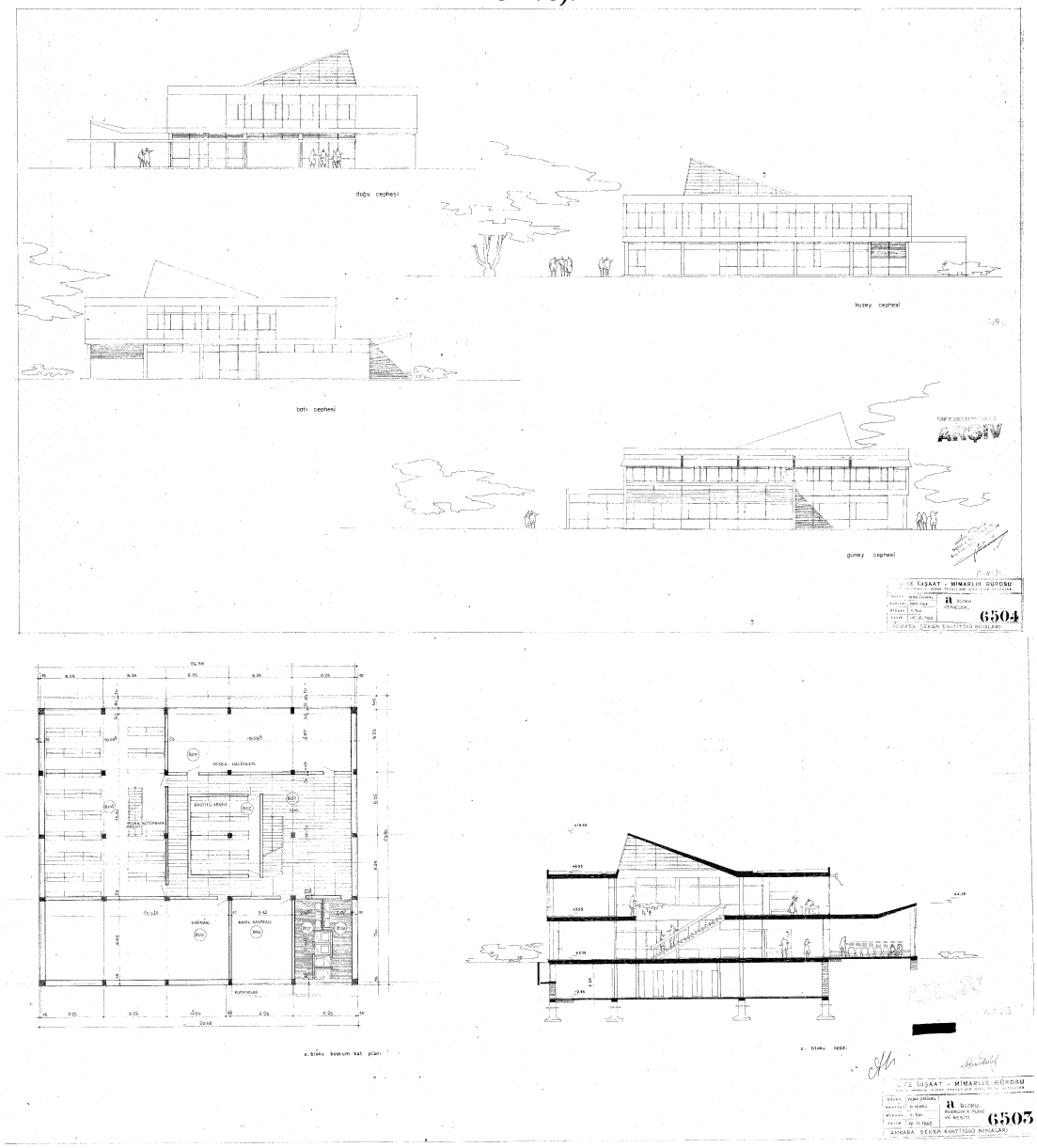

Figure 3. 6: Sugar Research Institute, Facades View, Plan and Section (TOBB ETU Architecture Department Archive).

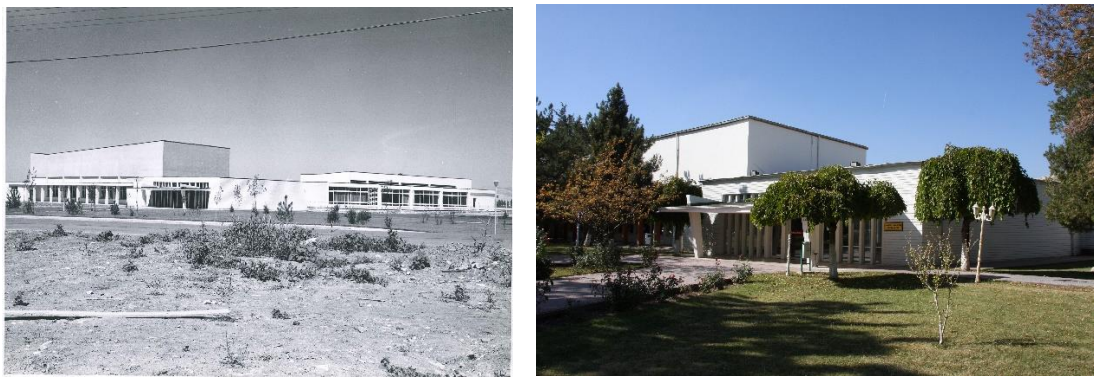

Figure 3. 7: Cinema and Restaurant Building (TOBB ETU Architecture Department Archive).

In addition to all those threats, the factory is covered by the privatization process described in detail in section 3.1. The future of the field will remain at the discretion of legal entities after 5 more years of production requirement which is the privatization criterion. The Ankara Sugar Factory is not only a part of the industrialization process but also forms indelible traces of the urban memory with its campus layout, social accessories, and modern life forms that have reached today. A new focal point can be created in the city by the correct construction of the future of the campus area, which has a lot of physical, social, and natural potential in the city center. For this purpose, the situation faced by the campus area today has been evaluated through the concept of Dark Ecology, which has been examined in detail in section 3.

Sugar factories changed the regions where they were established ecologically, sociologically, and culturally. In this case, the ecology definition of those regions must be changed and evaluated together with the existing nature and other concepts that participate in it along with the social organization. In other words, while the area in question consisted only of the natural environment, the current definition of Ecology changed with the construction of the factory to this area. Now factory production is redefining social life, the problems it faces, and its ecology. According to Morton, Dark Ecology embodies all concepts related to society and all themes related to nature. Within this context, the themes and locations of the Ankara Sugar Factory that constitute the Dark Ecology can be listed as follows;

Tangible Themes;

- Production facilities (machine factory, Sugar Factory, etc.)

- Social areas (Guest House, Casino, Cinema structures, etc.)
- Daily life places (schools, mosques, lodgings, etc.)

Intangible Themes;

- Cultural events (prom, opening ceremony)
- Sporting events (wrestling, running, etc.)
- Images of space (ballrooms that are mediators of modernization, etc.)
- The unique identity of the field (the modern way of life experienced in campus areas and advanced production technologies etc.)
- Daily life practices (educational courses etc.)

Ecologic Themes;

- Recreation Area (green arenas)
- Stream source (Çubuk Stream)

Problems;

- Degradation of the soil integrity of the area,
- Being under threat of privatization,
- All structures not being included in the scope of registration,
- Insufficient production capacity.

While the future of Ankara Sugar Factory is being constructed, the definition of Dark Ecology, which is formed by the combination of its natural ecology and the threats it faces, should be considered. At this point is, exactly what Morton argues appears, that space now exists with its dark ecology, and this situation cannot be ignored. In this context, the Ankara Sugar Factory now consists of a combination of its abstract and concrete heritage and the dark situation it is in today. If this paradoxical situation can be constructed together, design strategies that are both compatible with the city and not contradictory to its past can be developed. At this point, the example of IBA Emscher Park in the Ruhr region was examined as a means of establishing this association. Because this area, like the Ankara Sugar Factory, is an area where production, culture, and ecology were once built together, and later has become a dark area by remaining in the city center over time and has been reintroduced to the use of the urbanist through its design strategies.

4. IBA EMSCHER PARK AS A MEANS FOR PRODUCING INDUSTRIAL TRANSFORMATION STRATEGIES

The Ruhr region contains numerous natural fields, which are composed of three main landscape. The lowest point (13 m) in the west of the area, in the Lower Rhine Bight, can be in Xanten (District of Wesel). The highest one (442 m) is in the southern Rheinisches Schiefergebirge (Rhenish Slate Mountains) at Wengeberg in Breckerfeld (district of Ennepe Ruhr). The third large natural area, the Westphalian Bight, lies in the north of the country. The three broad natural landscape can be divided into smaller units whose influence was as important to the creation of regional trends as the main river courses – the west-oriented Ruhr, Emscher, and Lippe rivers and the north-bound Rhine river. Geologically, the Ruhr is part of the northwest European coal belt that also involves the mining sites in the south of Poland, in southern Belgium, in northern France, in South Wales, and the Midlands of England. Furthermore, building materials as sandstones and sands are to be found in the valleys of the rivers Ruhr and Rhine. Another important natural advantage that affected and favored the development of the Ruhr is the water of the rivers Ruhr, Emscher, Lippe, and the Rhine. Connecting various functions, the rivers are used as lines of transport, they provide the population with water of high quality. Also, water used in industries for cooling could be drained by riverbeds. Ruhr valley, which contains many different mining resources, has become a very important industrial area, even if it started industrialization later than other European countries. In the high industrial era from 1850 to 1900, Emscher areas witnessed significant industrial impacts.

During the two world wars, weapons and the war economy were primarily used for the industrial capacities of the Ruhr Valley. After World War II, coal production resumed as the base for economic reconstruction in Germany. Coal was still the energy basis of iron smelting, of the chemical industry, of electricity generation and transport. In the 1950s, there was a big crisis due to reasons such as the price of cheap plan oil and natural gas and cheap coal imports from the USA. The Ruhr was also filled with iron

and steel resources. One of those resources was the iron deposit, which was excavated in the region of Emscher. The Ruhr's iron and steel industry were the center of the arms industry for World War I and II. In only a few decades, the rivers became the natural starting lines of its infrastructure, a highly integrated manufacturing complex centered on coal, iron, and steel spread throughout the country. Ruhr valley did not only become the guiding lines of development within the various structural rural zones (Ruhr zone, Emscher zone, Lippe zone), but it also grew to meet the needs of the population living and working in the region. The social culture that had developed in the Ruhr was broken up by the Nazi ideology. Also, the regional decline of coal mining and the iron and steel industry that ensued from the late 1950s crises may even have lost its former popularity. Based on a short but eventful history since the mid-19th century, Ruhr developed into a multicenter area the specific of which is its variety Figure 4.1) (Keil & Wetterau, 2013, pp. 4-34).

The Ruhr industrial zone has become an unused area for reasons such as its location in the city center, decreased coal reserves, and moving production units to different regions. Plans were made for the future of such a large area in the city center.

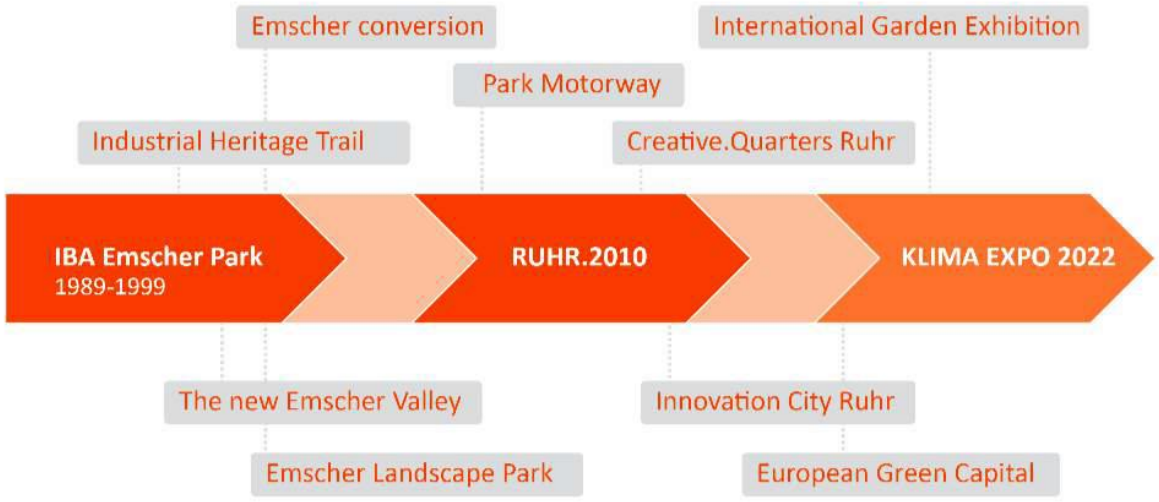

Figure 4. 1: Chain of Effects in the Ruhr Area (Reicher, 2018).

4.1 Emscher Park (1988-1999)

Emscher Park is in the central part of the Ruhr area. The International Building Exhibition (IBA)[7] launched a study on the transformation of the region in 1988 (Figure 4.2).

> "IBA Emscher Park (1988-1998) has been recognized as a classic case study to see how the Ruhr region has transformed the gloomy heavy-industrial image into a brand-new one with more sustainable concerns. The research makes a comprehensive review of the project after it's finished for 20 years and evaluates what's the pattern of legacies and any other additional values that the project has brought to the region. Besides, the research also discusses the maintenance mechanism of those legacies and provides some guidelines for further researches. According to the research, there are indeed plenty of tangible and intangible legacies that IBA has left such as ecologically revitalizing water system and landscape, socially empowering citizenship, politically consolidating regional cooperation, economically boosting regional competitiveness, and so on, and the further influences are affected even nationally and internationally. However, several challenges both the Ruhr region and IBAs are facing, such as lack of strong visions and the standard of experimental implementation. In the end, the research points out several debates about the legacy topic and provides some recommendations about the regional development as well as future IBA implementation" (Jeng, 2018, p. 8).

This mega-project, which is the result of a 20-year work of IBA[8], has increased the region's competitiveness and quality of life. This project did not only transform the Ruhr region but also guided the potential industry transformation of areas. Moreover, in the future protection approaches and transformation suggestions can be developed for areas carrying industrial heritage characteristics, thanks to this valuable knowledge. Reading the design criteria of this project, which IBA has designed and implemented over the years, has been used as a tool in the creation of the transformation strategies of the Ankara Sugar Factory, which constitutes the main purpose of the thesis.

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[7] IBA is an innovative instrument to implement urban regeneration in Germany.

[8] In the ten years in which the IBA operated for the Ruhr regeneration, €2.5 billion was invested, of which €1.5 billion came from public sources (federal government, EU funds) and €1 billion in private resources (Douet, 2012, p. 108) .

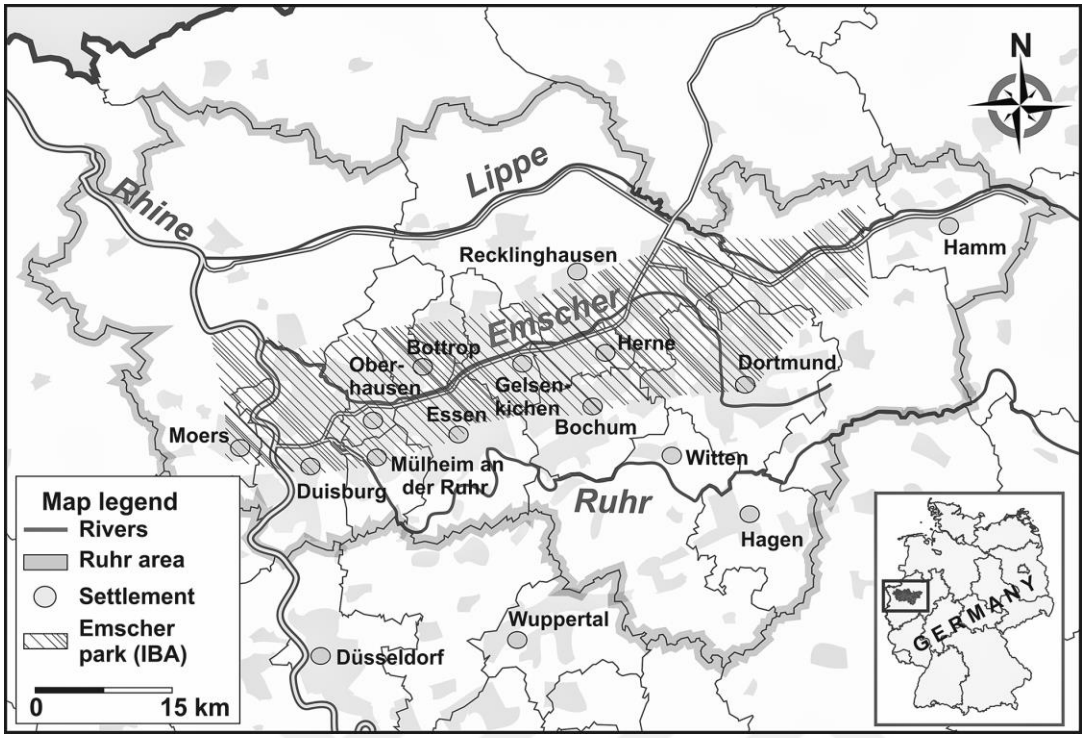

Figure 4. 2: Ruhr Area with Highlighted Position of the Emscher Park (IBA) (ĆopićA, et al., 2014, p. 45).

In this project, which has a development process of nearly 30 years, the main idea has brought a new perspective to landscape planning. The reorganization of this recreation area has offered solutions to problems such as uncontrolled urbanization of the region and unemployment. With the implementation of the project, the region between the abandoned industrial zones has become a new attraction. Ruhr Valley, which has lots of brownfields has turned to a new attraction center thanks to this project. Thus, the project has offered better-living conditions to the citizens, attention has drawn to the ecological, economic, and social aspects of the difficulties experienced so far, and ways to improve the region have cleared. Also, Route.industriekultur route has been created to connect green areas and cultural structures in this urban scale transformation project (Figure 4.3). The said route provides access to 13 different port areas, factory conversion projects located inside, and 14 cruise points with impressive views. This circulation not only provides users with a cultural activity but also connects neighboring cities in terms of cultural heritage. In addition, the Emscher River, which has become dirty, dangerous, and unusable due to wastewater, has been cleaned and revitalized under this project with a large investment of 5.5 billion (Jeng, 2018).

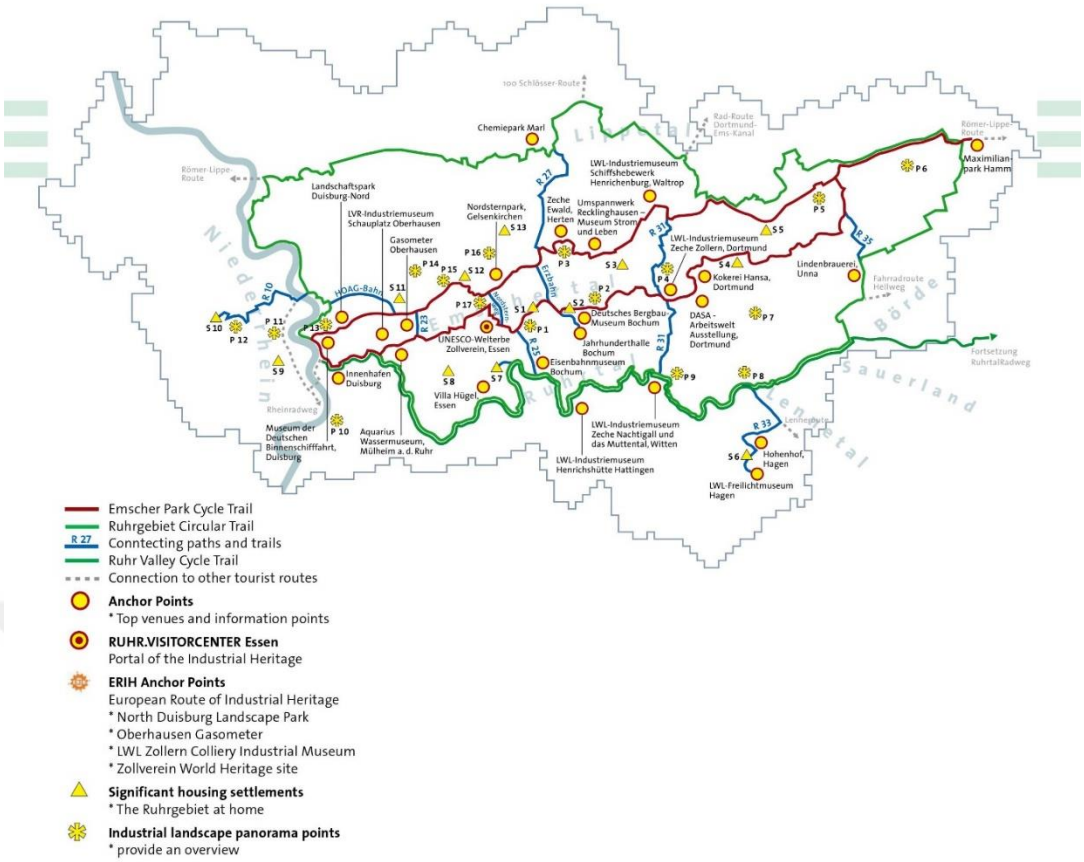

Figure 4. 3: Ruhr Valley Industrial Culture Route (Emscher Landscape Park Visitor's Guide).

IBA Emscher Park project is an industrial transformation of the field and is an action beyond a recreational renewal. Researching the legacy and its impacts of the project, which is implemented with innovative approaches, is essential for design strategies that are the main structure of this thesis. IBA Emscher Park is a successful **urban regeneration** project that converted industrial brownfield into a multi-functional area. Besides, the post-industrial transformation of IBA Emscher Park also has characteristics of community-led, cultural-led, and mega-event-led regeneration. To better understand urban renewal, in this chapter, a more detailed examination was provided for all the properties.

At the end of the 20th century, the **post-industrial transformation** was very popular and was evaluated as a tourist attraction. According to Hospers (2002), there are three types of transformation. Firstly, many industrial ruins have been restored and transformed into museums to display the process of production and industrial occupations. The second group involves a great variety of transport systems, such as roads, rail, and water systems to provide a nostalgic or modern transport experience.

The last group consists of socio-cultural attractions about the unique industrial history of the area, such as former employee houses and daily life of the inhibitors (Hospers, 2002). All three types of transformations are included in the IBA Emscher Park project. The buildings in the old industrial area of approximately 550 hectares have been transformed into modern trade centers, science parks, and public buildings with the partnership of public and private investment. Besides, some of the industrial buildings converted to meet social needs such as a public park, housing, culture center. Currently, it is observed that there are a variety of former industrial buildings or fields that is used as commercial, leisure area, residential, etc. For instance, Zeche Holland is now both a residential and commercial area in combination with some green open space, and Zeche Helene is now used as a fitness center (Jeng, 2018, p. 48).

Besides, thanks to this long-term transformation project, many people have been provided with jobs, new training areas have opened, professional acquisitions have encouraged, and local citizens' SME projects have supported. Another development in the area is to provide housing for the urbanist. There are 25 housing projects implemented within the scope of the IBA Emscher Park project. New construction techniques and sustainable applications were implemented, thanks to nearly 3000 new housing projects designed as a result of various national and international competitions. Industrial constructions that need to conserve the legacy were the most important part of the project such as blast furnaces, gigantic mines, winding towers. New definitions were introduced to construction like art galleries, concert halls, residences, and workplaces. These constructions have introduced new functions such as art galleries, concert halls, residences, and workplaces, thus the requirements for conservation and transformation have been practiced. As an example of these transformations, the Oberhausen Gasometer has been transformed into a large exhibition space. With the huge interior spaces, the panoramic view at the top, the old gas trap offers new experiences to the participants with its new function (Figure 4.4) (Jeng, 2018).

Figure 4. 4: Gasometer Oberhausen (www.dlr.de, www.ruhr-tourismus.de).

As an example of the best practice approach, Loures and Crawford (2008) use IBA Emscher Park to show the importance of public involvement in post-industrial landscape regeneration. They claim that public involvement as a user-centered approach not only defines the program in a way to meet the needs of the society but also designs a vision for the future. Likewise, they can generate a state of belonging to a place, sharing a common history, and creating identity through initiatives taken by the citizens. Thus, community-led regeneration not only benefits the project quality of the whole process but also benefits the society as it enhances the awareness of social capital (Loures & Crawford, 2008; Healey, 1998). **Community-led regeneration**, which is the next step of post-industrial regeneration, is discussed as follows. Professional expertise and local communities were encouraged to extend beyond vertical governmental structure and empower local private business sectors, to build up a more sustainable community (Deakin & Allwinkle, 2007). While implementing this project, barriers were eliminated and a more developed public and private partnership was established by promoting social capital with sufficient capacity, trust, information flow, communication skills, and institutional capacity to strengthen legitimacy (Jeng, 2018).

Cultural-led regeneration, one of the urban regeneration stages, was organized as follows. Culture has created an impulsion for urban regeneration to enhance regional competitiveness for thirty years. Urban planners have utilized cultural activities to stimulate regeneration strategies and accelerate a better quality of life because of the rising social problems like unemployment, guilt, demographic change, and poverty.

The sphere of culture has been expanded to social, economic, and political extends, and some researchers have asserted that cultural policy should be more integrated on other aspects of space design (Garcia, 2004; Wilks-Heeg & North, 2004; Miles & Paddison, 2005). The IBA Emscher Park project displays two important units of regional modernization. This regeneration is a good example for the preservation of the industrial heritage, and recollection of cultural identity. The biggest distinction between IBA and other parks is that the regeneration of IBA involves local arts, historical landmarks, cultural events, and temporary projects to revitalize the region's landscape and images. Thus, IBA Emscher Park not only improves the local economic development by being an investment area for new businesses but also brings various supporters together and increases the sense of identity (Shay, 2012).

IBA Emscher Park was certainly a **mega-event-led regeneration** in terms of its immense effects on the number of tourists and the interest of both locals and the world over. The reasons for Emscher Park's success in Mega activity are having a historical landmark and a large area, being suitable for events, and being an important place for the local community (Greenstein & Sungu-Eryılmaz, 2004). In the past few decades, **Mega-events** have become an innovative tool for strategic spatial planning and have been a catalyst for urban regeneration. According to Müller (2005);

> "Mega-events are ambulatory occasions of fixed duration that attract a large number of visitors, have a large mediated reach, come with large costs and have large impacts on the built environment and the population" (Kassens-Noor, Wilson, Müller, Maharaj, & Huntoon, 2015, p. 638).

As another definition related to this subject, Mega-events control the processes of urban transformation by transforming the city images, constructing new infrastructure, renewing communities, and creating synergies between public-private sectors and citizens due to time constraints (Chen & Spaans, 2009).

The relationship between the four stages of IBA Emscher Park's **urban regeneration** is demonstrated in Figure 4.5. Initially, **post-industrial regeneration** could be considered as the basis of the project, because the main purpose of the project was to transform the brownfield field and to organize recreation areas. Moreover, **community-led regeneration** should be evaluated as the impulsive force to support the project. The IBA project was constructed with solid structures thanks to the participation of local communities and stakeholders. **Cultural-led regeneration**

distinguished between projects implemented in different regions and improved the results of the project. The region is a representation of unique culture and history that is rebuilt with past experiences. Finally, the **mega-event regeneration** has been an accelerating force for urban regeneration. In a short period of about 30 years, it has been the biggest factor in the formation of this region's own cultural identity and legacy.

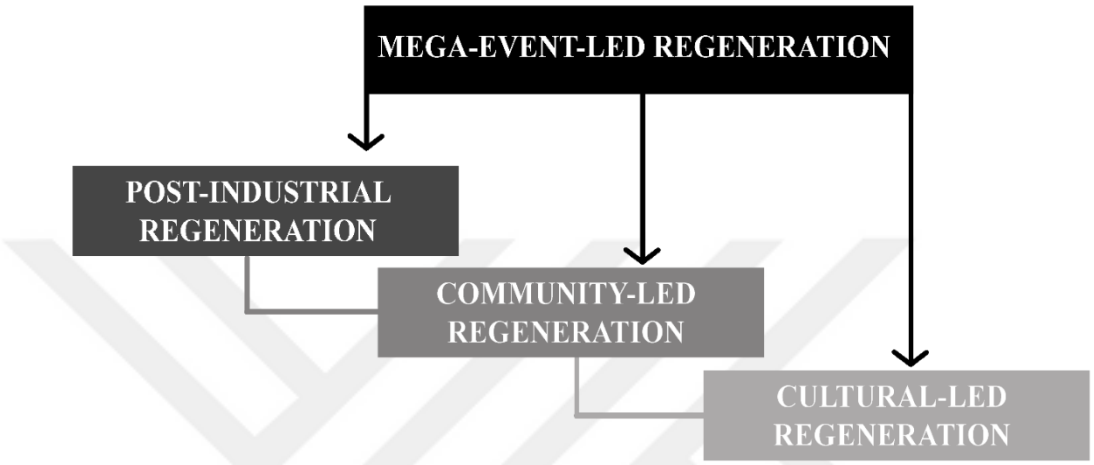

Figure 4. 5: Conceptual Framework: Urban Regeneration of the IBA Transformation.

The implementation of the innovative mega-regeneration project and its own culture and community may be considered as the key to the success of the region. IBA Emscher Park has created its legacy with its transformation. The Legacy was studied under two main titles in Yu Rung Jeng's work titled "The Legacy of International Building Exhibition Emscher Park: A Review Project 20 Years Later" as **tangible** and **intangible legacy**. Then, the spatial functions of 119 projects implemented in IBA were classified under the legacy themes. At this point, it is necessary to examine the definition of the concept of Legacy.

Firstly, the concept of **legacy** was discussed and the types of approaches in mega-events were examined as various scholars and policy-makers have continued to raise their interests toward the topic of legacy in mega-events since the 1980s, and planning for legacy is considered as much important as planning for the mega-event. According to Preuss, Legacy is defined as:

> "Irrespective of the time of production and space, legacy is all planned and unplanned, positive and negative, tangible and intangible structures created for and by a sporting event that remains longer than the event itself" (Preuss, 2007, p. 211).

This approach is simpler and more rational as it focuses on the designing process which can be easily defined over a certain period. The first thing that comes to mind when discussing legacy is tangible. However, the most important results of such mega-events tend to be intangible legacy, such as job opportunities, knowledge production, improving the identity of the place, enriching the social relations of the society (Ferrari & Guala, 2015).

One of the main challenges for project implementation to last for 15-20 years is that the organizing committees are structured as temporary mechanisms and this increases the difficulty of implementation of planned legacy, as it usually is. Essentially, ambiguous bid proposals, limited time and resources, disagreement between various actors, unpredictable circumstances have made it difficult to realize legacy management. In other words, mega-events and organizations are regarded as temporary events and the concept of the legacy must maintain what has been going on until today. The inclusion of local stakeholders in this planning process can provide long-term management of this legacy (Christie & Gibb, 2015). Based on the previous research about the conceptualization of legacy, the research categories legacy in several themes that are associated with the investigation of the IBA project (Figure 4.6).

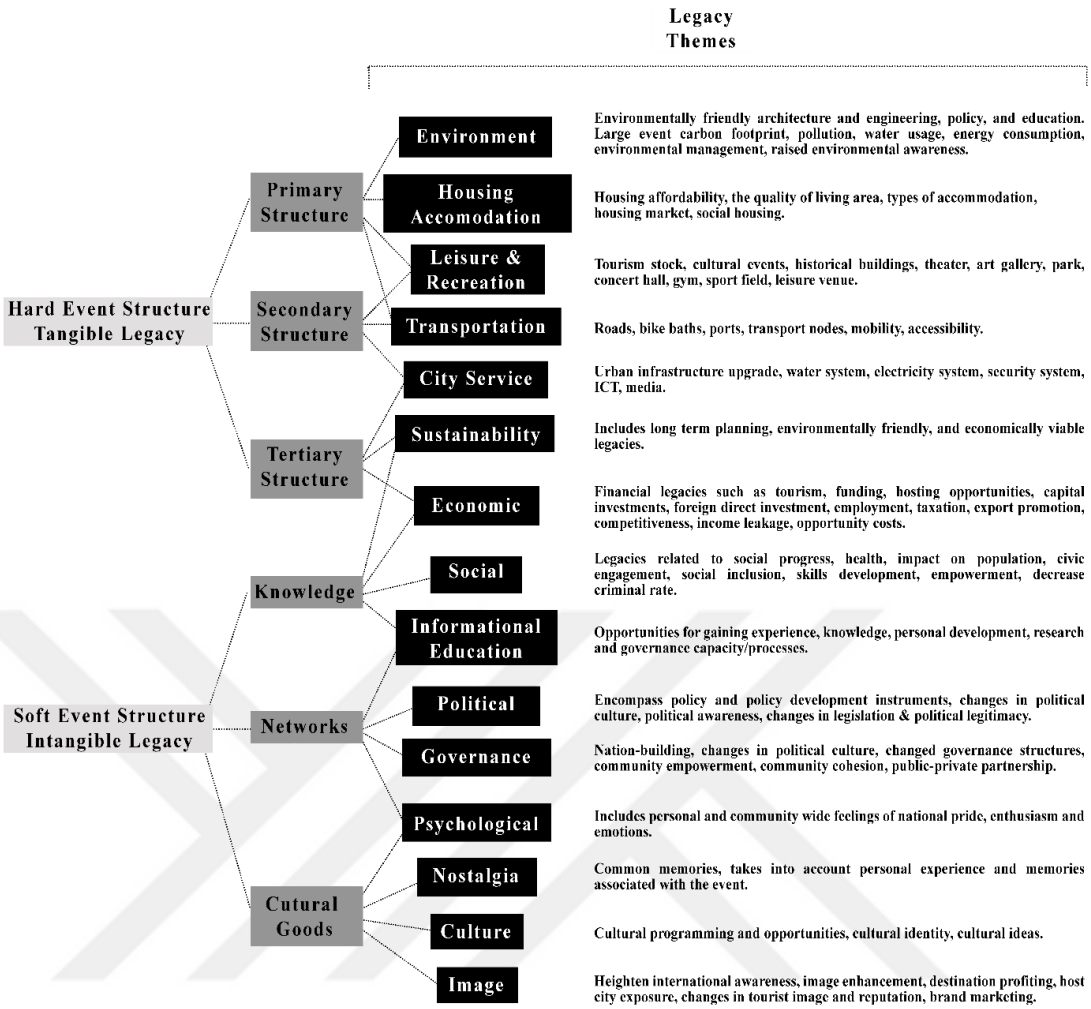

Figure 4. 6: The Dimensions of Legacy in IBA Emscher Park (Jeng, 2018, p. 27).

IBA Emscher Park project is a professional and strategic work with its theoretical content, planning strategies, application areas, transformation approaches. The main idea in this project is to understand the historical value and redefine it within the context of cultural and industrial heritage. With these qualifications, it can be an example of potential transformation projects of industrial areas with similar features.

As a result, The IBA project is exemplified only based on the methods implemented. In this section, answers were sought to questions such as how the path should be taken in the transformation of an industrial area that is in idle state, what the entries of mega-event projects are, what the qualities of the cultural regeneration that occurs after post-industrial regeneration are, what kind of community regeneration the said post-industrial and cultural regeneration causes, with which architectural programs intangible and tangible heritage can be continued. The answers given to these questions constitute the infrastructure of Ankara Sugar Factory's transformation strategies.

5. BACK TO THE STRANGER FROM THE DARK ECOLOGY: ANKARA SUGAR FACTORY

Today, sugar factories face many different problems, such as privatization, being considered as a rent area. These problems threaten the existing cultural and industrial values of the areas. To preserve these values and pass them on to future generations, forms of intervention with a scientific infrastructure must be developed. In this context, the reconstruction of the establishment strategies work has been designed to focus the attention of academic, professional platforms and society on the sugar factories campus areas in the long run, both in Ankara Sugar Factory and all sugar factories in general. In addition, this thesis has been created to increase the diversity of cultural activities specific to Ankara city and to define new areas and possibilities for city users. In this way, both the sustainability of an industrial area in the city center will be ensured and the area will be included in the urban space.

In this context, the strategy forms developed were created by reconstructing the establishment strategies of sugar factories with contemporary architectural approaches. While developing this process, the methods of applying the themes of urban, architectural, landscape, and cultural transformation in the example of IBA Emscher Park were used. These strategies are structured under 7 main headings. These are transportation from the city to the campus area, circulation in the campus, landscaping on the campus, improving the infrastructure systems in the campus, preserving and re-functioning the structures on the campus, developing new building proposals, structures that need to be removed from the campus. These strategies do not directly create possible transformation strategies of the field, but only have a guiding quality. Besides, in the development of these strategies, the memories of real people were used, and references to the past were given in the creation of future scenarios.

Strategy 1: Transportation from the city to the campus area	• Transportation by public transport • Transportation by private vehicle
Strategy 2: Circulation within the campus	• Vehicle paths • Pedestrian paths • Bicycle paths • On-campus ring
Strategy 3: Landscaping within the campus	• Hiking Trail • Bicycle Path • Green Path • Organic Agricultural Area • Çubuk Stream Coastal Arrangement • Recreation Areas • Outdoor Sports, Yoga, etc. Areas • Revitalization of the forest area • Alternatives for outdoor organizations • Playgrounds for children and young people • Outdoor sports courts such as basketball, football, volleyball, golf, tennis
Strategy 4: Improving campus infrastructure systems	• Reclamation of Çubuk Stream • Improvement of infrastructure systems (Sewage system etc.) • Diversification of Plant Habitat • Bicycle stations (smart bicycle systems) • Regulations for sustainable energy sources such as rainwater storage, solar energy use • Construction of outdoor sports fields
Strategy 5: Preserving and re-functioning of the structures in the Campus, **Art in the campus**	• Museum of Industrial Archaeology • Indoor and outdoor venues for large scale events • Permanent exhibition units where the heritage machinery equipment in the production unit can be exhibited • A permanent exhibition for the sugar industry and the existing sugar archive

	• Interactive spaces where sugar industry development is transferred • Indoor and outdoor areas where contemporary artworks can be exhibited • Educational venues for different types of music, such as jazz, classical, pop • Learning spaces for performance arts, such as theater, ballet, modern dance
Strategy 5: Preserving and re-functioning of the structures in the campus, **Culture in the campus**	• Employment Association for women • Installations related to sugar production and social life in the campus • Flexible spaces for small-scale organizations • Open permanent spaces for large organizations • Temporary accommodation units • Vocational education and training venues • Information and health center • An ecological and multicultural school (painting, music, organic agriculture, wood workshop, glass atoll, etc. courses) • Research and study places • Indoor and outdoor areas where Festival are held or cult films are broadcasted • Indoor and outdoor spaces for performing arts such as theatre, dance performances
Strategy 6: New building proposals, **Science on campus**	• Technology Center • Science Academia • Research Center
Strategy 6: New building proposals, **Sports on campus**	• Indoor spaces or different sports, swimming, athletics, etc.
Strategy 7: Structures that need to be demolished	• Removal of the Optimum Mall from the area • Demolition of Toki residences

	• Moving the existing train maintenance station

Table 2: Ankara Sugar Factory Campus Area Transformation Strategies (Prepared by Author).

Strategy 1: transportation from the city to the campus area.

For the proposed strategies to function in systematic integrity, it is first necessary to determine how access will be from the surrounding area and other parts of the city and to plan traffic. When the campus area was examined, it was observed that the main problem with transportation is the boundaries that restrict the communication of the campus with the city. The campus area is bounded by Ankara-Ayaş Highway in the North, Railway Road, and Station Street in the South, Etiler Street in the East, and Ankara perimeter in the west. The presence of fast-flowing vehicle roads on the boundaries of the area divides the programmatic relationship between the campus and the city. For this reason, the area is included in the social memory only as a place surrounded by gross walls (Figure 5.1). In order to change this image, the area needs to be perceived, especially from the north-south axis, where urbanites live in intensity. To increase this perception, Söğüt Street in the north of the campus and İstasyon Street in the south can be combined with connection roads or elements. That is strategic urban planning for pedestrian transport between Station Street and the campus that does not touch the border of the train line (connection routes at plus or minus elevation) can be studied. A similar type of approach can also be performed between the campus and Söğüt Street. This way, pedestrian access to the campus area, which is surrounded by vehicle roads, can be provided without interruption (figure 5.2.). Also, existing entrances on Ankara-Ayaş highway and Etiler Street can be preserved. Furthermore, regular service lines can be established from certain focal points of the city (Kizilay, Ulus, Tunus Street, etc.) to the campus.

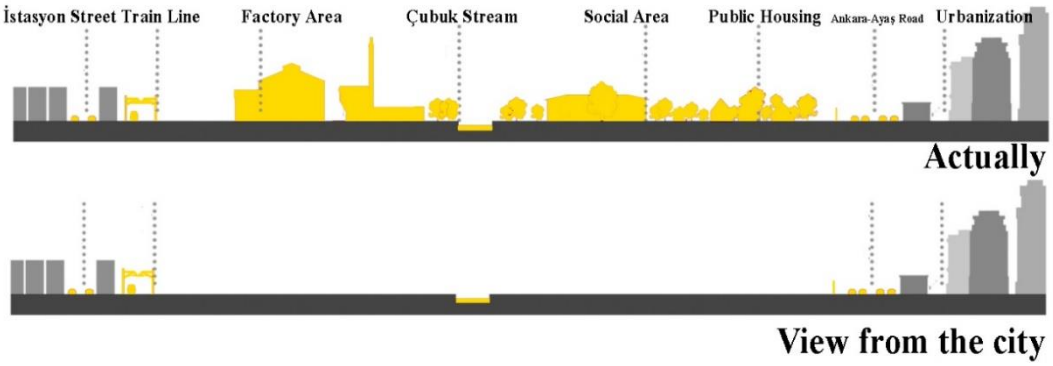

Figure 5. 1: View of the campus area from the city (Prepared by Author).

Strategy 2: Circulation inside the campus

After providing transportation to the campus, additional new connecting routes and transportation networks should be developed and added to the existing circulation within the campus. Parking solutions for private vehicles, departure and stop points for services that will make a ring in the campus, rental stations for vehicles such as bicycles, electric scooters are part of this transportation network. As a matter of fact, in the past, bicycles have been used very often in settlements as a means of transport or even a sports branch. In particular, the Konya Sugar Factory team was the Turkish cycling champion of the era and represented the country in international races. In some factories, it was almost impossible to see workers walking on foot. Practical solutions were produced to protect and store bicycles (Tarus, 2018, p. 23). In addition, a three-tier network of on-campus circulation for the motor vehicle, non-motorized vehicle, and pedestrian, should be created. When creating this network, existing vehicle and pedestrian paths, new functions of existing structures, functions of new proposed spaces should be taken into consideration.

Strategy 3: Landscaping within the campus

Another area that needs to be improved in the campus area is landscape elements and open space arrangements that will work with it. First, although the Cubuk Stream, located in the east-west axis of the area, has significant potential, it has not been able to establish a physical connection with the campus. The improvement of Çubuk Stream, the gradual lowering of the campus elevation to the water level, the green space and open space proposals in these coding along the water can be considered as a design approach. The campus can turn into a new center of attraction for the city

dwellers with the green continuity along the streamline and the setting of areas serving various functions (camping, yoga, running, meditation, etc.) at different elevations. In addition, an urban forest can be created by reviving the existing green area in the west. This area can be enriched with functions such as bike path, pedestrian path, running track, camping areas, outdoor activities, playgrounds for children and young people. In this way, new spaces with different social and urban qualities can be developed, offering rich architectural programs as an alternative to existing urban uses.

Strategy 4: Improving campus infrastructure systems

As a result of the development of these strategies, the Ankara Sugar Factory area needs several infrastructure upgrades to maintain its existence for many years. Also, the adaptation of technological changes in infrastructure systems is the main requirement for the transformation of the area as a mega-event, as determined in the example of Emscher Park. The old systems of the area such as electricity, telephone, water, sewage should be renewed, and infrastructure elements such as natural gas and the internet should be added to the system. In addition to this system called gray infrastructure systems, green infrastructure systems should also be included in the campus. Thus, the sustainability of the field will be supported by technological developments. Green infrastructure systems include many different approaches such as clean air based on hydraulic networks, drinking water, green roofs, collecting rainwater, and using solar energy. In addition, this new type of approach includes protecting existing landscape elements and increasing their living diversity, suggesting permeable coatings that allow rainwater to seep underground, and recreation areas. As a long-term strategy, this system pursues long-term eco-friendly interests rather than economic gains (Aslan & Yazıcı, 2016). For the campus area to have a sustainable future, it is necessary to create grey and green infrastructure systems together and develop innovative solution proposals.

Within the scope of infrastructure systems on the campus, different spatial organizations can be developed under the title of **sports on the campus.** In the history of the sugar industry, it has many achievements in different sports, especially in the field of football. Volleyball, basketball, tennis courts, swimming pools, and golf courses were available in the settlements, and the workers, managers, children, and spouses of employees spent their free time on these courses (Tarus, 2018, p. 23). On weekends, the matches of Sekerspor were watched. The team was quite successful

because the factory gave jobs to successful footballers and always kept the team strong. Talented young people gathered from different factories in Turkey and established a Wrestling Club, which ended up producing both World and Olympic champions (İpek, 2020, s. 19). In line with all this information, a professional sports club can be established on the campus to revive the establishment strategies. Here, talented athletes gathered from different parts of the country can represent Turkey on international platforms. The sports fields in question can be designed together with recreation areas. This way, different sports and application areas can work in integrity.

Strategy 5: Preserving and re-functioning the structures in the campus

Production units, research centers, accommodation units, lodgings, and all other structures in the campus must be protected. The main sugar factory, Machinery Factory, Electromechanical Devices Factory, Sugar Institute[9], Seed Factory, Warehouse Structures, Silos, Housing Structures, and Adnan Menderes Mansion are located on the campus. The transformation strategies of these buildings can be transformed with the existing function in the campus under the title of the art, depending on the quality, potential and structural possibilities of the spaces. The transformation process in question can be created with the past uses of the structures and traces in the collective memory of the campus. Thus, the cultural and social values of the campus area will be preserved.

In the past, activities such as cinema, collective life, dance, all kinds of entertainment and balls were held in all factories. Movie theaters in all factories became focal places that organized social life. Istanbul's new and high-quality films were shown even in the movie theaters of the most remote factories, with the condition that they changed once or twice a week. During the day, conferences and meetings were held in movie theaters (Tarus, 2018). In addition, children were given special film screenings once a week. In these cinemas, where world classics and festival films were shown, children had the opportunity to get to know modern world culture closely. Also, the campus

[9] Founded in 1965, the Institute is responsible for research, development, technical assistance and training, as well as cooperation with other institutions at home and abroad. The Institute building is the first design of Dogan Tekeli-Sami Sisa, as a result of the Architectural Project competition held in 1961 (Bancı, 2006, p. 39).

would receive a theater play that changed once a month. People from the surrounding villages also came to the theater, where not a single seat remained empty, witnessing a culture they had not seen until that day. Also, workers' families would have fun with jazz performances, open-air cinema, one-person shows and magic shows on summer evenings. All kinds of music and art activities for the children of the factory workers are another social gain seen in the campuses. The children attended contemporary instrument courses such as mandolin, drums and piano, their live performances were recorded on turntables, and these performances listened in the campus gardens on summer evenings. The period of sugar production was called the campaign period. At the end of the campaign period, proms were held, and the busy and successful working period was celebrated with these proms. In summer, dancing nights, holiday receptions, New Year's Eve Ball in winter, "Basma" ball was held. Jazz concerts, classical music performances and dance performances were held at these proms. Inspired by the films, the dresses and shirts women sewn in courses were worn at these balls (İpek, 2020). The strategy to be developed in line with this information should also consider past usage patterns. Combining memories with contemporary design approaches can be considered as a tool to carry this transformation beyond being an image of nostalgia.

Several different strategies have been developed for the re-functioning of the existing buildings to be integrated into the city as a result of the rethinking of the modern daily life created in the factories in today's conditions.

First, the main factory unit, warehouse structures located on the same axle, and large openings between them can be built together. This way, new spaces can be offered to collective social organizations seen in the history of sugar factories. Also, the main factory structure has witnessed the history of the sugar industry with the machinery and production units it contains within. For this reason, this unit can be transformed into an industrial archeology museum where all the information about the sugar industry can be accessed, the production stages can be observed, the social life in the campus areas is explained and the entire sugar archive is permanently displayed. The main factory is suitable for the transformation in terms of its architectural and structural characteristics. This way, the places where the historical development of the sugar industry and the social life on the campus is observed can be preserved (Figure 5.2). In the space between the main factory, boiler room, and pulp drying facility, an

open-air exhibition space can be created with the museum. A ground for large-scale organizations can be designed in the area to the south of the main factory building where the pools are located today.

Figure 5. 2: Arrangement of the Main Factory environment (Prepared by Author).

The warehouse structures to the east of the main factory and the open spaces between them can be transformed in various ways. At this point, a visit to the past of the sugar industry can provide appropriate intervention. Sugar factories changed the places where they were established, and the people of the region encountered social activities and new cultural activities they had never known before. The education level on the campus was quite advanced. The students had completed world-class education in daytime schools and attended modern art courses such as music, painting, and dance in the evenings and weekends. Besides, the wives of the factory employees had attended courses in many different branches, from sewing, raising children, cooking classes to painting workshops in evening schools (İpek, 2020).

When the past achievements are examined, the strategies developed can be evaluated under the title of **culture on the campus**. The warehouse structures, where wide openings are crossed and where high ceilings are located, can accommodate many different functions when constructed together. For example, workshops for vocational courses or arts, crafts, music, etc. can be converted into educational structures. Within the scope of this setup, silos located in the north of the main factory building can be transformed into performance stages, temporary-permanent exhibition spaces, or

library[10] structure thanks to the large spatial possibilities they offer. In addition to all these possibilities, it can also be developed into a street setup that includes functions such as eating and drinking places and sales units. Within this setup, silos can be constructed as a multi-story parking lot, restaurant, or sports/health center. Construction elements that significantly determine the image and character of all structures must be preserved during this re-functionalization. Otherwise, common courtyard ideas, pedestrian circulation, and different open space functions within this circulation can be developed to strengthen the interaction and communication between structures close to each other such as the main factory, warehouses, machine factory (Figure 5.3). This way, sharp spatial separations between new functions can be avoided and pedestrian flow between spaces can be achieved. While developing all these possibilities, past social gains of factories should be considered and should not be distracted from its context.

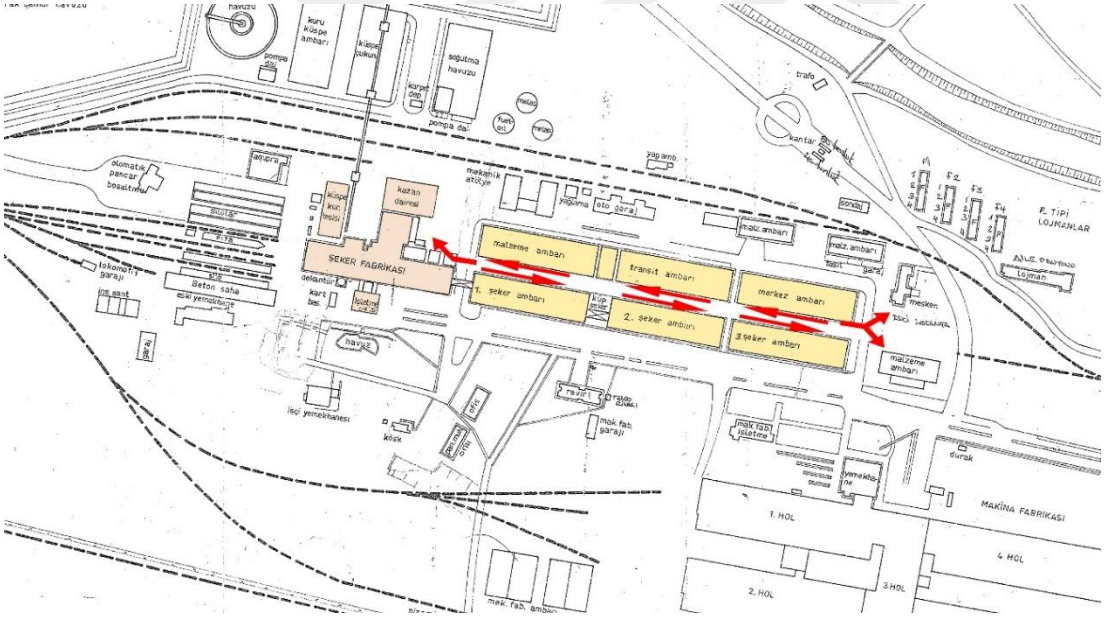

Figure 5. 3: Circulation Between Main Factory and Warehouse Structures (Prepared by Author).

[10] Almost every factory had a sugar library with magazines published during its period, foreign and domestic book resources and encyclopedia collection (İpek, 2020).

Another production unit, the machine factory, can be equipped with different functions within itself. For example, the machine factory can be organized as theater, ballet, modern dance studios, learning spaces for performance arts under the title of **art on the campus**. Another possibility is to transform the machine factory into evening courses for the local community, employment associations, and craft workshops under the heading of **culture on the campus** (Figure 5.4).

Figure 5. 4: Machine Factory (TOBB ETU Architecture Department Archive).

The large area between the main production area and the railway can be re-designed for large-scale events such as festivals, fairs, concerts. Thus, both units that are re-functionalized in the main production axis can serve this area and the human flow can be achieved between different locations (Figure 5.5).

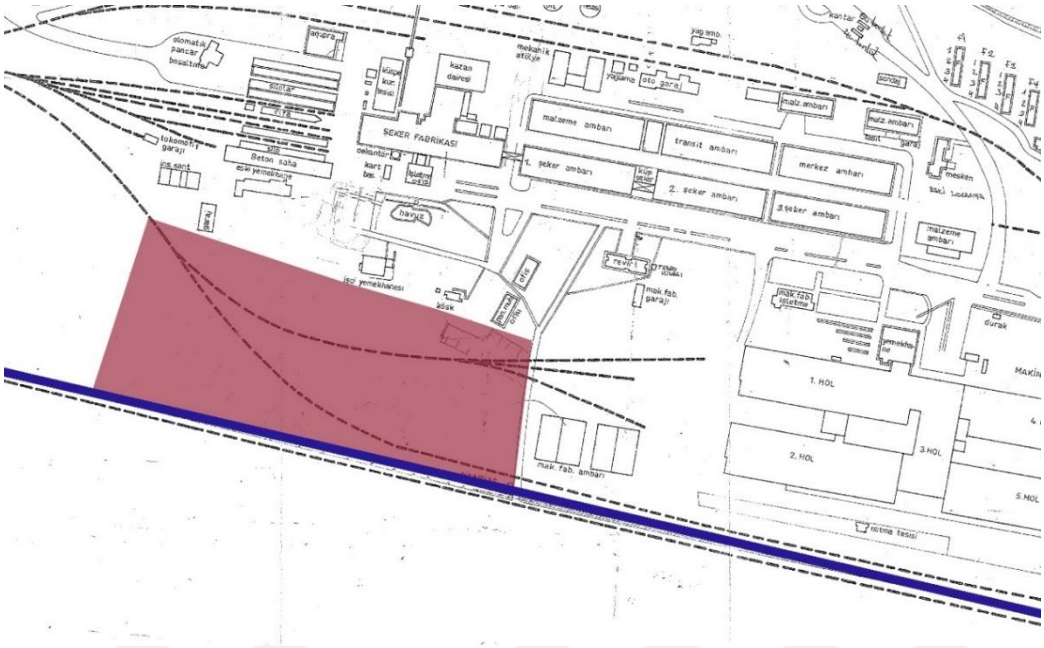

Figure 5. 5: Large-Scale Organization Area (Prepared by Author).

Residential areas located in the campus area can be re-functionalized as dormitory buildings, temporary accommodation units for events, etc. while their current use is preserved.

Strategy 6: New building proposals

Construction of **science on the campus** can be created with the Sugar Institute located in the north-east of the campus and new building proposals. Sugar Institute, whose main purpose is to conduct all research on sugar production, can maintain its current use. Also, scientific studies and researcher training programs, which were seen on campuses in the past, can be reconstructed with contemporary design approaches. In the past, students in the campus were selected during high school, their performance was evaluated in scientific studies for a year, and finally, they were sent abroad on scholarships to complete their higher education in the fields of chemistry, machinery, electricity, or agriculture (İpek, 2020).

In this regard, İlhan Tarus also mentions the following in his book;

> "…Research is conducted here in purely scientific content. Under the direction of high agricultural engineer Afif Bediz, the territory of Turkey is being sifted and examined by expert agronomists…" (Tarus, 2018, p. 129).

> "…We're entering the technology lab. This is a research hall that works as a science institute, where silent people in white shirts work fast and heartily by the rows of tubes, microscopes, tiny machines and tools…" (Tarus, 2018, p. 129).

In line with this information, a scientific research center can be established on the campus. Courses, project development centers, research laboratories can be offered for students with different educational levels (Figure 5.6).

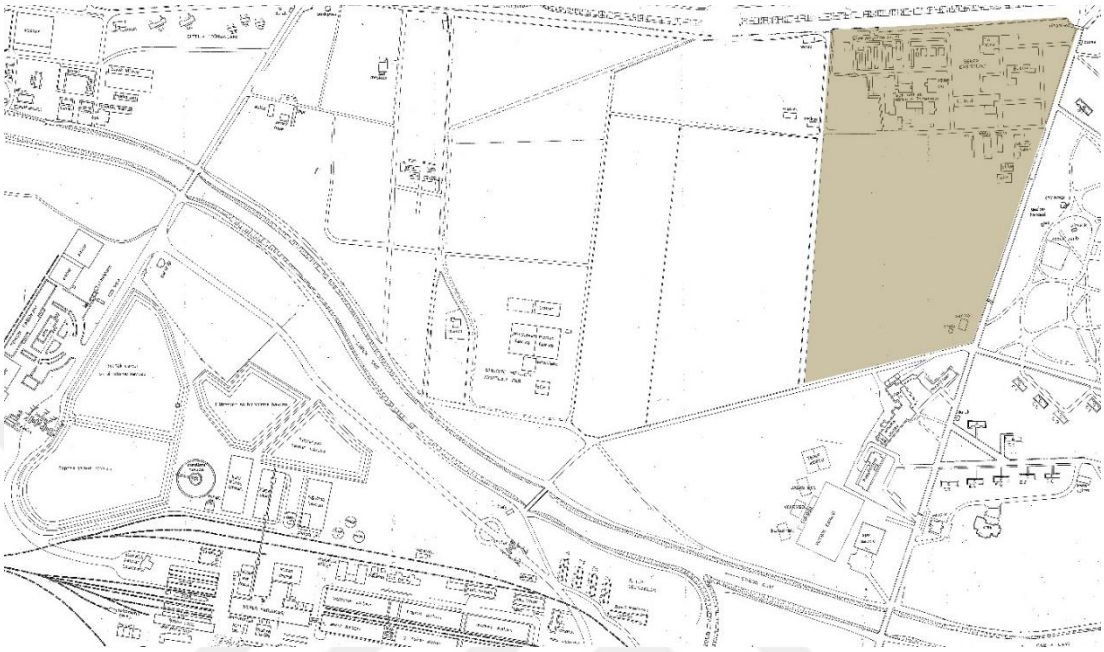

Figure 5. 6: Research Center (Prepared by Author).

Strategy 7: Structures that need to be demolished

Over time, the boundaries of the settlement have been narrowed or fragmented (Figure 5.7). However, it is necessary to ensure the integrity of the area of the Ankara Sugar Factory, because, in possible transformation strategies that will be implemented in the campus, public use and social use must be separated. In other words, a train maintenance station and cultural event area should not coexist in the same concept. This situation may cause different security flaws. Also, the shopping center structure located in the north-west of the campus does not match the industrial and cultural identity elements of the campus. Apart from these, the public housing structures in the common part of the campus are the last type of building that should be at the center of an area where industrial, cultural, ecological, and social transformation is experienced. An area that should appeal to all segments of society should not serve personal interests and private property structures should not be included in the area. For all these reasons, the moving of the current train maintenance station on the campus, the demolition of the mass housing structures, the removal of the shopping mall from the campus can be preferred as an intervention method. Thus, the integrity of the area may be ensured and

the flow of the relations between the different programs on the campus may not be divided.

Figure 5. 7: Structures that Disrupt the Integrity of the Campus Area (Google Earth Pro).

Ankara Sugar Factory can be considered as a field of application for mega-events where all these different possibilities are built together, or different design approaches can be applied by customizing each strategy (Figure 5.8). These transformation strategies which can be applied under 4 main headings, can be developed in line with the needs of the city, the wishes of the users and the potentials in the establishment strategies of sugar factories. At this point, regardless of the intervention type, the past values of the field should not be lost, and a finished design approach should not be adopted (Figure 5.9). As in the case of Ruhr Emscher Park examined in detail in the fourth chapter, while developing design strategies, it is a very important issue that social transformation and cultural renewal can build itself after the industrial transformation strategy.

Figure 5. 8: Transformation Strategies Diagram (Prepared by Author).

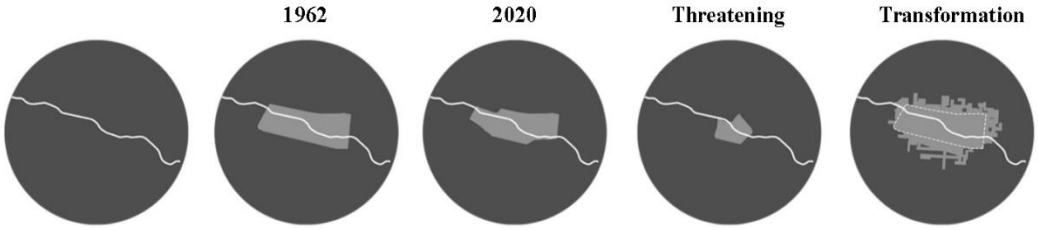

Figure 5. 9:The change of the campus over time, the Existing - Predicted -Designed (Prepared by Author).

6. CONCLUSION

During the history of sugar factories in Turkey, they developed the areas in which they were established economically, transformed society sociologically and culturally, and mediated the construction of a new identity. Recent regulations and recommendations on the future and sustainability of these historic industrial areas often offer solutions to the destruction of these areas, rather than highlighting and revealing the value of the industrial heritage carried by sugar factories. In this thesis, the strategies of reconstructing the physical and social gains of sugar factories that existed in history with current design approaches have been developed. In this study, it was aimed to raise social awareness against the rhetoric of sugar factories about their past values, current potential, and future use. In these transformation strategies, it is aimed to make the society a part of the process. It is thought that the value of sugar factories in the past can be recovered by ensuring social awareness and social participation.

Comprehensive, decisive, and consistent steps need to be taken to develop discourses on the future of industrial areas such as sugar factories. Before taking these steps, necessary evaluations should be made in light of scientific data, necessary protection measures should be taken according to the nature of the values it carries, and the industrial field should be made sustainable with appropriate methods. For this reason, all suggested strategies should be evaluated with participatory and pluralist methods and should be formed based on consensus. To create appropriate conditions, it is necessary to ensure cooperation between the local government and the designer, to establish a scientific and legal basis for commissions to be created and interventions to be made in the field. an architectural design competition can be organized with the participation of architects and urban planners in accordance with all the criteria, establishment strategies and current design approaches created within the scope of this thesis on the transformation of these areas. As a result of the design competition, under the supervision of the commission created, the transformation strategies developed and considered appropriate can be implemented gradually.

Sugar factories should be considered not only as an economic, industrial, agricultural resource but also as areas equipped with modern technology where social change and

transformation occur. While the campus areas contributed to the economy of the country, they also contributed to the modernization of the traditional Turkish society. The sugar industry existed as a multifaceted branch of industry that taught machine agriculture to peasants, where workers could organize and defend their rights in trade unions, where service sectors such as hospitals, schools, mosques were built, social facilities such as movie theatres, sports clubs were established (Tarus, 2018). All these gains are the characteristics that make sugar factories "The Stranger". However, today's campus areas represent large urban voids. The participation of these voids in the daily life of the city as social spaces that city users can benefit from has been adopted as the most rational approach. The strategies developed in this context were created by reconstructing the sugar factories' criteria for being "The Stranger" discussed in the second chapter, using current design approaches. Thus, the methods of transforming the status of the campus area from being "Dark Ecology" discussed in the third chapter into "The Stranger" were designed.

The discourse developed by this thesis is formed by adopting that sugar factories are industrial areas that have the potential to add value to the public and cultural structure of the city. In this context, future strategies related to industrial areas have been established through the Ankara Sugar Factory campus area. These strategies have been developed to bring the urban, public, and spatial characteristics of sugar factories that existed during the establishment period to the Ankara Sugar Factory. Especially the Ankara Sugar Factory (1962) started production in a relatively late period of the sugar industry and could not fully realize the gains of the establishment period. One of the main reasons for this is that Ankara has reached a certain level of modernity with the advantages of being the capital and is already equipped with many social and cultural spatial amenities. Also, the campus area was located far from the city center. For these reasons, the establishment strategies of the campus area were insufficient to support the cultural environment of the city. With these strategies, this area can be transformed into "The Stranger" that transforms and develops society by getting rid of Timothy Morton's state of degradation and decay, which is defined as "Dark Ecology". In this way, a new area of attraction created with different, new, and modern approaches to the cultural, public, and recreational areas of the city can be established. In other words, considering the size and existing structures of the Ankara Sugar Factory area, a multifaceted, new generation definition of "The Stranger" can be developed for the

city in many different social areas. The said new generation "The Strange" definition was created using the method of regeneration strategies of the IBA Emscher Park transformation project example. In the project on which industrial transformation projects are based, the main purpose is a social and cultural renewal, as in the establishment period of sugar factories. This thesis also argues that in the longer term, all industrial areas should use their potential to transform the social and cultural structure that exists at its core.

To conclude, by transforming the structural, cultural, and social resources of industrial areas with contemporary design approaches, the values of these areas can be re-established. In particular, the transformation of the Ankara Sugar Factory, which is located in the city center, into an area that supports the social accessories of the city, where cultural spaces are re-functional with modern design approaches, where traces of history can be easily observed, can meet the city's spatial, cultural and public space needs to some extent. All these strategies were eventually designed to create the beginning of mega-events that began with industrial transformation and brought with them social and cultural renewal, as in the period of the establishment of sugar factories in Turkey.

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July 2019 **BETONART,** " Standartlaştırma", Sayısal Tasarım Atölyesi, TOBB ETÜ, Mimarlık Bölümü, Ankara, 27 July- 5 August.

November 2018 **E-FIADE (Exploring the Field İnteraction in Architectural Design Education),** " A School of One's Own", Mimar Sinan Fine Arts University and The Chamber of Architects, Karaköy, 30 October-7 November 2018.

September 2018 **The Rifat Chadirji Prize 2018,** Baghdad Design Center, Non-construction Design Center, September 2018.

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