VALUE ASSESSMENT FOR COTTON-BASED INDUSTRIAL HERITAGE IN ADANA

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

BY

ELVAN AYNAL ARCI

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARCHITECTURE
IN
CONSERVATION OF CULTURAL HERITAGE IN ARCHITECTURE

DECEMBER 2019

Approval of the thesis:

VALUE ASSESSMENT FOR COTTON-BASED INDUSTRIAL HERITAGE IN ADANA

submitted by **ELVAN AYNAL ARCI** in partial fulfillment of the requirements for the degree of **Master of Architecture in Conservation of Cultural Heritage in Architecture Department, Middle East Technical University** by,

Prof. Dr. Halil Kalıpçılar
Dean, Graduate School of **Natural and Applied Sciences** _____

Prof. Dr. F. Cana Bilsel
Head of Department, **Architecture** _____

Dr. Nimet Özgönül
Supervisor, **Architecture, METU** _____

Examining Committee Members:

Assoc. Prof. Dr. Ufuk Serin
Architecture, METU _____

Dr. Nimet Özgönül
Architecture, METU _____

Assist. Prof. Dr. Azize Elif Yabacı
Architecture, TEDU _____

Date: 18.12.2019

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Surname: Elvan Aynal Arcı

Signature:

ABSTRACT

VALUE ASSESSMENT FOR COTTON-BASED INDUSTRIAL HERITAGE IN ADANA

Aynal Arcı, Elvan
Master of Architecture, Conservation of Cultural Heritage in Architecture
Supervisor: Dr. Nimet Özgönül

December 2019, 206 pages

The cotton-based industrial sites that effected urban development of Adana since the middle of the 19th century, were being persisted in the city center due to the extension of the urban area. Vast majority of cotton-based industry sites, that varying types of production occurred, having diverse area sizes and locations, and built in different periods, were ceased production or/and demolished. The three of the current sites were registered as cultural property and only one of them is being conserved. These conditions show that industrial heritage and heritage values are not appreciated adequately. This study aims to determine the heritage values of industrial sites at the study area, within 'value assessment of cultural heritage' and 'industrial heritage' conceptual frameworks. To reach this aim, following the research and examination of the conceptual framework, research and field studies were done to collect information about the case study. The study area was determined according to the distribution of industrial sites that were densely located in the urban area. The industrial sites were identified and building sheets were produced as inventory in this study. Due to varying characteristics of the sites, they were analyzed by classification and mappings of these classifications. Later present sites that ceased functioning were selected and examined regarding the buildings on these sites. Finally, cultural heritage values were defined

within the light of these research and analyses, in order to guide decisions and studies about the conservation of cotton-based industrial heritage in Adana.

Keywords: Conservation of Cultural Heritage, Industrial Heritage, Cultural Heritage Values, Cotton-based Industry, Adana

ÖZ

ADANA PAMUĞA DAYALI ENDÜSTRİ MİRASININ DEĞERLENDİRİLMESİ

Aynal Arcı, Elvan
Yüksek Lisans, Kültürel Mirası Koruma
Tez Danışmanı: Dr. Nimet Özgönül

Aralık 2019, 206 sayfa

19. yüzyılın ortalarından itibaren Adana kent gelişiminde etkili olan pamuğa dayalı sanayi alanları, kentin genişlemesiyle şehrin merkezinde kalmıştır. Pamuğa dayalı çeşitli üretimlerin gerçekleştiği, farklı büyüklükteki alan ve konumlarda olan, çeşitli dönemlerde inşa edilen bu endüstri alanlarının büyük çoğunluğu üretim faaliyetine son vermiş ve/veya yıkılmıştır. Mevcut fabrikaların üç tanesi kültürel varlık olarak tescillenmiş ve bunlardan sadece biri korunmaktadır. Bu durum, endüstri mirasının ve miras değerlerinin yeteri kadar takdir edilmediğini göstermektedir. Bu çalışma 'kültürel mirası değerlendirme' ve 'endüstri mirası' kavramsal çerçeveleri içinde, çalışma alanında bulunan endüstri alanlarının miras değerlerinin saptanmasını amaçlamaktadır. Bu amaç doğrultusunda, kavramsal çerçeve araştırma ve incelemelerini takiben, örnek çalışma ile ilgili bilgi toplamak için araştırma ve alan çalışmaları yapılmıştır. Çalışma alanı, endüstri alanlarının şehirdeki dağılımı ve yoğunluklarına göre belirlenmiştir. Çalışmada fabrikalar tanımlanmış ve envanter olarak yapı fişleri oluşturulmuştur. Endüstri alanları farklı özelliklere sahip olduğu için, sınıflandırma yapılarak ve bu sınıflandırmaları haritalandırılma ile analiz edilmiştir. Daha sonra mevcut ve işlevlerini yitirmiş alanlar, arazide bulunan yapılara ilişkin incelenmiştir. Sonuç olarak, araştırmalar ve incelemeler ışığında, Adana'daki

pamuğa dayalı endüstri mirasının korunmasına dair kararları ve çalışmaları yönlendirmesi için kültürel miras değerleri belirlenmiştir.

Anahtar Kelimeler: Kültürel Mirası Koruma, Endüstri Mirası, Kültürel Miras Değerleri, Pamuğa Dayalı Sanayi, Adana

To my family…

ACKNOWLEDGEMENTS

First of all, I would like to thank my family for all their support during my education. Secondly, I would like to thank my friends who helped me during the writing process, which is impossible to mention all here. I hope I showed and will be able to show them all my gratitude. Thirdly, I would like to thank to staff of institutions, for sparing their time and sharing the sources that I apply. Fourthly, I would like to thank to jury members Assoc. Prof. Dr. Ufuk Serin and Assist. Prof. Dr. A. Elif Yabacı for sparing their time. Last but not least I want to thank my supervisor Dr. Nimet Özgönül, for her patience and support.

TABLE OF CONTENTS

LIST OF TABLES

TABLES

LIST OF FIGURES

FIGURES

LIST OF ABBREVIATIONS

ABBREVIATIONS

COE: Council of Europe

DOCOMOMO: Documentation and Conservation of Buildings, Sites and Neighborhoods of the Modern Movement

ERIH: European Route of Industrial Heritage

HAER: Historic American Engineering Record

ICOMOS: International Council on Monuments and Sites

KUDEB: Koruma Uygulama ve Denetim Bürosu – Conservation Implementation and Supervision Bureau

TICCIH: The International Committee for the Conservation of the Industrial Heritage

UNESCO: United Nations Educational, Scientific and Cultural Organization

WHL: World Heritage List

CHAPTER 1

INTRODUCTION

1.1. Definition of the Problem

Industrial sites and buildings have been incapable of continuing their original functions, such as; transportation, production, and energy provision, due to technical, financial and environmental reasons mainly. This results in the abandonment, demolishment, and decay of technical equipment and buildings at the industrial sites.

Thus, these circumstances led reconsideration of these industrial beings and areas as a matter of conservation of cultural heritage at the second half of 20th century. Since then, studies, inventories, definitions, conservation principles, and concepts of industrial heritage have been advancing.

The conservation attempts start with listing-registering the sites as a cultural heritage to protect in countries' laws. In Turkey 2863 numbered 'Law on the Conservation of Cultural and Natural Property' covers the definitions, sites to protect, conservation principles and regulations about the 'cultural heritage'. This law doesn't cover a specific definition of 'industrial heritage', also the 'values' of cultural heritage are not defined broadly in this law.

The appreciation of industrial and modern heritage is still inefficient[1]. To illustrate Ankara Gas Works which was built in 1929, as an industrial heritage it had been demolished despite the site was listed in 1991; it had been de-listed in 2006 and the

[1] In 'ICOMOS World Report 2001-2002 on monuments and sites in danger' the industrial heritage sites and 20th century heritage places had been taken into consideration of heritage sites at risk. (Ahunbay, 2002:42)

demolishment of the site had been completed around 2017[2]. 'İller Bankası' was an example of modern cultural heritage and designed by Seyfi Arkan, built in 1938 in Ankara. It had been demolished in 2017 even it is a listed building. [3]

In the case study, there are types of cotton-based factories that are located in various areas, established in different periods, having diverse physical conditions and mostly private property in Adana. As a resident of Adana[4], it can be stated that cotton agriculture and industry were manufactures which many people involved in. It was an important source of income for residents of urban and rural areas around city. This raw material even had been the symbols of annual film festival[5] and many institutions of the city. In addition to this, the cotton-based factories in the city were remarkable while concerning the appearance of the town.

The industrial sites having the characteristics stated before are being exposed to demolishment over the past decade increasingly[6] and most of the remaining sites are not continuing their original production in Adana. In such a town of various cotton-based industrial sites once were present, there are only three factories of this production that are registered as a cultural property [7] and only one of the three is being restored in order to conserve. This shows that industrial sites and their heritage values are ignored and not appreciated. The demolishment and decay of present sites mean also the loss of the values they embody.

---

[2] Maltepe Havagazı Fabrikası. Retrieved from: http://www.mimarlarodasiankara.org/index.php?Did=2434, https://emlakkulisi.com/ankara-havagazi-fabrikasi-yikildi/558381

[3]Retrieved from: https://www.arkitera.com/gorus/iller-bankasinin-yikimi-uzerine/, https://www.arkitera.com/haber/cumhuriyet-doneminin-simge-yapilarindan-biri-olan-iller-bankasi-binasi-yikildi/

[4] Until moving to Ankara for the university education.

[5] Adana Altın Koza (Golden Boll) Film Festival.

[6]Retrieved from: https://www.memurlar.net/haber/77798/ozellestirilen-sumerbank-fabrikasi-batti-ogrenciler-yolsuz-kaldi.html, http://blog.milliyet.com.tr/dev-fabrikalar-alisveris-merkezine-donusuyor/Blog/?BlogNo=114750

[7] Registered by Adana Regional Council for the Conservation of Cultural and Natural Property. Milli Mensucat in 2006, Cumhuriyet Un Çırçır in 2009 and Ulaş Çırçır in 2018.

1.2. Aim of the Study

This study aims to assess the values of present and nonfunctioning cotton-based industrial sites in Adana as industrial heritage principally. In accordance with this aim, it is sought to examine and be able to attribute the significance of the case by understanding two main concepts 'industrial heritage' and 'value assessment of cultural heritage'. While doing this, by collecting information about case study; cotton-based industrial sites and their context, it is targeted to understand the case and also provide documentation. To understand the case and conceptual frameworks, the leading questions of this study were:

- What are the cultural heritage values?
- How the heritage values of the industrial heritage of this case can be interpreted?
- What are industrial heritage concepts, and how they may be treated for the evaluation of the case?
- What kind of tools can be used to evaluate industrial heritage that are at the study area?
- What are the common and distinctive features of the cotton-based factories, and how these sites were distributed and developed at the city?

The methodology and the structure of this study were determined in order to answer these questions and to reach the aim of the study.

1.3. Methodology and Structure of the Study

In this study, literature research was done in order to understand two theoretical contexts of this study; firstly, about 'industrial heritage' and secondly about 'value assessment of cultural heritage', and thirdly concerning the case study, research and field studies were done in brief.

Firstly, with respect to 'industrial heritage', literature sources were reviewed that are mainly, related books, charters and documents of international organizations, and

other related papers covering case studies. The major sources regarding the industrialization in brief and in Turkey were books of Freyer (2014), Girouard (1985), Pamuk (1997, 2007, and 2018) and Boratav (2014). The examples of industrial buildings and sites emerged in Turkey regarding the industrialization era were searched from articles of case studies. The development of concepts of industrial heritage were examined according to books, the publications of international organizations such as TICCIH[8]. Other literature sources were used for examinations in addition to these mostly referred sources, these examinations about industrial heritage take place in Chapter 2 in this study.

Secondly, considering the 'value assessment for cultural heritage', similar with the first conceptual framework**,** literature sources were reviewed that are mainly, related books, charters and publications of international organizations, and other related papers. The assessment of cultural heritage in historical context was examined according to Jokilehto (2005), Glendinning, (2013) and Erder (2007). The value groupings of scholars and organizations are listed according Labadi (2007), Judson&Iyer-Raniga (2010), Madran & Özgönül (2005) and Orbaşlı (2008). From these typologies, the values sorted by Riegl (1996), Burra Charter (1998), Mason (2002), Madran & Özgönül (2005) and Orbaşlı (2008) were examined. The values of industrial heritage in studies were reviewed according to documents of TICCIH. The review of these subjects was done in order to interpret the values and guide the examinations of the case of this study. The examinations about values of cultural heritage take place in Chapter 3 in this study.

Thirdly about the case study, the information was collected about cotton-based industry sites, and study area town as the context by research. In this study, Chapter 4 covers the case study.

In respect to the case study town Adana, books, encyclopedias and papers covering the general information, historical and urban development of the city were searched.

[8] The International Committee for the Conservation of the Industrial Heritage

General information about the city was obtained mainly from encyclopedias. Brief history and development of cotton-based agriculture and industry in the city were referred mainly,

- Efsaneden Tarihe, Tarihten Bugüne Adana: Köprü Başı, 2000
- Adana Kentsel Kültür Envanteri, 2012
- Nomads, Migrants and Cotton in the Eastern Mediterranean: The Making of the Adana-Mersin Region 1850-1908, 2010

Concerning the historical development of the city, it was concentrated at the recent past, since the cotton agriculture and related industry had started to develop at the last two centuries. Before examining the cotton agriculture and industry in Adana, general information about them are cited mainly from Turgay and Bailleux's book (1940) and TICCIH Textiles Section document ('TICCIH Textiles', 2007).

Regarding the cotton-based industrial sites in Adana, mainly the publications such as Adana Chamber of Industry's 'Adana Industrial History'[9], Chamber of Architects' 'Adana Architecture Handbook 1900-2005'[10] were reviewed. In addition, old photo albums of the city were searched for old photos of cotton-based industrial sites.

In literature sources, there are two former academic studies about the factories in Adana. The first is Tülücü's Ph.D. thesis 'The City of Adana's Historical Industry Buildings Structural Analysis and a Study on Conservation Method'[11]. The second is Özüdoğru's Ms. Thesis "A research of Adana's weaving factories in the concept of industrial archeology"[12] . (Tülücü, 2007; Özüdoğru, 2010) In the first study, the factories of cement, brick, textiles and oil are included and structural features are examined specifically. The second study reviews ten textile industry buildings, by using the first study as one of the main sources. Four of the industrial sites had been demolished, since the second study was conducted. Both studies do not cover

[9] 'Adana Sanayi Tarihi'. (Varlık *et al.,* 2008)
[10] 'Adana Mimarlık Rehberi 1900-2005'. (Saban, *et al.,* 2005)
[11] 'Adana kenti tarihi endüstri yapılarının yapısal analizi ve korunmaları için yöntem araştırması'.
[12] 'Adana'da Dokuma Sanayi Yapılarının Endüstri Mirası Kapsamında İncelenmesi'.

specifically the value assessment of cultural heritage which this study aims to conduct. In addition, the current situations of the common factories, that were studied within these former studies, were revised in this study.

The sources that were acquired from local institutions were also used in this study. One of these are the registration sheets of the listed factories, that had been taken in digital format from Adana Regional Council for the Conservation of Cultural and Natural Property. Since the sites are located at two districts of the city, the plans of future development decisions about the sites were obtained from Seyhan and Yüreğir Municipalities. The land use assigned to these sites by 1/1000 implementary development plans had been done by the district municipalities.[13] 1/25.000 Master Development Plan of Adana 2017 achieved from Seyhan Municipality, KUDEB department. The images from the maps of development plans are at Appendices-B in this study.

The literature sources mostly included just the count or the names of the factories in Adana. The names of the factories change in time by ownership transfers, that was a research constraint that provided difficulties to compile information and place their location. To overcome this constraint, old maps of the city were used. These maps are; '1918 Base Map of Adana' and 'Adana Jansen Plan 1940' that were acquired from the webpage of 'Technische Universität Berlin Architekturmuseum'[14]. The Base Map of Adana 2006[15] and the Aerial Photo of 1950 were taken from the Metropolitan Municipality of Adana. The locations of the factories, that had not been studied before, were determined from these maps by following the road fabric and old monumental buildings still present. These locations, which were determined in all maps, were

[13] The development plan of Seyhan Municipality was accessed from the online city guide webpage, which the decisions are being updated according to the changes done by the municipal council. The development plan of Yüreğir Municipality was taken from the planning department of the directorate of construction affairs. This plan had been done by staging, so the stages that industrial sites persist were obtained.

[14] The maps were available in pieces on the webpage and these pieces were reunited.

[15] *Halihazır*, updated latest in 2006. The map was on Net Cad format; it was converted to AutoCAD format later.

adapted on the base map of the city. Furthermore, periods of the establishment of some of the factories, which the dates were not clear at the sources, were clarified according to the dates of these maps.

The information collected from the sources and locations of the factories from the old maps were combined, and represented on the 2006 Base map of Adana. These visual sources take place at Appendices-B part of this study.

During the field studies, photographs and notes were taken, and visual observations were done in order to obtain;

- Current structural condition (demolished or present) and current function
- Architectural features, construction techniques, material, and building types of the factories.

The first field study had been done in 2018, for examining the current situation of the 21 factories, whose locations were accurate at the former academic study[16].After compiling the information from other sources, and positing the areas of the 32 factories, the second field study was done in 2019. In this second field study, two more industrial sites[17] were determined and added to the study, which were not examined at any literature source. During the field studies, it was also aimed to ask questions in order to derive verbal information from the personnel at the factories whenever it was possible.

It should be mentioned that in the field studies, possible sites to enter were visited[18]; some of the sites were unable to visit. These field study limitations' reasons were the abandonment of the factories with a locked door, and restrictions to enter the site by the personnel as the sites were private property. The observations about these sites

[16] (Tülücü, 2007).
[17] Eski Çırçır (number 2 on the mappings and building sheets) and Şengül Çırçır Prese (number 3 on the mappings and building sheets).
[18] Çukobirlik Mihmandar, Sadakat Çırçır, Pati Çırçır, Milli Mensucat, Şengül Çırçır and Emeksizler Nebati Yağ sites were the 6 sites, that were visited out of the 13 present industrial sites.

were tried to be done from the outside of the site and they were examined referring to sources.

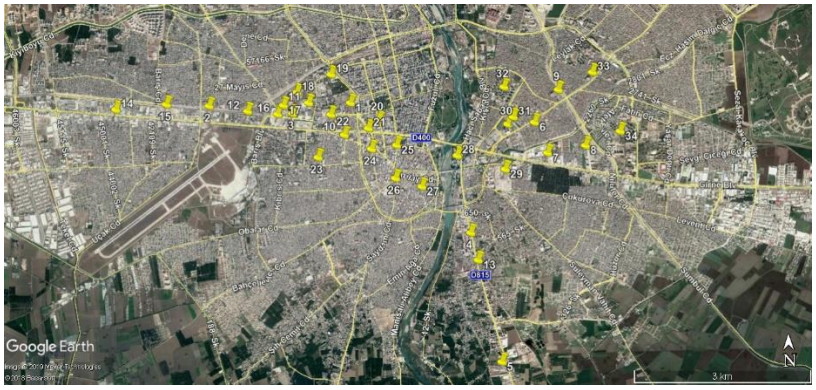


Figure 1.1. Cotton-based industrial sites determined in Adana- 2019 satellite image of Google Earth

The factories that information about their location, establishment era, production, and boundaries had been settled were compiled. By means of these sources and studies, 34 factories to examine (see Figure 1.1) and the study area were determined (see Figure 1.2). The numbering of the factories does not represent a chronological order of establishment or size. It was done to follow the building sheets and the numbers at the mappings. In the text after mentioning the names of the factories, the numbers given in this study to follow them on building sheets and mappings were cited in parantheses. The first 13 of the factories are still present and the rest had been demolished.

Figure 1.2. Study area boundary at the city-2019 satellite image of Google Earth

The information about the area and location, historical and technical development, current situation of the 13 present sfactories, and historical and technical development, and destruction dates of the 21 demolished factories were stated in Chapter 4. Later, all information acquired from research and field study-site visits were projected on mappings of analyses. The maps were produced over the 'Base Map of Adana 2006'. These mappings of analyses were done firstly, as a tool to understand the case. and support the research. Secondly, in order to determine the sites for value assessment. Thirdly, in search of information to determine common and distinctive characteristics for the value assessment. These analyses of:

- Area sizes of the factories were determined according to the maps.
- Periods of the emergence were determined mainly according to literature sources and secondarily from field study and maps.
- Types of production were determined mainly according to research and secondarily from field study.
- Zones of the factories were defined considering the distribution of the locations of the factories in the city for this study. The zones were identified according to the urban development examinations done in this study, land use assigned in 1/25.000 Master Development Plan of Adana 2017 and satellite images of Google Earth from old and recent dates.
- Current condition and current use were determined mainly according to field study and secondarily literature sources.

According to current condition and current use analyses, eight present factories which do not continue their original production were selected. These selected factories were analyzed concerning their,

- Original functions of the buildings. The functions of the buildings are projected on second type of mappings, which base site plans derived from 2006 Base Map of Adana. These analyses were referred mainly from field study-site

visit observations and secondarily Tülücü's study due to field study limitations stated before.

- Architectural features, construction techniques, material, of the buildings which had been observed at the field study-site visits were indicated.
- Land use assignments taking place at 1/1000 implementary development plans done by Seyhan and Yüreğir Mucipalities were stated.

The visual data and information about the determination of 34 factories were treated on the building sheets as an inventory, having the same numbers at the mappings. These sheets consist of the name/names, visual information including the layouts of Google Earth images and photos taken at the field study or photos from the sources, the names, lot/plot numbers[19], districts, establishment dates of the industrial sites. Furthermore, at the building sheets of the demolished sites, the demolishment years were stated. The acronyms of the features determined at the analyses were also indicated on the sheets and they take place at Appendices-A in this study.

Finally, within the two conceptual frameworks of conservation of cultural heritage; 'industrial heritage' and 'value assessment of cultural heritage', the case study was evaluated. Heritage values of the cotton-based industrial heritage at the study area were interpreted according to these research and examinations.

[19] The information of lot/plot number of the sites are attained from 1/1000 implementary development plans of Seyhan and Yüreğir.

CHAPTER 2

INDUSTRIAL HERITAGE

2.1. General Information about Industrialization

2.1.1. Industrial Revolution and Industrialization

During pre-industrial period, people had produced objects and wares at different times to keep up with their lives and needs. However, in 1768 the steam machine invented by James Watt in England started an utterly different situation that will turn as the symbol of the 19th century in history. Beyond an invention, the steam machine and power turned the technique into a different standpoint. The industrial era can be specified with industrial waves following each other in time. The first one is the Textile Industry Wave and respectively Iron-Steel Wave, Transportation Era, Chemistry Era, Electricity Industry, Petrol Engine, and Atomic Power Era in time (Freyer, 2014:37-45).

When it comes to the industrial revolution, the first thing comes to mind is the textile industry field however, the fields of iron-steel, wool textile or coal production gained importance later. The textile industry had been the major industry in western world for a long time. The innovations started from the 1760s had changed the use of organic and inorganic power sources of manufactures, such as; human, animal, water, and wind that lead the steam-powered engine, cotton factories with wageworkers took the place of the production process with simple hand tools. The use of steam-powered machines firstly in yarning and then in weaving was the crucial point of the technological leap forward in England. The changes in the second half of the 18th century were modest and small-scaled when compared to the 20th century; however,

these earlier changes provided the increase in labor productivity and manufacturing, costs decreased. This change was caused by the inventions of;

- Automatic weaver's shuttle in 1750,
- Spinning the machine in 1767,
- Power-operated weaving loom in 1786,
- Roller-gin in 1783,
- Saw-gin in 1796
- Steam engine in 1801 (Pamuk, 2007:192; Gençer, 2000:592; Pamuk, 1997:151; Girouard, 1985:269).

To mention about industrial revolution just regarding England can be misleading. Since the beginning of the 17th century, the foreign market played an important role in the development of the English cotton textile industry. In the earlier phases, the textile industry in England had been a manufacturing field that gravitates towards the foreign markets. Beginning from the first years of the 19th century the Industrial Revolution arrived in countries of Europe like France, Belgium, Germany, and some Western Europe countries. These countries were trying to overcome the competition with the English manufacture and began to rally to machine engine factories. In a short time, both England and Western Europe countries started a search for new markets for cheap agricultural and manufactured goods in the other parts of the world (Pamuk, 2007:193).

"Starting with the first factories, facilities for manufacturing and distributing goods produced indelible marks on the physical layout and sociology of the cities, and indeed countries." (Berens, 2011:3) According to Freyer (2014:28), the period described as the Industrial Era was the period that changed the whole appearance of the globe mostly in a very short time. These physical changes appeared not only in the metropolitan cities with factories or places of mines but also in a silent valley, in front of high mountains, deserts, wild forests and seas the technique never stopped. The author also adds that if an observer had painted a picture of the world in 1800 and

once again in 1900 or 1950, there will be additions at the latter picture which is a new line system consisting of railways, roads, factory chimneys, petrol plants and oil exploration machines, stations, electricity plants, telephone cables and high-voltage transmission lines.

Moreover, due to industrialization, improved technologies of infrastructure and medicine lead to population growth, the need for raw materials generated great new cities such as Chicago for meat and corn, and New Orleans for cotton. In time mass advertising caused people to consume more goods, working hours and crowded cities caused more people to travel for pleasure (Girouard, 1985:270).

The industrial revolution started in England in the 19th century and extended to countries like France, Germany, Belgium, and the USA. In the beginnings of 20th century Italy, Holland, Japan, and Russia started to experience their own industrial revolution (Köksal, 2012:146). The impact of the industrial revolution on countries and cities vary, and places have their own 'industrial histories'. [20]

2.1.2. Industrialization in Turkey

> "The more one knows a country's history and development,
> the more significant every factory and railway and shipyard becomes,
> no matter what its age" (Hudson, 1971:4)

The influence of the industrial revolution on the countries varies. In addition, the industrialization of each country on the globe has different signs of progress. During the industrial revolution era, the Ottoman Empire was governing Turkey.

The beginnings of the formation of the industry in Turkey can be summarized from Pamuk (2018:19) that in the 1820s the United Kingdom completed the Industrial

[20] The history of industrialization in countries of Europe is briefly mentioned on website of ERIH (https://www.erih.net/how-it-started/industrial-history-of-european-countries/).

Revolution process and became unrivaled at the market of the globe after defeating France. Other European countries, experiencing the Industrial Revolution in those years were protectionist about the English products to get into their own markets. This resulted in the orientation of English commercial and industrial capital to other parts of the world rather than Europe. Commercial relation between the Ottoman state and the UK was developing in 1820. The UK was in the purpose of long-termed agreement with the legislative framework, however Ottoman state was intervening and restraining. The revolt of Egypt governor Mehmet Ali Pasha was threatening to the Ottoman state and an opportunity for English diplomacy.

After this revolt, the Ottoman state's territorial integrity was under risk and the state compromised with the United Kingdom and they signed Balta Limanı Agreement in 1838. This agreement was a grant for English trade in Ottoman lands by guarantying Ottoman territorial integrity. However, there are many contentions about this agreement that it was the main obstacle Ottoman industrial revolution. Pamuk states that the Ottoman manufacture was based on traditional craft which was neither within the process of transition to capitalism nor at the edge of the industrial revolution, and the agreement prevented Ottoman State to carry out an independent external trade policy so that industrialization attempts were slow and weak (Pamuk, 2018:21).

Keyder and Yenal (2013:225) remark the earlier periods of Industry in the Ottoman Empire that the first wave of the establishment of large-scale factories occurred in the 1830s and 1840s, mainly to fulfill the requirements of the state and the army. The second capitalist wave improved dating from the 1880s which the industrial plants were using exported technologies.

Martal (1999:279-282) describes the attempts for the development of industry in the Ottoman Empire in the first half of the 19th-century industrialization were grounded on building factories. In this first period, the technicians, types of equipment, machines, and engineers were brought from Europe and students were sent to Europe

for technical training. However, advancements in this period were far behind the European industrialization, this period provided the technical know-how and experience in industry for future developments. In the second half of this century, the Ottoman State had left building factories for foreign capital within the state control (Martal, 1999:282-284).

- In 1835 Feshane Factory was founded in İstanbul,
- 1845 Broadcloth Factories in İzmit and İslimiye,
- 1855 Cotton and Silk Factory in Hereke, Silk Textile in Bursa, Gabardine Factory in Balıkesir and Broadcloth Factory in Samako were established.

The private industrial establishments were owned by mostly foreigners due to the advantages of tax privilege, capital stock, and technical knowledge. The first private textile factory was founded by Barutçubaşı Ohannes which later became Bakırköy Cloth Factory. Following this, Silk factories in Bursa, 9 Yarn Factories in Lebanon, Gustiniani firm in Konya, Aliotti and business people from Isparta founded Carpet Factory in İzmir, Cotton Ginning factories in Tarsus and Adana, Tırpani and Simyonoğlu Factories in Adana, Mavromati in Tarsus and İzmir Şark Industry Cotton Yarn Factory were established (Anonymous, 1958:5).

In addition, in 1887 Samsun Tobacco factory was established by French Regie Company, which is known as Samsun TEKEL Factory (Özen & Sert, 2006:500). And Bomonti Brewery in Feriköy (İstanbul) was founded by Swiss Bomonti brothers in 1890 (Tanyeli & İkiz, 2009:120).

A-  B- 

C- 

Figure 2.1. Images of examples of factories, built in Ottoman Period[21]

During the 19th century and at the beginnings of the 20th-century, railway constructions in Ottoman lands were done by foreign funds. These constructions were done largely at Central Anatolia and Macedonia by German capital. In Syria, Western Anatolia and Macedonia by French capital between 1888 and 1896 (Pamuk, 2018:35).

Between Constitutional Monarchy and Republican Period, attempts were done to eliminate the competition between the owners in the industry to set a national industry. In 1913 Law for the Incentives for the Industry[22] and Customs Code[23] was introduced, however, due to the defeat at the WWI, these attempts were insufficient for targeted improvement in the industry (Anonymous, 1958:7).

[21] A- Mavromati (Çukurova) Factory in Tarsus, view from the entrance (Author, 2011),
B-Samsun Tekel Factory (Özen & Sert, 2006:501), and
C- An old photo of Bomonti Brewery – İstanbul, from General Directorate of TEKEL Archive (Tanyeli & İkiz, 2009:120).
[22] Teşviki Sanayi Kanunu.
[23] Gümrük Kanunu.

The progress of the economy between 1908 and 2009 in Turkey is divided into ten eras by Boratav in his book 'Economic History of Turkey 1908-2009'[24]. Since the development and the progress of industrialization are associated with economic policies and shifts. These periods can be summarized focusing on the states of industrialization in each era and by giving examples of factories built in these periods in Turkey.

The period between 1908 and 1922 is named as the 'years of revolution and war' that the industry had been dominated by foreign capital. The state was semi-colonized which a modern Ottoman industry was difficult to remark (Boratav, 2014:19-21).

The largest plants built were the industrial plants, that were producing textiles, yarns, and fabrics of cotton, wool, and silk until the WWI. In addition to these, factories producing food, oil, soap, cement, and brick were founded. These factories were mainly taking place at İstanbul, İzmir, and Adana. During WWI the number of workers in these factories was not above five thousand (Keyder & Yenal 2013:226). In addition to these parts of Turkey, Akçaabat Tobacco factory had been built in 1915 which later became Akçaabat TEKEL factory (Özen & Sert, 2006:504).

Figure 2.2. Akçaabat (Trabzon) Tobacco Factory (Özen & Sert, 2006:505)

[24] Türkiye İktisat Tarihi 1908-2009.

Between 1923 and 1929 is the first six years of the foundation of the Republic of Turkey. In these years just before the foundation of the new regime, Turkey Finance Congress[25] had been held on February 1923 in İzmir. This congress had aimed to achieve decisions for national enterprises for the independent economic development of the country. In 1924 Haydarpaşa-Ankara, Eskişehir-Konya, Arifiye-Adapazarı railways and in 1928 Adana-Tarsus-Mersin railways which had been built and owned by foreign countries were bought by the state (Boratav, 2014:45-48).

In 1926 sugar factories were established by the state in Alpullu and Uşak. The former had been built close to İstanbul-Kırklareli railway station and Ergene River, the latter in Uşak close to İzmir-Aydın railway station and Gediz River (Durukan Kopuz, 2017:138).

Figure 2.3. An old photo of Alpullu-Kırklareli Sugar Factory from Alpullu Sugar Factory Archive 2015, view from the 1930s (Durukan Kopuz, 2017:132).

Between 1930 and 1939, First Five Year Industrial Plan was drawn in 1934. The production of three white goods (flour, textile, and sugar) had been the first industrial attempts of the 3rd World countries at the beginning of the 20th century. In Turkey in addition to the developments of these production industries, iron-steel, paper, metallurgy, and chemical industrial plants were established in this era. Industrial

[25] Türkiye İktisat Kongresi/İzmir İktisat Kongresi.

growth in Turkey occurred mostly in this period which is dominated by state control (Boratav, 2014:64-72). Sugar Factories were established in Turhal (Tokat) close to Samsun-Sivas road in1934 and in Eskişehir close to Eskişehir-Ankara railway station and Porsuk River in 1933 (Durukan Kopuz, 2017:138).

Figure 2.4. An old photo of Turhal Sugar Factory, from Alpullu Sugar Factory Archive 2015 (Durukan Kopuz, 2017:136)

The Republican state placed industry to the forefront for development. Sümerbank was instituted, in six years in the field of the textile industry

- Kayseri Factory in 1934,
- Ereğli (Konya) Factory in 1934,
- Nazilli (Aydın) Factory in 1937,
- Malatya Factory in 1939,
- Bursa Merinos Factory in 1938, and
- Gemlik (Bursa) Artificial Silk Factory in 1938 had been built.
- Bakırköy Cloth factory was renewed and new buildings added in 1934 (Anonymous, 1958:10; Şağan, 2005:174-177).

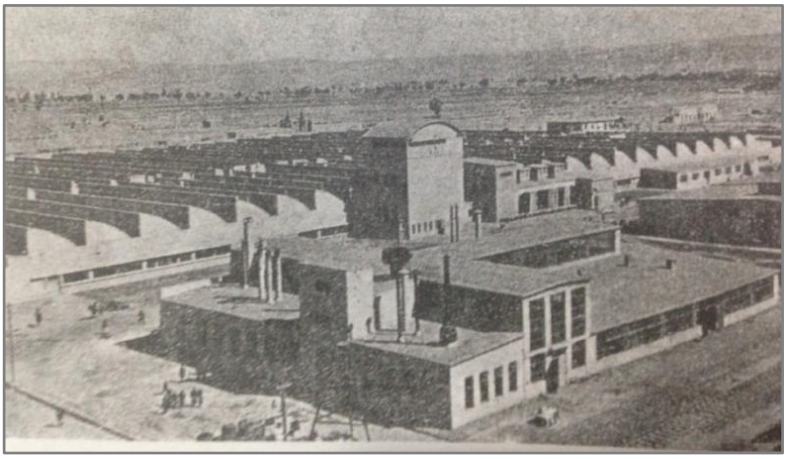


Figure 2.5. An old photo of Kayseri Sümerbank Factories, from Arkitekt-5, 1935 (Bozdoğan, 2012:142)

Companies were established and multiple factories with different functions were built by Sümerbank (see Figure 2.6). 15 factories had been built including the textile factories and factories in the fields of paper and iron-steel production. Moreover, Etibank was founded in 1935 which was funding the mining in industry (Bozdoğan, 2012:141, Köse, 2018:403).

- Keçiborlu (Isparta) Sulphur in 1935,
- Karabük Iron-steel in 1938,
- Ergani (Diyarbakır) Copper smelting in 1936,
- İzmit Paper Factory in 1936, and
- Isparta Rose-oil in 1935 had been established and built by Sümerbank.

In addition to these institutions established by Sümerbank, İstanbul Paşabahçe Şişecam and Zonguldak Semi-coke factories were built in this period (Şağan, 2005:178-181).

Figure 2.6. Map of Sümerbank Factories in Turkey, (Eldek, 2007:117)

There had been the designs of well-regarded architects in Turkey in the first half of the 20th century. Sir William Owens as known with the pioneering designs of mushroom concrete columns, had designed a ginning factory in Adana[26] in 1926, French modernist Rob Maller-Stewens designed a liquor factory in İstanbul. Moreover, German architect, Fritz August Breuhaus had designed the sugar factories and buildings of administration, lodgements and social facilities in these industrial sites (Bozdoğan, 2001:141).

Between 1940 and 1945, however Turkey was not involved in World War II, there were the negative impacts of war on the economy. In this period Wealth Tax[27] in 1942 had been imposed which was disadvantageous for investors of minority communities and people who didn't have close relations with the political power of the time (Boratav, 2014:81, 88).

Between 1946 and 1953, Second Five Years Industrial Plan[28] was drawn in 1946 but did not go into effect and a year later Five Years Development Plan of Turkey[29] was

[26] During research and field study about the case, such a factory was not detected. It also may be built and demolished or designed but not built.
[27] Varlık Vergisi.
[28] Beş Yıllık Sanayi Planı.
[29] Türkiye Beş Yıllık Kalkınma Planı.

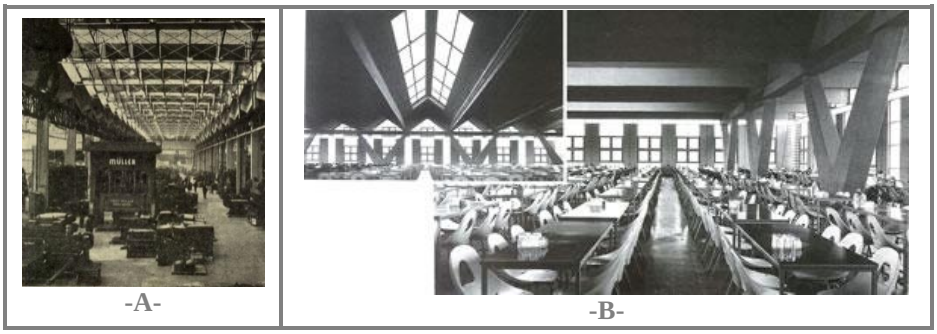
drawn which provided an increase about the role of the private ownership in transportation, agriculture, and energy sectors of industry. This plan also had not been gone into effect later. In this period Turkey gained funds with the help of the Truman Doctrine and Marshall Plan. The increase in the number of tractors led to the growth of cultivated lands and agricultural yield, also agricultural growth was dominant in the growth of the sectors in the economy. State control on the economic policies and practices decreased in this period which gave start to uncontrolled enrichment of the capitalists (Boratav, 2014:95-98, 105).

Between 1954 and 1961 is the period that the public and private sectors started to go into functional integrity economically. In industrial production of sugar, cement, tea, tobacco, iron-steel, and paper were dominated by public institutions while the production of textiles started to be dominated by private institutions. In addition, migration from rural areas to cities and squatter housing[30]in urban areas are proliferated in this period (Boratav, 2014:108-109, 113).

Between 1962 and 1979[31], a new branch of industry the production of consumer goods such as; white appliances and television emerged in Turkey. Agriculture Sales Cooperatives[32] were also established in this period, such as TEKEL for tobacco; Şeker Şirketi for sugar, and ÇAYKUR for tea production and trade (Boratav, 2014:119, 125).

In this period in 1969 Vakko Factory in Merter[33] (İstanbul) designed by Haluk Baysal and Arçelik Factory in Çayırova (Kocaeli) designed by Aydın Boysan were built (Cengizkan, 2007; Batur, 2018).

[30] 'Gecekondulaşma'.
[31] Boratav divides this period into two parts however, in this study the highlighting developments about the industry have been stated within the same era.
[32] Tarım Satış Kooperatifleri.
[33] The factory had been demolished. https://emlakkulisi.com/merterde-fabrikalar-yerinde-luks-konut-projeleri-yukseliyor/528951



-A- -B-

Figure 2.7. Old photos of Arçelik Çayırova(Kocaeli) Factory-interior views [34]

Figure 2.8. An old photo of Vakko Factory - Merter (İstanbul) [35]

Between 1980 and 1988 changes in the economy occurred against industrial development. The establishment of neoliberal policies before and after the coup of September 12 in 1980 caused the decrease in state-owned enterprises and the foundations of the privatization were laid, which increased in the 1990s. (Boratav, 2014:155-162) Between 1989 and 1997 more than the developments in the industry, the strikes of the workers of iron-steel industry, SEKA[36] factories and Zonguldak coal factory and coal miners were significant. (Boratav, 2014:175) Between 1998 and 2009 Agriculture Sales and Credit Cooperatives[37] such as; TEKEL and ÇAYKUR had been

[34] A-http://dergi.mo.org.tr/dergiler/4/399/5846.pdf,
B- http://www.mimarlikdergisi.com/dsp_imageNavigasyon.cfm?YaziID=4343&ResimID=75814
[35] http://www.mimarlikdergisi.com/dsp_imageNavigasyon.cfm?YaziID=1620&ResimID=4500
[36] Turkey Cellulose and Paper Factories.
[37] Tarım Satış ve Kredi Kooperatifleri.

disabled by the economic policies and privatization of industrial public institutions such as TEKEL and TÜPRAŞ accelerated. Extracting rent (unearned profit) from urban lands, as an important income for investors, escalated in this period. (Boratav, 2014:201-203)

According to Köksal, in Europe during the 18th and 19th centuries, industrial architecture based upon the functional needs of the industry and manufacture of industrial buildings. The buildings of same industries had similarities, architectural movements of periods had influenced design of industrial buildings especially façades. However, to evaluate Ottoman industrial buildings and sites is not possible due to demolition of the majority of the factories. In addition to this, remaining parts are changed by physical interventions, which obstruct examination and comparison about architectural, technological and historical features of buildings of this period. Within the limited sources, it can be examined that state-owned factories had been larger than private factories in relation to their production capacity (Köksal, 2005:102-104).

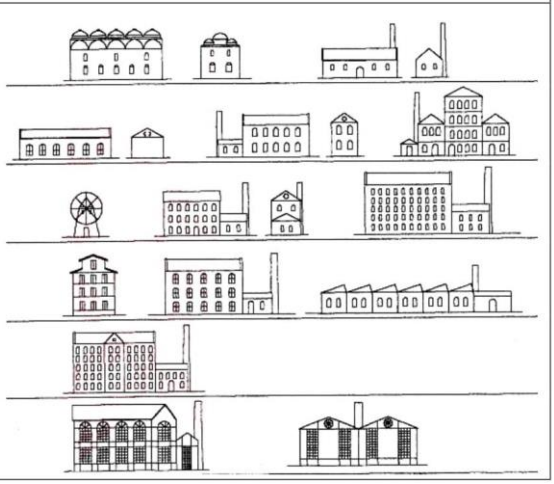
FUNCTION	FORM	THE INDUSTRIAL BUILDINGS (FACTORIES) IN TURKEY
Military Industry Cannon foundry Gunpowder	Traditional	
Food Industry Oil and Soap	Single-story and Multi-story	
Food Industry Flour mills	Multi-story	
Textiles Industry Wool, Silk	Multi-story and Sawtooth roof	
Food Industry Tobacco Brewery	Multi-story	
Power Plants Electricity Gasworks	Greater span	

Figure 2.9. Kıraç's typology of industrial building in Turkey (2001:233) translated by Author (2019)

Kıraç (2001:233), examines the factory buildings in Turkey in her study and classifies them according to their function and form (see Figure 2.9). These examinations involve factories such as, Silahtarağa-İstanbul and Alsancak-İzmir power plants of electricity; Yedikule, Hasanpaşa - İstanbul and Maltepe - Ankara Gasworks; Bomonti Brewery-İstanbul, Cibali Tobacco Factory- İstanbul, Olive-oil factories in Balıkesir, Silk factories in Bursa, Paşalimanı and Kasımpaşa flour factories in İstanbul, Gunpowder and Cannon ball foundry in İstanbul.

The earliest examples of industrial buildings in Turkey had been built in areas that are close to urban centers or railways and rivers, port sides of the sea, such as Haliç district in İstanbul. During the republican period, industrial plants were built as public institutions that were isolated from the cities by green areas, such as Sümerbank, SEKA sites. In these industrial premises, usually the production buildings were located at the center and social, administrative, clubhouse, hospital buildings were around factories. These premises also included lodgments (Köksal, 2012:151). 'Significant Industrial Structures and Sites from Turkey' dating from the Late Ottoman and Early Republican Period have been indicated in Canaran's study. This list consists of 104 sites from both periods. Sites from the Late Ottoman Period are mostly from Istanbul and respectively from Bursa, Kocaeli, İzmir, tobacco factories from Trabzon and Samsun. Sites from Early Republican Period are also located at the other parts of Anatolia, for instance, Sivas, Kayseri, Malatya, Eskişehir are included in this list (Canaran, 2009:221-243).

The industrial development in Turkey was tried to summarize in this part of the study related to the economic history of the country and some significant industrial buildings emerged during these periods. The latest decades can be related to the abandonment and deterioration of the industrial sites and buildings.

2.2. Conservation of Industrial Buildings and Sites as Industrial Heritage

2.2.1. Types and Development of Industrial Buildings and Sites

To state common architectural characteristics and development of the industrial sites and constructions is almost impossible due to their varying types of structures. The types of industrial structures differ according to their function.

Falser (2001) refers to 'HAER's Industrial Structures Classification System'[38]in his analysis which is a systematic source to follow the types of the industrial structures. This system classifies the structures under 10 main titles of industries that include numerous subcategories. These main classes of industries and some of the subcategories are in Figure 2.10.

Main Industries in HAER Industrial Structures Classification System
0. EXTRACTIVE INDUSTRIES
Such as: Iron Mining, Non-Metallic Minerals (Stone, Salt, …), Crude Petroleum & Natural Gas, Non-Ferrous Ores (Copper, Lead and Zinc, Gold and Silver), …
1. BULK PRODUCTS INDUSTRIES
Agriculture and Rural Industries (Ginning, Tobacco, …), Thermally Produced Products (Brick, Glass work, …), Chemical Industry (Plastics and Synthetics, Soap and detergents, …), Textiles, …
2. MANUFACTURING INDUSTRIES
Machine Manufacture, Finished Wooden Product Manufacture, …
3. UTILITIES
Municipal Water Supply, Gas, Electricity, …
4. POWER SOURCES and PRIME MOVERS
Water Wheels, Wind, Electric Motors, …
5. TRANSPORTATION
Railroads, Roads, Marine and Harbor Works, …
6. COMMUNICATION
Telephone and Telegraph, Radio and Television, …
7. BRIDGES, TRESTLES and AQUEDUCTS
Beam and Girder, Arched, Viaducts and Trestles, …
8. BUILDING TECHNOLOGY
Foundations, Framed Superstructures, Fenestration, Roof Systems…
9. SPECIALIZED STRUCTURES and OBJECTS
Dams, Tunnels, Thermal Structures, Materials Storage, Workers Housing, …

Figure 2.10. Main Industries in HAER Industrial Structures Classification System produced by Author (Falser, 2001)

[38]HAER: Historic American Engineering Record, the classification system takes place in APT Bulletin (*Bulletin of the Association for Preservation Technology)*.

ERIH categorizes the sites at the route related with their function, use of energy, and transportation. More than one of the categories defines different features and contents of the sites that are located on the route of industrial heritage ('ERIH', 2019).

The countries' inventory studies and industrial structure classifications may differ according to the industry types of the country and the regions (Madran & Kılınç, 2008:146). It can also be seen at the whole HAER list that the subcategories of the list include blank titles[39].

The Ironbridge Gorge in England as the symbol of Industrial Revolution built in 18th century, The Four Lifts in Belgium as a 19th century industrial landscape, Watertower in Dunkirk France built around 1910, Gasholder Finchley in England built around 1890, Silkweavers' Houses in Macclesfield Cheshire-England built in 18th century, and Zollverein Coal Mine Industrial Complex in Essen Germany built in 19th and 20th century can be given as examples of significant industrial structures and sites of different types in order to underline the variety of industrial buildings and sites.

Figure 2.11. Examples of types of industrial structures-1

From left to right: The Ironbridge Gorge-England[40], The Four Lifts on the Canal du Centre and their Environs, La Louvière and Le Roeulx (Hainaut-Belgium)[41], and the Water tower, Dunkirk, France (Hudson, 1971, figure-58)

[39] The whole list of this classification is given at Appendices-B part of this study.
[40] https://whc.unesco.org/en/documents/136704
[41] https://whc.unesco.org/en/documents/112708

Figure 2.12. Examples of types of industrial structures-2

From left to right: The Gasholder Finchley, England (Hudson, 1971, figure-61), Silk weavers' Houses in Macclesfield Cheshire, England (Cossons, 1975:259), and Zollverein Coal Mine Industrial Complex in Essen Germany[42]

Despite the multiple types of industrial structures, common changes and characteristics of factories in the last three centuries can be summarized according to Köksal. Until the end of the 18th century in Europe, the early examples of industrial buildings had been built with a masonry structural system by the use of stone and brick material, with a maximum seven-story height, and timber floor that was not allowed to bridge great spans. Before the invention of the steam engine in the 18th century, industrial buildings were used to be constructed at riversides and near water channels because of the necessity of water power and transportation. Moreover, due to the developments at the transportation system, industrial buildings had become able to be constructed in the areas, which are close to raw material sources and available for the trade of production (Köksal, 2005:8-10).

Waltham Massachusetts' Boston Manufacturing Co. which the different parts are built in the first half of the 19th century and Manningham Mills in Yorkshire built in the 1870s are examples of multi-story manufacture buildings (Berens, 2010:7).

[42] whc.unesco.org/en/documents/169067

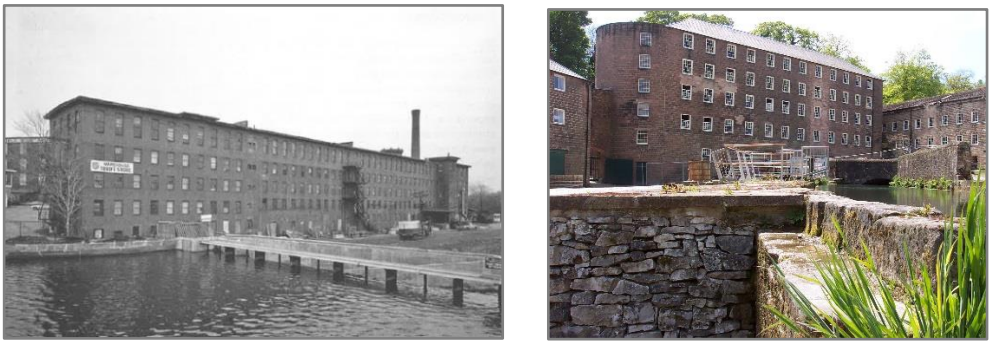


Figure 2.13. Examples of types of industrial structures-3

From left to right*:* 19th century Mill, Waltham Massachusetts' Boston Manufacturing Co. / USA in 1979 (Berens, 2010:7), and 18th century Mill, Cromford Mills[43] Derwent Valley / UK

Technical developments in the production of building materials had changed the architecture of industrial buildings. In the 19th century, cast iron had started to be used as an industrial building material. In the 20th century as a result of new inventions like band conveyors and new requirements for production, one-storeyed factories which can expand in large areas started to be built on outskirts of urban centers which were convenient locations for the entry-exit of the raw material and manufacture, instead of multi-storeyed factories. In this century the extensive use of reinforced concrete as structural system provided large factories and industrial plants expanding horizontally had been built (Köksal, 2005:10-12). Lingotto-Italy FIAT factory building built in the 1920s can be given as an example of large factories of the 20th century.

Figure 2.14. Image of 20th-century factory building, Lingotto FIAT factory building[44]

[43] Retrieved from http://www.derwentvalleymills.org/plan-your-visit/cromford/visit-cromford-mills/
[44] Retrieved from http://www.rpbw.com/project/lingotto-factory-conversion

The industrial buildings and structures which ceased functioning are being exposed to abandonment, decay, and demolishment that resulted in rethinking them as a matter of study fields of industrial heritage.

The main reason of ceasing functioning and abandonment of industrial buildings and sites is the replacement of old technologies due to new needs and inventions in the industry. Moreover,

- Difficulties in the supply of raw material
- Purchase of finished products with low costs from far Eastern countries
- Dangers of pollution and environmental degradation caused by industrial plants and sites
- The change of traffic patterns in cities, both for residents and commerce in time
- Shifts at the economic and industrial policies of the countries can be seen as the factors that caused industrial buildings' becoming nonfunctional and insufficient with their present architectural characteristics and location (Berens, 2010:19; Köksal, 2005:12).

2.2.2. Concepts of Conservation of Industrial Heritage

Before the appreciation of industrial structures, these sites and buildings were the 'interlopers' and 'unprecedented' where and when they emerged. The industrialization was related to 'unemployment, decay, desperately miserable towns and landscapes of destruction' on people's minds. In addition, these structures were not essentially regarded to be built 'pretty' (Berens, 2011:19; Cossons, 1975:18; Orbaşlı, 2008:30). That is also because 'the damage and suffering' caused by industrialization in cultural terms had been recognized at first (Cossons, 1975:15).

Since the beginning of the 1970s, industrial structures had been subjects of studies and importance of the conservation of industrial heritage was underlined by academicians, national and international organizations and committees, also NGO's (Köse, 2018:51).

The origin of the 'Industrial Archaeology' term is not very clear which was rooted in Manchester at the beginning of the 1950s. The term had appeared firstly in Michael Rix's article published in 1955. In his article, Rix pointed out the importance of recording and preserving the remains of industrialization before they vanish (Cossons, 1975:19).

Industrial Archaeology involves the studies and researches of 'the physical remains' of the Industrial Revolution era. Archeology examines the past cultures, mainly by the pieces of evidence acquired from excavations which make it possible to reach specific aspects of chronological and geographical classifications of human culture, generally based on a type of technology. In this manner industrial archaeology studies with the documents, archival information and physical remains (Cossons, 1975:15).

In Europe, "Recommendation No. R (90) 20" was declared by COE Committee of Ministers in 1990 "on the Protection and Conservation of the Industrial, Technical and Civil Engineering Heritage in Europe" which emphasized that "the technical, industrial and civil engineering heritage constitutes an integral part of the historic heritage of Europe". In addition, the measures to be taken into account for

- "the identification, survey, and scientific analysis,
- to protect and conserve,
- to alert the public and,
- to promote co-operation and intervention at European level to the technical, industrial and civil engineering heritage" are stated in this recommendation ('Recommendation', 1990).

ERIH (European Route of Industrial Heritage) is the route of industrial sites and museums in Europe that has been certified as 'Cultural Route of the Council of

Europe' since 2019. It is the network of European Industrial Heritage including tourism information which has more than 250 members in 26 countries. The website of the route includes the presentation and links of over 1,850 sites, regional routes assigned to European Theme Routes. The website also includes information about the industrial histories of the European countries and biographies related to industrialization ('ERIH', 2019).

In 1973 the first assembly in order to act and share knowledge internationally was FICCIM (The First International Conference on the Conservation of Industrial Monuments) in Ironbridge/England. At the third meeting of this conference in Sweden, TICCIH (The International Committee for the Conservation of Industrial Heritage) had been found in 1978. TICCIH supports the education and international collaboration about the research, documentation, analysis, and conservation of industrial heritage (Kıraç, 2010:121). TICCIH has also online sources as congress proceedings, bulletin, published reports, and thematic studies done by sections.[45]
The industrial heritage is defined in the first part of the TICCIH *"The Nizhny Tagil Charter for the Industrial Heritage"*, which had been held in Moscow on 17 July 2003, as:

> "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 industry such as housing, religious worship or education." ('Nizhny Tagil Charter', 2003:1)

[45] 'Agriculture and Food Production, Hydroelectricity and Electrochemical Industry, Communications, Global/Local Group, Hydroelectricity and Electrochemical Industry, Metallurgy, Mining and Collieries, Railways, Textiles, Tourism and Worker Housing/Industrial Communities'.

This charter also covers the values, legal protection, maintenance and conservation, education and training, presentation and interpretation issues of industrial heritage.

It is underlined at 'ICOMOS World Report 2001-2002 on monuments and sites in danger' that the main concerns of the industrial heritage are "scale and complexity forcing economical rationalism to prevail in re-use decisions; lack of widespread vocal support constituency; location in prime redevelopment areas, and environmental management precluding heritage values" (Burke, 2001).

In 2011 the definition of industrial heritage widened as Industrial Heritage Sites, Structures, Areas, and Landscapes by Joint ICOMOS – TICCIH Principles, also named "The Dublin Principles" covers

- "Document, understand and values
- Ensure effective protection and conservation
- Conservation and maintenance
- Present and communicate the heritage dimensions and values of industrial heritage to raise public and corporate awareness and support training and research" ('Dublin Principles', 2011).

Recently in 2019 'Sevilla Charter of Industrial Heritage 2018- The challenges of the 21th century' had been published on the website of TICCIH[46]. The charter[47], aims to guide the research, practices and management of conservation of industrial heritage regarding the

- "Problems and Perspectives
- Recommendations of Conceptualization, Methodologies and Tools, Proposals and Actions in relation to Industrial Heritage".

Due to complicated variables that affect places of work, necessity of forming a new wider heritage typology instead of present 'methodological and conceptual

[46] Carta de Sevilla de Patrimonio Industrial 2018 Los retos del siglo XXI.
[47] That is the conclusion of the 7th Seminar on Industrial Landscapes of Andalusia by TICCIH-Spain and Andalusian Center for Studies.

frameworks' is underlined and that is defined as 'transdisciplinary' ('Sevilla Charter', 2018).

In addition to international and continental organizations, there are institutes, graduate programs and research centers about the education of industrial archaeology and heritage[48].

Furthermore, there are governmental organizations, NGOs, and societies working in the field of industrial heritage of countries. http://ticcih.org/sites/ Some organizations can be given as examples such as; Heritage Documentation Programs of National Park Service[49] of USA is Historic American Buildings Survey (HABS), including the Historic American Engineering Record (HAER) and Historic American Landscapes Survey (HALS) involves in the research of industrial heritage. [50]Society for Industrial Archaeology (SIA) is a nonprofit organization in Michigan Technological University[51]. In Ireland IHAI (Industrial Heritage Association of Ireland) is a national organization founded in 1996 for recording and conserving the country's industrial past and raise awareness.[52] More organizations are included on the website of TICCIH.

As a multidisciplinary field, the studies about the conservation of industrial heritage are advancing. The industrial heritage describes not only the production buildings of mills and factories of the 19th and 20th centuries but also ancient mills, bridges and flint mines of the prehistoric and medieval era. From the procurement of the raw materials to the industrial manufacture and marketing steps, the places and building of these steps are within the scope of industrial heritage (Kıraç, 2010:131; Falser, 2001:9).

[48] Retrieved from http://ticcih.org/sites/ .
[49] Governmental institution of the USA directing the conservation of natural and cultural heritage of the country.
[50] Retrieved from https://www.nps.gov/hdp/ .
[51] Retrieved from http://www.sia-web.org/about/mission/.
[52] Retrieved from https://ihai.ie/about-ihai/.

2.2.3. Conservation of Industrial Heritage in Turkey

In 1985, The Council of Europe completed researches to document the condition of industrial heritage in Europe. In "Situation of the Technical and Industrial Built Heritage in Europe" publication, the researches about the condition of the industrial heritage in Western and Southern European Countries had been done. In this research the primary concerns of the conservation of industrial buildings and sites at the Southern European countries including Turkey were related with,

- The deficiencies of 'the appreciation and acknowledgment of the values,
- funding for the documentation, preservation, and restoration,
- specialists of the industrial heritage', and
- absence of 'legislative framework for the preservation, and
- standardization of conservation practice and interventions' (Köse, 2018:51; Köksal, 2005:114).

Since then, there has not been any governmental organization established working on documentation, survey, inventory, preservation and publicity of industrial heritage in Turkey (Köksal, 2012:155; Köse, 2018:55).

In addition, there is not a TICCIH National Representative of Turkey in 2019. The industrial buildings and sites are being covered by DOCOMOMO[53] Turkey as the heritage of the modern era.

In most cases, conserving 'industrial monuments' in countries begins with registering them as 'historical items' lists to be conserved and then providing money for the conservation become reality (Hudson, 1971:2). There are preservation laws for the conservation of industrial heritage in European countries' legislation (Köse, 2018:55).

[53] International Working Party for 'Documentation and Conservation of Buildings, Sites and Neighborhoods of the Modern Movement'.

However, there is not any specific definition [54]for industrial heritage on the Law on the Conservation of Cultural and Natural Property in legislation of Turkey. In addition, in Article 6a 'Immovable cultural and natural property to be protected' described as 'immovable property built until the end of the 19th-century' statement generates challenge for the conservation of modern and industrial heritage (Law Number 2863, 1983). The definition, values, features and chronological standards regarding the necessity of conserving the industrial heritage are not certain at the legislative framework in Turkey (Madran & Kılınç, 2008:9).

There are academic studies covering the conservation of industrial heritage. There are ten Ph. D Thesis studies on architecture that cover the conservation of industrial heritage in Turkey.

In addition to thesis studies, there are research studies about the cases as cultural inventories. One of them is as an international refereed journal, Tüba-Ked[55]. Tüba-Ked is a common ground for researches without the time and locational restraints about fields like history, cultural landscapes of cultural heritage since 2003. It is published once a year and has an online archive on the website of the journal ('Tüba-Ked', 2019). When compared to other fields of cultural heritage studies, researches about case studies of industrial heritage are a lot fewer than the other cases.

ÇEKÜL[56] is an NGO founded in 1990 for raising awareness and building a network for conservation of built and natural landscapes of urban and rural areas of Turkey. In addition to the urban inventories of cities in Turkey done by the foundation, it is cited on the website of the foundation that inventory studies about the industrial heritage by

[54] Article 3a) "Cultural property shall refer to movable and immovable property on the ground, under the ground or under the water pertaining to science, culture, religion and fine arts of before and after recorded history or that is of unique scientific and cultural value for social life before and after recorded history." (Law Number 2863, 1983)
[55] Türkiye Bilimler Akademisi Kültür Envanteri Dergisi / Turkish Academy of Sciences Journal of Cultural Inventory.
[56] Çevre ve Kültür Değerlerini Koruma ve Tanıtma Vakfı / The Foundation for the Protection and Promotion of the Environment and Cultural Heritage.

the support of agencies are continuing (ÇEKÜL', 2018). As an NGO the Chamber of Architects' publications and journals cover case studies and conservation of industrial heritage issues.

In 2016 3rd İstanbul Design Biennial 'Are we Human?' is organized by IKSV (Istanbul Foundation for Culture and Arts)[57]In this biennial 'Design Chronology Turkey-Draft' were produced that the drafts are as the documentations concentrated at the last two centuries design chronology of Turkey under 13 titles. Some of these titles are the design of Furniture, Housing, and Toys (Valeri *et al*., 2016). The design chronology also has 'industrial buildings in Turkey' title, the thresholds in economy and industrial buildings construction dates are listed in chronological order and buildings are shown at the maps of Turkey (see Figure 2.15).

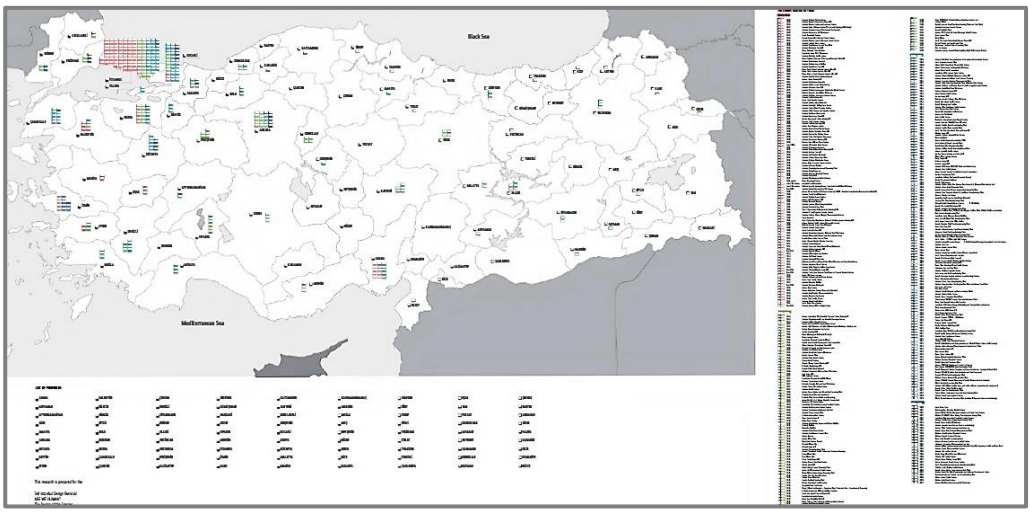


Figure 2.15. A map example of industrial buildings in Turkey, Design Chronology Turkey-Draft[58]

Furthermore, DGA[59] Lab an architecture firm continues a project on mapping survey on industrial heritage and design. This project is being done by research, documentation, and mapping for a smartphone application to be accessible for users.

[57] İstanbul Kültür ve Sanat Vakfı.
[58] http://arewehuman.iksv.org/wp-content/uploads/2016/11/industrial_buildings.pdf
[59] Dila Gökalp Architects.

For now, the project is continuing to work İstanbul industrial heritage and planning to cover industrial heritage of Eskişehir, Zonguldak, and Adana (Bayhan, 2016; 'DGA Lab', 2019).

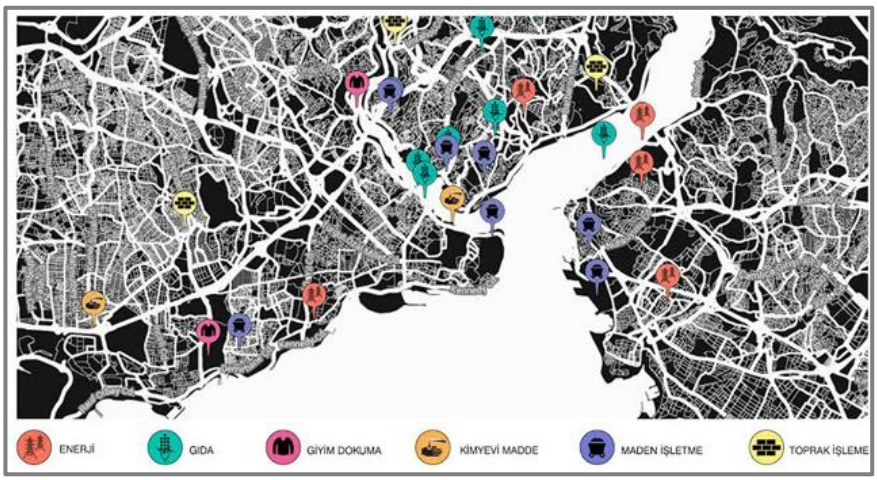


Figure 2.16. An example of mappings of 'Industrial Heritage in İstanbul' by DGA Lab ('DGA Lab', 2019)

In addition to inventorial studies, a book of Union of Textile Industry Employers of Turkey, named 'Bir Okudular, Bin Dokudular' was published in 2016. The book covers the memories of workers and life in the premises of Sümerbank factories, by interviewing with 178 people who worked and lived at the factories all around Turkey. It had been adapted to a documentary with the partnership of Bahçeşehir University and the union. The documentary can be evaluated as a so[60]urce of collective memory of workers and industrial history of the country ('Sümerbanklılar', 2016; 'BAU Documentary', 2016).

However, there is not any standardization of conservation interventions about the industrial heritage in Turkey, there are examples of conservation projects of industrial sites and buildings which will be cited at the following pages with some of international examples of approaches to conservation of industrial heritage.

[60] Türkiye Tekstil Sanayi İşverenleri Sendikası.

2.2.4. Approaches of Conservation of Industrial Heritage

The technical and socio-political structure alterations that caused cessation functioning or abandonement of the industrial sites, also resulted in 'redevelopment' or 'modification' of these sites (Burke, 2001).

There had been plentiful implemented projects of conserving the industrial buildings and sites, which the pioneering ones are in Europe and USA. As the types, scales and locations of industrial structures are diverse the implementations are also varying related with the cases.

The industrial structures and plants which cease functioning are mostly conserved by rethinking them for new uses. This new uses for the conservation of industrial heritage can be classified in three approaches. The first approach is conserving the industrial structures such as bridges, thermal structures, as they are with minimum intervention. Ironbridge Gorge in England (see Figure 2.11) and Völklingen Ironworks (see Figure 2.17) can be given as examples of such approach.

Figure 2.17. General view of Völklingen Ironworks-Germany[61]

Völklingen Ironworks had been an iron and steel production plant that was closed in 1986 and its site covers a very large area. It has been used as a venue for exhibitions

[61] Retrieved from whc.unesco.org/en/documents/131639

and concerts[62]. As a large plant, the site is outskirts of urban area between Saar River and railway.

The second approach is re using the industrial heritage as technological museums or industrial museums related with its original function. MIAT[63] Ghent Belgium can be given as an example of museum of industry.

Figure 2.18. Exterior and interior view from MIAT Ghent-Belgium (Author, 2012)

The museum was a former spinning mill built in 1905[64] . Exhibition of documentations and machinery collections covers the period from the mid-18th century to present. The industrial site is not a very large site while compared to industrial plant of Völklingen, and it is located at the urban area near Leie River.

Former Lengerhane[65] built in 18th century in İstanbul had been converted to museum of technology. The former building had been bought by Rahmi Koç Museology and Culture Foundation. It was named as Mustafa V. Koç building in 2016[66]. MIAT Ghent and Lengerhane Museum involves machinery collections not only related with the original functions of the museum buildings, but also other industries and technology.

[62] Retrieved from https://www.erih.net/i-want-to-go-there/site/show/Sites/world-heritage-site-voelklingen-iron-works/
[63] Museum of Industry, Works and Textiles.
[64] Retrieved from https://www.erih.net/i-want-to-go-there/site/show/Sites/museum-of-industry/
[65] Anchor and chain house.
[66] Retrieved from http://www.rmk-museum.org.tr/istanbul/en/about-us/history

The third approach is conserving the industrial heritage with a new function which is called adaptive re-use. In this approach, the new uses that are adapted to the buildings and sites can be resident, business, education or culture. This attribute also varies according to the scale of the industrial heritage. Large industrial plants, such as Zollverein Coal Mine Industrial Complex in Essen-Germany (see Figure 2.12) were planned in larger scale and can involve multiple new uses. Zollverein Coal Mine was emerged in 1847 and significant central shaft was built in 1932, the plant stopped working in 1986 and listed as UNESCO World Heritage site in 2001. The site is located in Ruhr regional route of ERIH[67]. The site is inside the boundaries of Emscher Landscape Park (see Figure 2.19). "The Emscher Park International Building Exhibition" by IBA[68] started in 1989 to 1999 by a regional planning approach for a site that covers more than 800 km^2. With the involvement of 17 cities, wide range of initiatives and partners 117 projects were produced for the future of the region.[69]

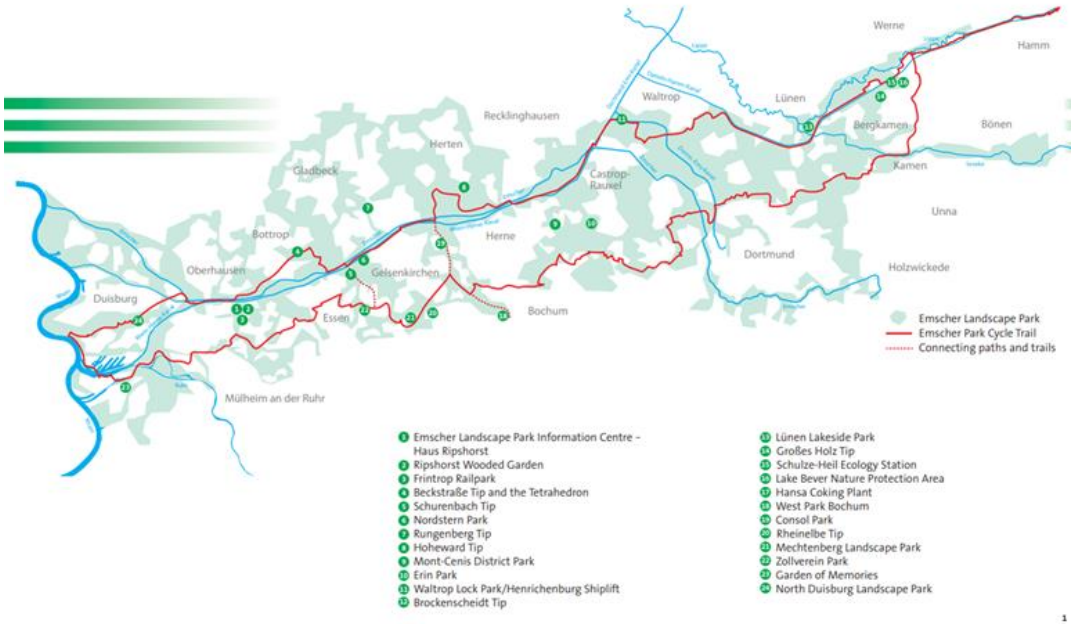


Figure 2.19. Map of Emscher Landscape Park[70]

[67] Retrieved from https://whc.unesco.org/en/list/975, https://www.erih.net/
[68] Internationale Bauaustellung.
[69] Retrieved from http://open-iba.de/en/geschichte/1989-1999-iba-emscher-park/index.html
[70] Retrieved from https://climate-adapt.eea.europa.eu/metadata/case-studies/a-flood-and-heat-proof-green-emscher-valley-germany/11305605.pdf, Zollverein Complex is numbered 22 on the map.

Berens (2011) examines the implementations regarding the initiations as; the project planning strategies and actors of the projects, urban evolution's public policies and environmental development. The author also classifies the project types related with re-use adaptations as; 'cultural projects', 'residential, commercial and mixed use developments', and 'open space and parks'.

As an owner initiated conversion, Fiat Lingotto Factory can be given as an example. After the factory had been closed in 1982, the owner firm declared a competition and the project was held by Renzo Piano Building Workshop architects. The former factory was transformed to a multipurpose center containing exhibition and conference halls, auditorium, hotels, offices and retail area[71].

'Santral İstanbul' is an example for mixed used developments in a large scale area in Turkey. The present site includes university buildings, museum of energy and places of food and beverage services. Some of these buildings are converted from industrial buildings and some of them are additional buildings. The site also had been a place for festivals and events. The former Silahtarağa Power Plant had worked to produce electricity between 1918 and 1983. The land of the industrial site had been assigned to Bilgi University by Ministry of Energy in 2004. In 2007 with NGOs, public and private initiations the project had been completed[72].

Figure 2.20. Images from Santral İstanbul Turkey[73]

[71] Retrieved from http://www.rpbw.com/project/lingotto-factory-conversion
[72] Retrieved from https://www.santralistanbul.org/tr/hakkinda/
[73] Retrieved from https://www.santralistanbul.org/tr/hakkinda/

There had been other adaptation of educational use to industrial sites in Turkey. These transformations of the former industrial sites are generally done by private universities.

- Former Cibali Tobacco Factory has been used as Kadir Has University since 2002. The factory had been bought by Kadir Has Foundation in 1997[74].
- Former Kayseri Sümerbank Factory has been used as Sümer Campus of Abdullah Gül University. The premise of the factory had been listed in 2003 and 2004 with the initiation of DOCOMOMO Turkey and the site had been assigned to the university in 2012. The Master Plan for the site had been approved in 2014, and the implementations are continuing[75].
- In İzmir former flour factory in Alsancak and in Bornova a bike and a paint production factories are now used as two campuses of Yaşar University. (Özsoy, 2011:31)

Some of other transformations of industrial heritage in Turkey are:

- As arts and cultural use, Cer Modern Art Center in Ankara has been used as art center since 2010, which was a traction workshop of railways in Ankara built in 1920s[76].
- As research renter use, Tarsus-Gözlükule Excavations Research Center in historic urban center of Tarsus-Mersin. Former ginning mill is being used as the research center of Boğaziçi University Gözlükule Mound Excavations since 2017. The factory had been assigned to the university in the 2000s and the conservation project was awarded by Europa Nostra Cultural Heritage Conservation Prize 2019[77].

[74] Retrieved from https://www.khas.edu.tr/tr/hakkimizda/tarihce
[75] Retrieved from http://arch.agu.edu.tr/tarihce
[76]Retrieved from http://www.uygurarchitects.com/site/tr/projects/cer-modern.html
[77] Retrieved from http://www.tarsus.boun.edu.tr/?sayfa=20

Figure 2.21. Images of Gözlükule Research Center[78]

- There are also industrial sites that are transformed for commercial use. Former Samsun Tekel Factory was transformed to a shopping mall named Bulvar Samsun.

Figure 2.22. Image of Bulvar Samsun shopping mall, former Samsun TEKEL factory[79]

The examples given can be disputable about their conservation approaches, in this manner it is recommended that the conversions of the industrial heritage can be appreciated unless they do not cause detaching of the industrial heritage from authenticity. ('TICCIH Textiles', 2007) The redundant industrial heritage sites of large areas are often attractive for conflicting redevelopments. Nonfunctioning sites that are at urban areas are especially exposed to such disputable transformations due to their pragmatic value as real estate. Approaching the conservation implementations concerning the land price is seen to overshadow their heritage values and compatible adaptive re-use possibilities. (Burke, 2001)

[78] Retrieved from http://www.tarsus.boun.edu.tr/?sayfa=20#prettyPhoto[sol]/0/ , https://www.arkitera.com/proje/bogazici-universitesi-gozlukule-kazisi-arastirma-merkezi/ .

[79] Retrieved from http://www.bulvarsamsun.com.tr

Moreover, Oevermann and Mieg (2015:5-7) classify ‘different understandings of conservation of industrial heritage’ as:

- ‘Testimony to the past’
- ‘Urban landmarks or cultural landscapes’
- ‘Built infrastructure and spatial resource’
- ‘Architectural and atmospheric space’

The conversion practices of industrial heritage sites are determined by the cooperation of discourses which are ‘heritage conservation’, ‘urban development’ and ‘architectural production’. The disputes of implementations are caused by value differences of these discourses. (Oevermann and Mieg, 2015:13)

To sum up the repercussion of industrial revolution and later industrialization had been in many aspects such as environmental, economic, technical and sociocultural. The industrial revolution is a phenomenon that leads developments afterward, which created impacts by shaping landscapes of urban and rural environments and evolved our present culture and way of livings throughout the world. The countries experienced these impacts and have their own industrial development histories related with resources, transportation opportunities and economy mainly.

In Turkey, the early industrial buildings and sites in Ottoman Period had emerged in İstanbul densely to supply the needs of the state and army. In early Republican Period during 1930’s, the industry had been controlled and encouraged by the state, that lead development of many types of industries and emergence of varying industrial sites alongside İstanbul. Later after the 1950s, other types of factories or industrial structures had been built by both private and public sector. After the 1980s the state control and funding decreased. Economic shifts and rapid urban growth affected the situation of industrial buildings and sites.

The abandonment of industrial structures created threats and risks upon these buildings which caused also demolishment. The field of ‘industrial archaeology’ started to study industrial structures since 1950s and industrial heritage concept emerged in 1970s. Since then the studies have been advancing and approaches to conservation of industrial heritage are varying. The conservation implementations differ and can be classified according to the type, scale, refunctioning, location (being at center or outskirts of urban areas) and management models. The approaches are also related with the values of the industrial heritage as a field of cultural heritage. The values of cultural heritage within the heritage conservation field will be examined in the next chapter of this study.

CHAPTER 3

VALUE ASSESSMENT FOR CULTURAL HERITAGE

3.1. Historical Background

Understanding of conservation of cultural heritage has changed with the widening concepts of heritage over the last decades. For a long period of time, places of the past were appreciated and protected only due to their historical and aesthetic values (De la Torre, 2013:157).

Civilizations had repaired, respected or appreciated historic buildings, all around the world throughout the centuries. The societies which took shape by 'western modernity' converted this appreciation into 'conservation movement'. This modern circumstance aroused in the late 18th and 19th century (Glendinning, 2013:2).

Jokilehto (2005:6) cites that approaches to the historic buildings and works of art of the past had developed in three ways. The first is 'traditional approach' which may be as old as the presence of the communities. This approach can be summarized as protecting a historic structure through their continuing 'use' value unless there is no specific reason to demolish them. Moreover, within this attitude important structures or objects of 'memorial' or 'symbolic' values for the societies were respected and repaired. These structures and objects were also destructed or taken away by opponents of these values (Jokilehto, 2005:6).

The second approach was appreciation of ancient monuments as the 'nostalgic remains of the past', while the destruction of historic buildings was continuing during these periods. With this approach the historic awareness increased in Europe. The

restoration implications of this approach were concerning the 'aesthetic values' and aiming 'unity in style' (Jokilehto, 2005:7; Orbaşlı, 2008:17).

Until the end of 18th century the attitudes that caused detrimental implications were undermining the former opponent ideologies, regimes and their cultural assets, using the material of the historic structures as a building material resource, destruction and damage caused by aesthetic or stylistic concerns of the era. The impacts of the industrialization on historic urban areas also caused deteriorations (Erder, 2007: 91-93).

The third approach had developed as an opposition to such implications and attitudes stated before. This approach was against 'falsification' and 'scraping' the 'historic stratification' while restoring the historic monuments and supporting to conserve 'authentic object' and 'original material' caused anti-restoration movement at the end of 18th and on 19th century. The former attitudes towards buildings of the past and works of art were criticized such as; in France by Victor Hugo, in England by William Morris and John Ruskin, in Italy by Camillo Boito, in Germany by Georg Dehio and in Austria by Alois Riegl (Jokilehto, 2005:7-8; Glendinning, 2013:91, 117).

In today's globalized world, cultural heritage ceased to be regarded as national patrimony and conservation of cultural heritage became an international issue. The nations are also accountable for international organizations' decisions (Tekeli, 2011:113).

Athens Charter in 1931 lead preservation to be accepted as an international action and later International Charter for the Conservation and Restoration of Monuments and Sites-the Venice Charter 1964 conservation and restoration started to be mentioned together[80]. The internationalization of cultural heritage has been confirmed by

[80] Retrieved from https://www.icomos.org/charters/venice_e.pdf

foundation of ICOMOS in 1965 and World Heritage Convention UNESCO in 1972. The terminology also evolved from 'historic monuments' to 'cultural property' and recently 'cultural heritage' is being used as a broader definition (Orbaşlı, 2008:15).

The countries are also determining the conservation principles suitable for their own cultures. Burra Charter of ICOMOS Australia published firstly in 1979, and revised latest in 2013, New Zealand Charter of ICOMOS New Zealand published firstly in 1993 and revised in 2010 are the examples of charters that are published by the country representatives of ICOMOS (Erder, 2007: ii).

The present understanding of valuation of cultural heritage had been formed by the accumulation of preceding experiences, approaches and criticism, which is still in progress as a scientific field.

3.2. Review of the Heritage Values

"'Heritage value means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. It is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects." The term 'Heritage Value' is equivalent to 'Cultural Significance' and 'Heritage Significance' (Chu & Uebegang, 2002:2). Mason positions the 'value assessment' at the center of planning process scheme for the conservation of cultural heritage as seen at Figure 3.1.

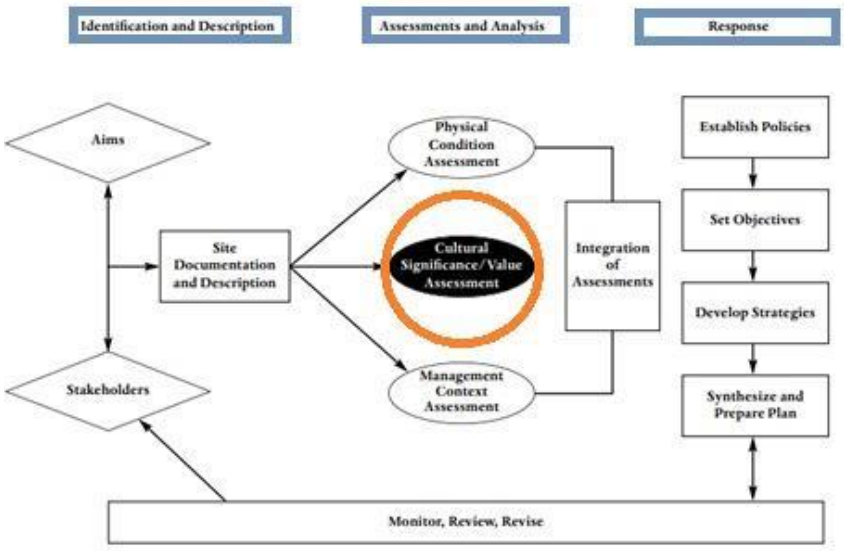


Figure 3.1. Planning process methodology (Mason, 2002:6)

It is stated as "The policy for managing all aspects of a place, including its conservation and its use, and the implementation of the policy, must be based on an understanding of its cultural heritage value." in New Zealand Charter, Article 2- "understanding cultural heritage value"[81].

Values of cultural heritage are varied, attributed, multiple and often in conflict (Mason, 2002:15, De la Torre, 2013:162). Value judgment is historical and may differ from one generation to another. Moreover, some buildings were built as to be a monument and continue to be for people, while some may gain other values that are attributed by the society and the individuals, hence start to symbolize and mean something else (Tekeli, 2009:95; Orbaşlı, 2008:38).

[81]Revised in 2010, Retrieved fromhttps://www.icomos.org/charters/ICOMOS_NZ_Charter_2010_FINAL_11_Oct_2010.pdf

There are value typologies of cultural heritage that are listed by scholars and cultural heritage organizations. These values sorted by academicians and treated by organizations are shown in Figure 3.2, 3.3, and 3.4, in chronological order. The values determined and defined by some of these sources are reviewed and these are marked with (*) symbol at figures below. Value groupings of Riegl in 1903 as being the pioneering (Riegl:1996), values cited in Burra Charter as an organization (1998), Mason's 'provisional typology', Madran & Özgönül's value grouping as covering wide range of values, and Orbaşlı's grouping as the values of architectural heritage are examined.

1)Ruskin (1849)	4) Fielden & Jokhileto (1998, [1993])	5) Darvill (1995)
Use Architecture	**Cultural Values:** Identity Value, Relative Artistic or Technical Value, Rarity **Contemporary Socio-Economic Values:** Economic Functional Educational Social Political	**Use Value** Archaeological research Scientific Research Creative Arts Education Recreation and tourism Symbolic representation Legitimization of action Social solidarity and integration Monetary and economic gain **Option Value** Stability Mystery and Enigma **Existence Value** Cultural identity Resistance to change
2)Riegl (1996, [1903])*	6) Heritage Victoria (1995)	
Age Historical Deliberate Commemorative Use Newness	Association Aesthetic Scientific Educational Cultural Richness Representativeness Rarity Social	
3)Lipe (1984)		
Economic Aesthetic Associative/ Symbolic Informational		

Figure 3.2. Heritage Values sorted by Scholars and Organizations -1, produced by the Author (Labadi 2007:150-151; Judson&Iyer-Raniga, 2010; Madran & Özgönül, 2005; Mason, 2002; Orbaşlı, 2008)

7) Carver (1996)	8) English Heritage (1997)	**10) Mason, (2002)***
Market values Capital/estate value Production value [agricultural, mineral extraction, etc.] Commercial value Residential value Community values Amenity value Political value Minority/disadvantaged/ descendant value Local style value (rather than aesthetic, which – Bequest is unknowable) Human values Environmental value Archaeological value	Cultural Educational Academic Economic Resource Recreational Aesthetic **9) Burra Charter (1998)*** Aesthetic value Historic value Scientific value Social Value (political, religious, spiritual, moral beliefs)	**Socio-cultural values** Historical value Cultural/symbolic value Social value Spiritual/religious value Aesthetic value **Economic values** Use (market) value Non-use (non-market) values: Existence Option Bequest

Figure 3.3. Heritage Values sorted by Scholars and Organizations -2, produced by the Author (Labadi 2007:150-151; Judson&Iyer-Raniga, 2010; Madran & Özgönül, 2005; Mason, 2002; Orbaşlı, 2008)

11) Throsby (2002)	**12) Madran & Özgönül , (2005)***	**14) Orbaşlı, (2008)***
Aesthetic Spiritual Social Historical Symbolic 13) English Heritage (2007) Evidential Historical Aesthetic Communal 15) Australian Heritage Council (2009) Association Aesthetic Scientific Educational Rarity Social Indigenous Tradition	Continuity Historic Memory Mythological Artistic and Technical Authenticity Rarity Uniqueness Group Multiplicity Homogeneity Economical Functional Traditional Educational Documentary	Age and Rarity Architectural Artistic Associative Cultural Economic, Educational Emotional Historic Landscape Local Distinctiveness Political Public Religious and Spiritual Scientific-Research and Knowledge Social Symbolic Technical Townscape

Figure 3.4. Heritage Values sorted by Scholars and Organizations -3, produced by the Author (Labadi 2007:150-151; Judson&Iyer-Raniga, 2010; Madran & Özgönül, 2005; Mason, 2002; Orbaşlı, 2008)

Riegl[82] divides the monument values in to 'Commemorative values' of age, historical and deliberate commemorative values, and 'Present-day values' of use and newness value. Glendinning (2013:142) remarks Riegl's value approach, as associating the 'intellectual historical value' and 'feeling based age value' when compared to contemporary understandings of the period. Riegls states that age and historical values have same scientific bases. Age value is enjoyed by 'modern viewer' aesthetically due to its continuous change within time (Riegl, 1996:72-80).

ICOMOS Australia Burra Charter 1999 'Charter for places of Cultural Significance' also covers the charter of 'Guidelines to the Burra Charter: Cultural Signifcance' in 1988. Article 2 in 1988 charter, sets 'encompassing values' as 'aesthetic, historic, scientific, and social values'. The Charter mentions that the cultural significance of a place may alter since the history of a place continues and its understanding changes with new information. It is also stated that values of a place may change according to groups and individuals. In the revised version in 2013, in Article 13 it is remarked as "Co-existence of cultural values should always be recognized, respected and encouraged. This is especially important in cases where they conflict." ('Burra Charter'; 1999, 2013)

Mason sets 'provisional typology' of values. The author classifies two main value types, first is sociocultural values and the second is economic values since these values can be elicited by different methodologies. The first type of values can be drawn out by qualitative methods (i.e. mapping, primary or secondary literature research, ethnography…) while the second type by quantitative methods (Mason, 2002:15-22).

[82] Professor of Art History, in Vienna University and General-Conservator appointed by government and 'Modern Cult of Monuments' including the values stated by the author had been published in 1903 (Glendinning, 2013:141).

Historical value as the base of concept of heritage, involves educational and academic, artistic, rarity, uniqueness, and technological values. It is stated that there is not any heritage which do not have cultural value and cultural value involves political, symbolic values which are related with living together and not related with chronological aspects as historical value. Social values of cultural heritage are the shared qualities of social groups that enable social connections. Spiritual or religious values related with sacred beliefs and also wonder. Aesthetic values are the most subjective value of sociocultural values and relates with 'sensory experience' (Mason, 2002:11-12). The second type economic values are divided into two groups as use value (market, private) and nonuse (nonmarket, public) value.

The value grouping of Madran and Özgönül covers every type of cultural heritage. The values are defined briefly by giving examples of significant sites of determined values from Turkey. It is remarked that the cultural heritage is the testimony of the past (Madran & Özgönül, 2005:57).

Orbaşlı, groups the values of 'all forms of architectural heritage' with given examples and the values are listed in alphabetical order. The author underlines the necessity of broader range of values should be noticed. Moreover, some of the values may be linked to the physical layout and elements of the places and some may be less tangible such as; emotional, symbolic and spiritual values. Regarding the values, the decisions and approaches also need to be based on 'integrity' and 'authenticity' principles (Orbaşlı, 2008:38, 52).

'Authenticity' concept had been asserted by Charter of Venice and covered by Nara Document, in the document it is stated at values and authenticity part as:

"…authenticity judgments may be linked to the worth of a great variety of sources of information. Aspects of the sources may include form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, and

other internal and external factors. The use of these sources permits elaboration of the specific artistic, historic, social, and scientific dimensions of the cultural heritage being examined." [83]

3.3. Values of Industrial Heritage

However, practice of excavation of an archaeological site and transformation of the use of a building of industrial heritage are guided by same fundamental principles; the approaches to both implications will differ (Orbaşlı, 2008:5). The value assessment of the cultural heritage directs the approaches.

The values of the industrial heritage are cited as 'historical, technological, social, architectural and scientific' at the definition part of industrial heritage and the values are described, but not grouped as a typology, at the second article of 'The Nizhny Tagil Charter for the Industrial Heritage'. These are:

- *Historical value* of industrial heritage is universal value of being records of actions that caused and still causing thorough historical results.
- *Social value* is being evidence of way of lives of ordinary people of societies that also creates impression of identity.
- *Technological and Scientific value* is being important in construction, production and engineering history.
- *Aesthetic value* is qualities of industrial structures and beings in 'architecture, design and planning'.
- *Rarity and Age value*, which is not named as but defined as pioneering, rare and early examples of industrial heritage are of special value ('The Nizhny Tagil Charter', 2003:1-2).

[83] Retrieved from https://www.icomos.org/charters/nara-e.pdf

In ICOMOS-TICCIH ‘Dublin Principles’ there is not a particular article defining the values and in definition part 2, it is stated as

“…significance and value of industrial heritage is intrinsic to the structures or sites themselves, their material fabric, components, machinery and setting, expressed in the industrial landscape, in written documentation, and also in the intangible records contained in memories, arts and customs.”

This may refer to values which are not specifically defined but remarked for conditional interpretation; this definition reaffirms the ‘The Nizhny Tagil Charter’ value definition of article 2.3. (‘Nizhny Tagil Charter’, 2003:1-2; ‘Dublin Principles’, 2011:3)

European Council’s Recommendation on industrial, technical and civil engineering heritage do not cover the values of industrial heritage at a specific article however, while describing the aim of the documentation the values that are mentioned are *technical, cultural and social values***,** the reasons to protect the industrial, engineering and technical heritage as European *identity* and *collective memory*. In the third part of this document *historic and scientific values* are cited (‘Recommendation’, 1990).

Oeverman and Mieg are stating that varying approaches for interventions about the conservation of industrial heritage is caused by the different value understanding of discourses (Oevermann & Mieg 2015:13). In the article the values and the appreciation of them by corporation of ‘architectural production’, ‘heritage conservation’ and ‘urban development’ fields are listed as in Figure 3.5.

Value	Discourses
Accessibility	Architectural production, Heritage conservation, Urban development
Authenticity*	Heritage conservation
Bottom-up	Heritage conservation, Urban development,
Character	Architectural production, Heritage conservation, Urban development
Design*	Architectural production
Development*	Urban development
Economic value*	Urban development
Environmental value*	Urban development
Esthetics*	Architectural production
Heritage values* (*Denkmalwerte*)	Heritage conservation
Image	Architectural production, Urban development
Integrity*	Heritage conservation
Re-use	Architectural production, Heritage conservation, Urban development
Sensitivity	Architectural production, Heritage conservation
Vision*	Urban development
* = core value	

Figure 3.5. List of values and discourses regarding the conservation of industrial heritage (Oevermann & Mieg 2015:14)

Köksal proposes a model for evaluation of historic industrial buildings and sites in İstanbul in her Ph. D. thesis. 17 criteria were determined under 10 titles for the evaluation of industrial heritage in İstanbul (Köksal, 2005:181-182). The author sets a value model which the sites that comply all the criteria can be a candidate for the WHL of UNESCO. In addition, according to Canaran appropriate implications for the conservation of industrial heritage can be decided considering 'Type and Level of Obsolescence', 'Constraints and Barriers of Intervention', 'Multi-Layer Values/Benefits/Opportunities' and 'Industrial Character Assessment' (Canaran, 2009:64). The urban context opportunities and multilayered values of industrial heritage are listed by the author and criteria determined in Köksal's study are shown in Figure 3.6.

Canaran, 2009	
Urban Context Opportunities (Canaran, 2009, pp. 18-24)	Multi-Layer Values (Canaran, 2009, pp. 25-30)
Locational Advantages Catalytic Benefits Public Realm Identity and Collective Memory Ownership Sustainability Spatial Opportunities Structural Advantage Visual Advantage	Socio-Cultural Value Historical Value Technological and Scientific Value Educational and Academic Value Architectural and Aesthetic Value Landscape Value Economic Value Resource Value
Köksal, 2005	
Historical importance Functional importance Cultural importance Symbolic importance Architectural-artistic importance Rarity value Continuity in use İmportance for industrial Archaeology Originality Value (design, material, construction, technique, location, equipment) Environmental importance(regional, urban, national, international)	

Figure 3.6. Industrial Heritage Values grouped in sorted studies, produced by the Author, according to Köksal (2005) and Canaran (2009)

Falser analyzes industrial heritage in 'UNESCO World Heritage List', in 2001 there were 28 industrial heritage sites and landscapes[84] with outstanding values of 'Cultural Criteria' at the list mainly located in North America and Europe. The author also examines the sites at tentative list and classifies as 'industrial heritage' and 'heritage with industrial heritage value' (Falser, 2001:6-7). Through the years the number of industrial heritage places is increasing in the list. In 2006 there were 43 industrial heritage sites worldwide, and recently there are 61 sites just from Europe[85]. The industrial sites and landscapes in WHL are listed as cultural site category.

3.4. Assessment of Cultural Heritage in Turkey

Tekeli states that conservation of cultural heritage in Turkey is based on four types of common approaches and aims. The first is that the interventions are done in order to raise historical awareness. The second aim is to strengthen the national identity. The

[84] Out of 529 cultural sites of 610 total listed sites.
[85] ('ERIH', 2019), https://www.icomos.org/18thapril/2006/whsites.htm

third approach supports the wide range of values instead of just concerning the historical value, and the fourth is to conserve the heritage with commercial concerns by encouraging tourism (Tekeli, 2009:94-95).

As the first step of legalization of conservation of cultural heritage, determination and registration of cultural heritage are done in the charge of 'The Ministry of Culture and Tourism' in Turkey. The law in effect covering the conservation of cultural heritage is 2863 numbered 'Law on the Conservation of Cultural and Natural Property' which was declared in 1983 and has been revised several times latest in 2009. Until this law there had been regulations and former laws which were in effect. Regarding previous laws monuments to protect had been remarked of architectural and historical values by 5805 numbered law in 1951. The 'site' concept to conserve was emerged firstly by 1710 numbered law in 1973 (Özküt, 2018:47-49).

Considering the law in force, definitions of cultural and natural properties take place in Article 3.a. The *'cultural property'* is defined as:

" movable and immovable property on the ground, under the ground or under the water *pertaining to science, culture, religion and fine arts* of before and after recorded history or that is of unique *scientific and cultural value for social life* before and after recorded history."

This definition neither covers wide range of values nor a conditional or provisional set of values with a broad definition. The 'Immovable cultural and natural property to be protected' is defined in Article 6. The values are not covered and defined in this article, "the immovable property not decided to be protected by the Conservation Councils on the *basis of their architectural, historical, aesthetic, archaeological, and other important characteristics* shall not be regarded as immovable cultural property to be protected." This statement just mentions the characteristics of cultural heritage to conserve.

Moreover, in article 3a *'conservation site'* is defined as "cities and remains of cities … with a concentration of cultural property and areas the natural characteristics of which have been documented to require protection." There is not a definition of groups of buildings in the law. Turkey is a party of 'Convention for the Protection of the Architectural Heritage of Europe' of COE held in 1985 and undertaken by Turkey legally in 1989. The convention defines groups of buildings as "homogeneous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social or technical interest which are sufficiently coherent to form topographically definable units". ('Convention', 1985)

Turkey is also a party of 'Convention on the Protection of the World Cultural and Natural Heritage' held by UNESCO in 1972 and undertaken by Turkey legally in 1983 (Madran & Özgönül, 2005:80).

To sum up, considering the assessment of cultural heritage values in historical context, there had always been attitudes towards historic structures to protect them. The values of cultural heritage appreciated were mostly 'aesthetic' and 'historic' values. Moreover, to protect a historic structure was also used as a tool to undermine or glorify a period related to the dominant ideologies of the era.

There is not a single approach for eliciting heritage values, and it is essential for the determination of decisions about the future of cultural heritage. So the heritage value typologies of the organizations and scholars, legal documents in Turkey were examined in this part of the study. In addition, values defined specifically for industrial heritage were reviewed in order to guide the case of the study.

Since there is not a single value typology for the assessment of values, and heritage values change from case to case, values of cotton-based factories in Adana were determined and attributed at the next chapter after examining the city, and analyzing the industrial heritage in study area.

CHAPTER 4

CASE STUDY: COTTON-BASED INDUSTRIAL HERITAGE IN ADANA

4.1. General Information about Adana

4.1.1. Demography and Geography

Adana is considered as the center of Çukurova Plain, takes place in the Mediterranean Geographic Region in the South of Turkey. Çukurova comprises of the lands of cities: Osmaniye, Mersin and Hatay, the region of this plain is also called as Cilicia in history. Adana lays between 36°32'' and 38° 23'' North Latitudes and 34° 42‟ and 36° 42‟ East Longitudes. The acreage of the city is 14.030 km^2 and it has 160 km coastline at the Mediterranean Sea. The center of the city is 40 kilometers north of this sea (see Figure 4.1).

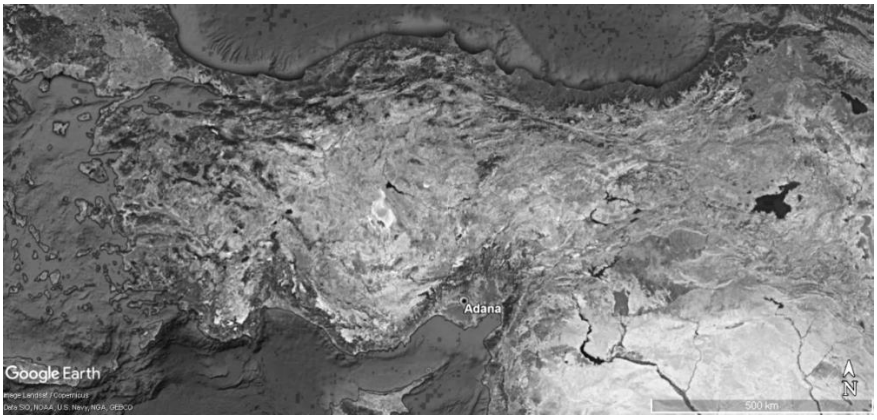


Figure 4.1. Location of Adana (Google Earth Image)

Adana takes place in the east part of the Mediterranean Region of Turkey. There is the Mediterranean Sea in the South part of the city. The neighboring cities with Adana are; Mersin ve Niğde is at the east, Kayseri is at the North West, Kahramanmaraş is at the North East, Osmaniye and Hatay are at the East.

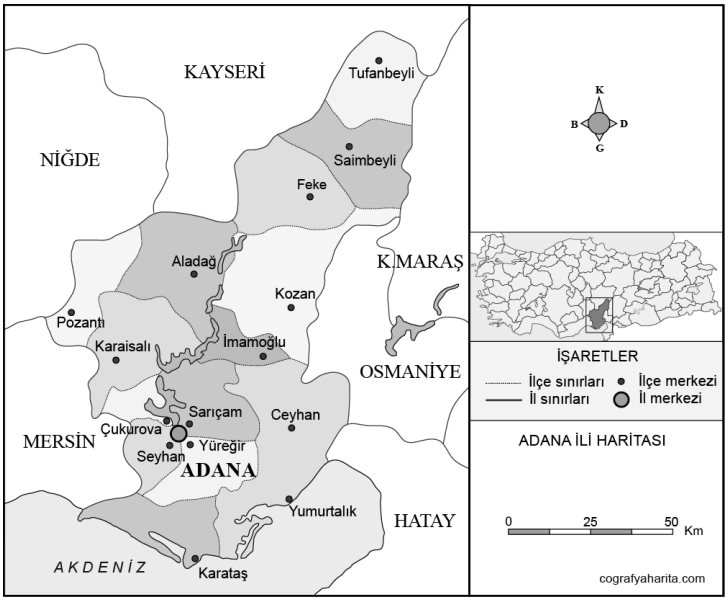


Figure 4.2. Map of Adana[86]

Adana is the sixth highly populated city of Turkey after Istanbul, Ankara, İzmir, Bursa, and Antalya. The city has 15 administrative districts (see Figure 4.2) and the central ones are Seyhan, Yüreğir ve Çukurova.

The districts and their population in 2017 from the most to the least are; Seyhan 793.840, Yüreğir 415.198, Çukurova 365.735, Sarıçam 173.154, Ceyhan 160.474, Kozan 130.495, İmamoğlu 28.239, Karataş 24.559, Karaisalı 22.308, Pozantı 20.683, Yumurtalık 18.587, Tufanbeyli 17.667, Feke 17.555, Aladağ 16.653 and Saimbeyli 15.338 (‘Adana Nüfus’, n.d.).

Considering the geographical information about the city, landforms, rivers, lakes, climate, and vegetation will be cited respectively.

[86] Retrieved from http://cografyaharita.com/haritalarim/4l_adana_ili_haritasi.png

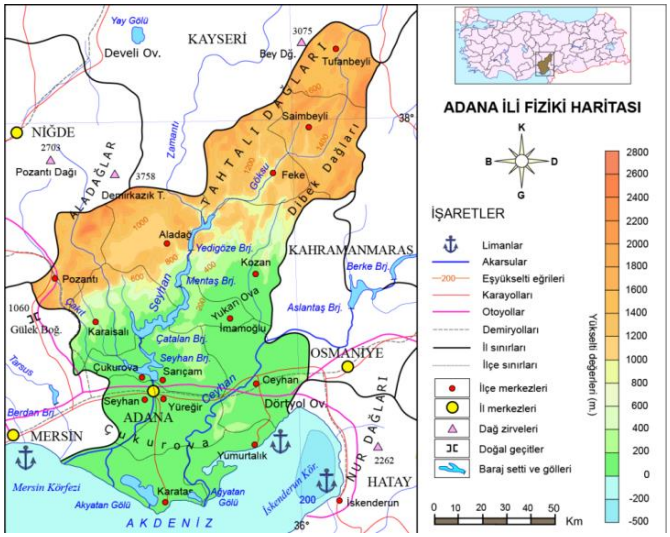


Figure 4.3. Geographical Map of Adana [87]

There are three main landforms of the city which are Mountains in the north, Plain areas at the south and the middle lands in between these two landforms (see Figure 4.3).

The first landform mountains rise from south to north at the provincial land and form peaks over 2500 meters high. Piedmonts of these mountains create lowlands through the Mediterranean. However, this mountainous areas' common name is the Taurus Mountains, the mountains have custom names from west direction to east Aladağlar, Tahtalı Mountains and Dibek Mountains which covers nearly the half of the lands of Adana (Anonymous, 1981:9).

The second landform middle lands between the mountainous and plains are the lands that have slope more than 5%. These lands also cover major parts and with the plain areas create lands that are suitable for agriculture. Kozan and Karasialı districts which are settled this type of landform. The last landform, plains of Adana has a common

[87]Retrieved from http://cografyaharita.com/haritalarim/2a-adana-ili-fiziki-haritasi.png

name Çukurova. Çukurova is a delta plain shaped by the alluvial soil that is moved by Seyhan, Ceyhan Rivers and Tarsus Stream and it had been identified with Adana. Its total area consists of 5% land and the parts at Adana province borders consist the 2,2% of Turkey lands. The important part of the Plain involves also the urban center of the city. The plain takes place at the east of the Mediterranean Sea which is surrounded by the Taurus Mountains at West, North and East parts (Anonymous, 1981:19).

Çukurova which had been subdivided and these division parts have various names at different sources. The actual borders and these subdivisions are controversial. One approach is to name the plain subdivisions by the district names at the lands such as Tarsus Plain, Yüreğir Plain, Ceyhan Plain, Haruniye Plain, Osmaniye Plain, Yumurtalık Plain, and Misis Plain. Another approach names the whole Upper Plain and the lower lands as Çukurova which is widely used by the settlers (Anonymous, 1994:217). The first landform mountains cover the 49% of province lands, the second middle lands 23% and the last plain lands cover 28% of Adana lands (Anonymous, 1981:10).

The two of the main rivers at Adana are Seyhan and Ceyhan Rivers. These two rivers are the collectors of the alluvial soil of Adana lands. Both of the rivers rise from East Taurus Mountains. Before reaching the plains and the sea level the smaller streams meet the rivers. In addition to rivers, there are two types of lakes in Adana. Lagoons are at the Mediterranean Sea coast of Adana. These lagoons are located in Yumurtalık National Park, Akyatan National Park, and Tuzla National Park. In addition to these natural lakes, there are dam lakes which are Seyhan, Kozan and Çatalan Lakes. The dam lakes are used for energy production and irrigation (Anonymous, 1981:10).

The climate at the Taurus Mountain areas on the North of the city is continental climate while in the South and plain areas it is a typical Mediterranean climate. In the Southern part, it is dry and hot during summer seasons warm and rainy which the warmth is above zero Celsius degree during winter seasons. The continental climate

at the northern mountainous parts is dry and hot during the summer season, cold and snowy during winter seasons (Anonymous, 1981:19). The climate conditions on the plain especially summer seasons are not healthy for people. It is not surprising that forced settlement attempts of nomadic people to move south plain areas in the 19th century faced with rebels of people. Even today, the majority of the population prefers to move seasonally to summer houses in the mountainous areas during sweltering summer (Halaçoğu, 2000:27).

The vegetation of Adana varies according to local climates. At the plain areas that the Mediterranean climate is seen the agricultural lands form the majority of vegetation, while at the middle lands maquis shrub lands are the main vegetation type. The Taurus Mountains are covered with forests consisting Calabrian pine, black pine, cedar wood, fir tree, and juniper trees from the skirts to the top hills reaching 2.000 meters, above this limit, there are alpine meadows (Anonymous, 1981:15).

4.1.2. Brief History and Urban Development

In this part, the history of Adana will be cited briefly because the subject of this study covers the last two centuries of the city rather than the earlier periods. After mentioning the brief history of the city, more recent eras will be indicated in the following parts focusing on the historical process that lead to the development of industry in the city.

Throughout the history, the name of the city had been cited differently at the historic sources and by the settlers at various periods of time as; Adanos, Ataniya, Adaniya, Uru Adaniya, Ta Adana, Erdene, Edene, Ezene, Azana, Batana, Atana (Anonymous, 1981:21). The most age-long sovereignties at Adana had been Luvi Kingdom, Arzava and Kizvatna Kingdoms, Kue Kingdom, respectively which ruled the lands more than two hundred years before the Common Era. During the Common Era these sovereignties are Roman rule, Armenian kingdom, Ramazanoğlu principality, and Ottoman Empire until the Republic of Turkey's found. The settlements of the reigns

had occurred at different parts of provincial lands (Anonymous, 1981:10). After the separation of Rome lands into the East and the West in 395 CE, Adana took place at East Rome (Byzantine). In this period Adana improved and became a trade center and the famous 21 arched Taş Köprü (Stone/Ancient Bridge) was built and urban development attempts were done in this period. The other rule in Adana, Ramazanoğlu Principality continued for a long time even during the Ottoman Period which shaped the city center also. On January 5th of 1922, the French occupation ended and it is celebrated annually at Adana as 'The Independence Day of Adana' (Halaçoğlu, 2000:11-12). The significant periods and changes between 1608 and 1909 can be cited as

- 1608 Adana becomes 'mütesellimlik' (ruled by a representative grand senior)
- 1691-1699 Forced Settlement Attempts
- 1833-1840 Egyptian İbrahim Pasha Period
- 1865 Fırka-I Islahiye Army entered the city to consolidate the state authority by settling the nomadic tribes
- 1864-1866 England and France started to interest in Adana
- 1867 Adana had been separated from Aleppo State and became an independent State
- 1886 Adana-Mersin railroad had been constructed
- 1900 Germany started to interest in Adana
- 1-14 April clashes occurred between non-Muslim and Muslim people of Adana (Anonymous, 1981:21).

During Ottoman Period, Adana was a county interdependent to Aleppo province and sometimes it was an independent county under the administrative organization of the Ottoman Empire. Between 1608 and 1833 it is governed with a representative grand seignior (mütesellimlik) and in 1867 becomes a province. During the war of independence, Adana was a province including three sanjaks (Çelik, 2000:109). After becoming a central province in 1867 Adana started to reconstruct. With the involvement of Cebelibereket province lands in 1933, Hatay province's foundation in

1939, and Osmaniye becoming a city in 1998 Adana province takes its present-day provincial borders (Saban *et al*., 2006:11).

The urban growth at the city center of Adana from the 16th century to 1960 is shown in Figure 4.4 in this study. This map was produced according to 1918 Base Map of Adana, 1950 Aerial Photo of Adana and from The Urban Development of Adana[88] article of Saban at Urban Cultural Inventory of Adana[89].

Toksöz and Yalçın summarize the urban growth of Adana city center until the last half of 19th century as Adana takes place at the records with the construction of Taş Köprü at the first century CE as a Roman Garrison Town on the Silk Road. In the 8th century by the Arabic incursions, Adana gains importance as a frontier town and in the 15th century built as the capital of Ramazanoğulları Principality. While compared with the biggest cities in Turkey, the history of Adana following the three centuries after the 15th century occurs differently. Adana was not a trade or textile center like Ankara and Bursa during these centuries, nor a trade center like İzmir. The Adana cotton clothes are not mentioned in Ottoman textile history like Bursa silk or Ankara wools. The cotton was only used for domestic needs in Çukurova. Adana was stable during these centuries as an old garrison town of Rome and a capital of the principality of Ramazanoğulları. However, in the last quarter of the 19th century, this stability changed in a short time by taking the attention of capitalist economy of the globe, Adana firstly becomes agricultural and then turned into an industrial center. In the following fifty years Adana became one of the biggest cities in Turkey (Toksöz & Yalçın, 1999:435).

[88] 'Adana'nın Kentsel Gelişimi'.

[89] Adana Kentsel Kültür Envanteri' 2012. The information derived from the sources that are mentioned was combined at the Base Map of Adana 2006. Since the urban growth after 1960s is extensive and sites at the scope of this study were established latest in 1950s, the growth in the following years was not illustrated on this map.

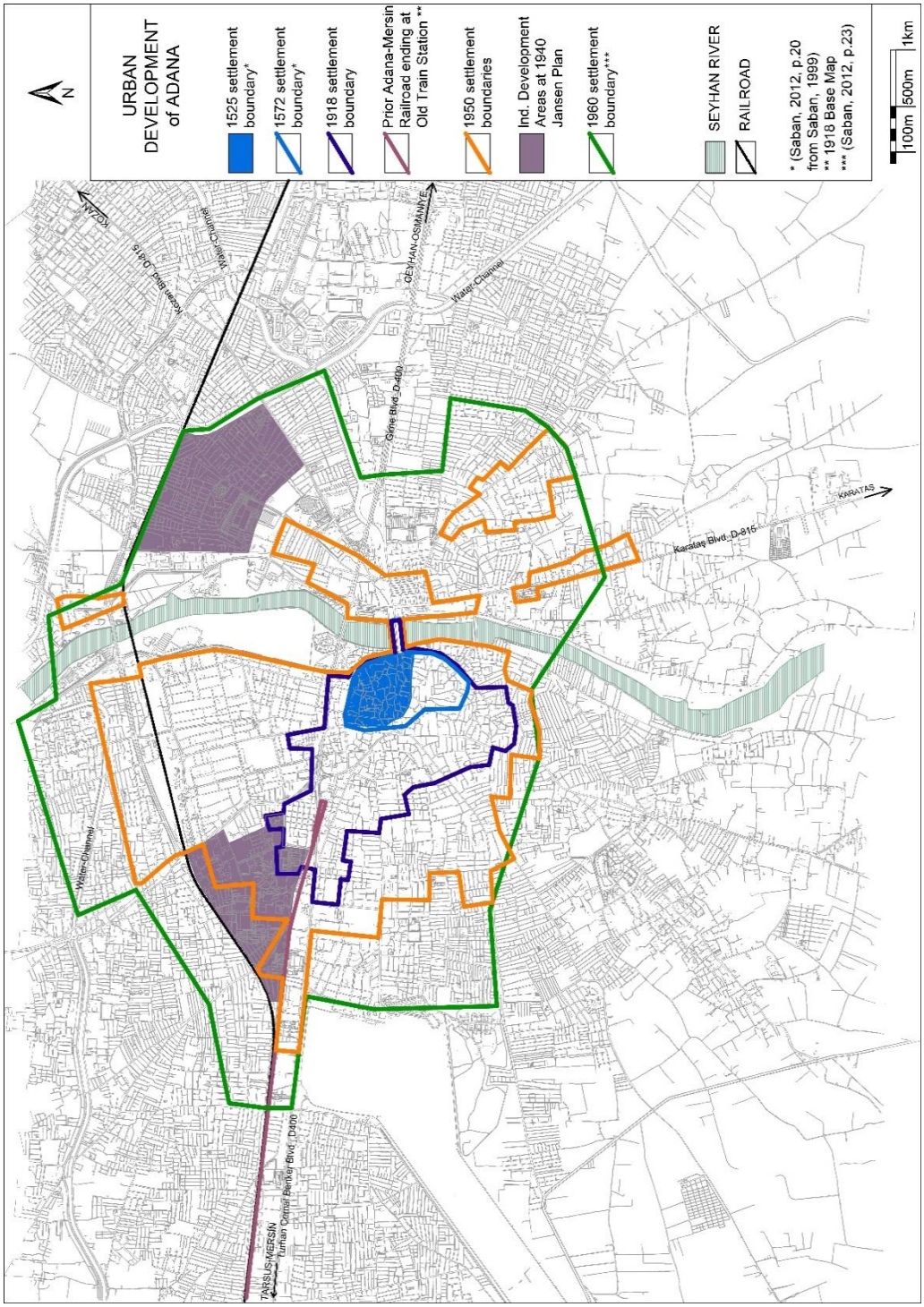


Figure 4.4. Map of Urban Development of Adana from the 16th century to 1960 (Author, 2019)

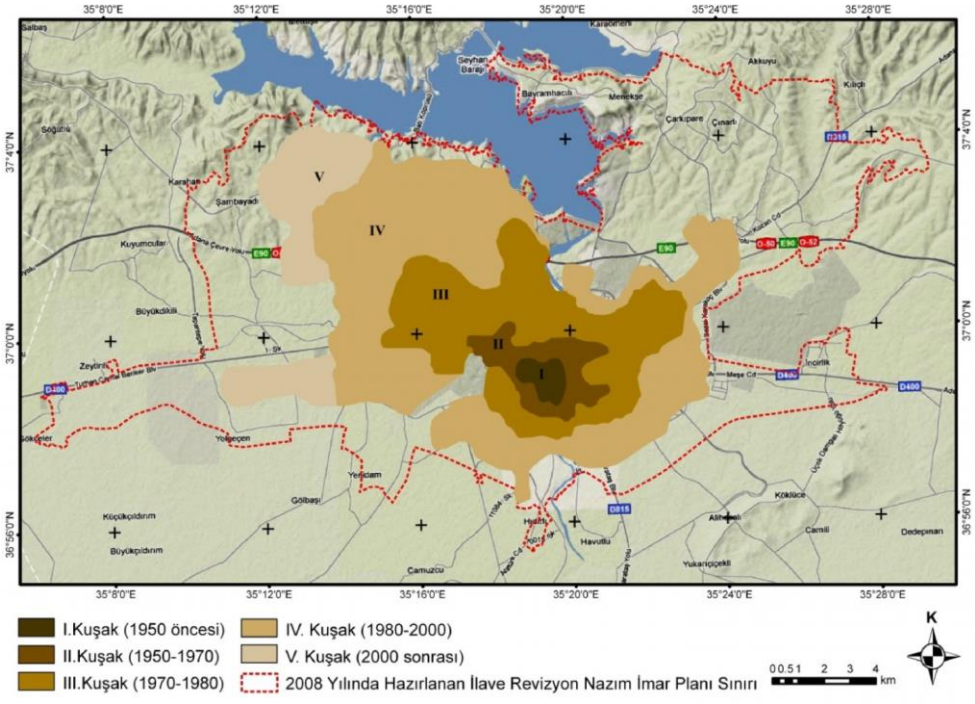


Figure 4.5. Map of Historical Development of Adana Urban Macro form (Say, Yücel & Ökten, 2011:3)

The extent of urban development after 1970 is seen at the development of Adana urban macro form map on the areas with roman numbers of III, IV and V in Figure 4.5 above. In this map the outmost border with red color defines the boundary of the 2008 Additional Revision Master Plan. While the urban settlement area extends in the city, similar to many urban areas, urban transformations occurred at the already built-up areas starting from the historic and commercial city centres. To review the past and continuing urban transformations in Adana is a far comprehensive issue, which may be subject to further studies and exceeds the content of this study. However, it is related to the destruction of industrial sites at the already built-up areas.

Salman states that unfortunately the immovable architectural extant of the civilizations settled at Adana city center is so limited. These architectural assets still present at the city center are, Tepebağ Mound, Taş Köprü (Stone Bridge), City Wall ruins from Roman Period at the backside of Atatürk Museum, City Wall ruins in Tepebağ Mound, another City Wall ruin in an apartment basement on Abidinpaşa Avenue, Traditional housing architectural examples at the center and around Tepebağ, few monumental buildings and urban fabric from Ramazanoğlu Period and the basilica inside Yağ Cami (Yağ Mosque) (Salman, 2012:12).

The earliest period extant of the architectural assets mentioned above is Tepebağ Mound, Saban quotes from Altay that according to the archaeological studies done in Tarsus- Gözlükule, Mersin-Yümüktepe, Kadirli-Karatepe and the drillings were done in 178 Mounds around including Tepebağ Mound it is understood that Adana was a borough of the Hittite Federation during the 16th century BCE (Salman, 2012:17).

The cultural-historical buildings including some of the extant mentioned are shown in Figure 4.6.

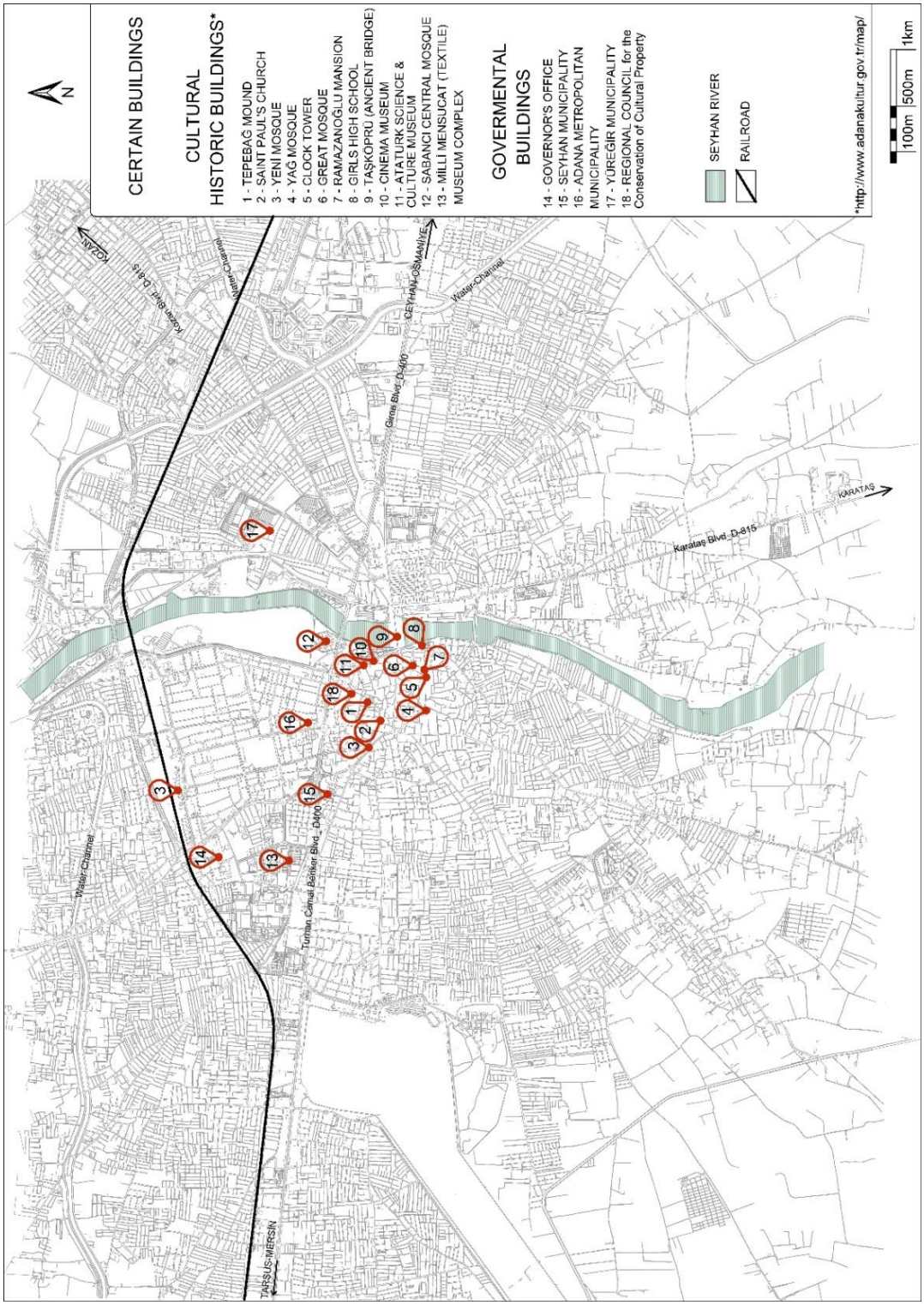


Figure 4.6. Map of Cultural-Historic and Governmental Buildings (Author, 2019)

4.2. Cotton-based Industry

4.2.1. Cotton Agriculture and Industry in General

4.2.1.1. Cotton Agriculture

Until the 13th century, the cultivation of cotton and cotton textiles had been produced by the East lands. The trade of cotton textile products is carried out by the Venetian and Genoese merchants. During the 13th and 14th centuries, cotton as raw material was taken from Asia and it started to be insufficient for weaving looms of the period. The textile industry ingrained in Flanders (Belgium) in the 15th century and reached England in the 16th century by the migration of the experts from Belgium. In the 1640s before the industrial revolution at the time of more traditional production of textiles, the textile industry in England was obtaining cotton as raw material from India, Asia, Antilles, Peru, and Brazil. The drastic change in the cotton industry occurred in the 1750s due to the new inventions at the period which changed not only the technology of cotton processing but also the history of the globe (Turgay & Bailleux, 1940:14-15).

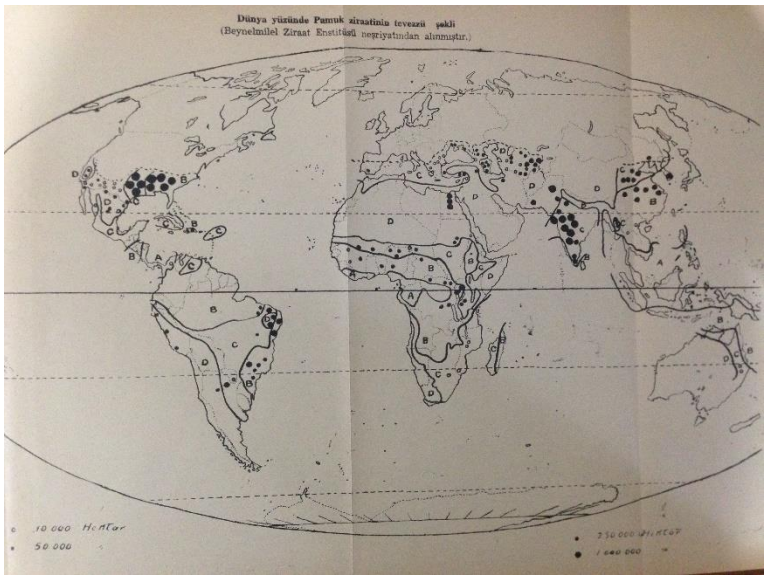


Figure 4.7. Cotton cultivation areas in the World between 1934-1935[90] (Turgay & Bailleux, 1940:27)

[90] On this map A represents the areas which are humid climate and the cotton cultivation is the least, B is the areas that are humid climate and cotton plant can grow without agricultural irrigation, C is the

During the end of the 1990s, six major cotton exporting countries are the USA, Greece, Australia, Argentina, Turkmenistan, and Uzbekistan. Nine major cotton importing markets are China, Indonesia, Thailand, Brazil, Republic of Korea, Italy, Japan, Portugal, and Hong Kong (Polymeros & Mattas, 2000:285).

4.2.1.2. Cotton-based Industry

Cotton consists of mainly two parts, seeds and fibers surrounding these seeds. In the cotton-based industry, the fibers are used mainly for textile productions and the seeds are for oil. In addition, ingredients of the cotton plant are used for the manufacture of many wares and substances (Turgay & Bailleux, 1940:2). The use of cotton as a raw material in several productions is shown in Figure 4.8.

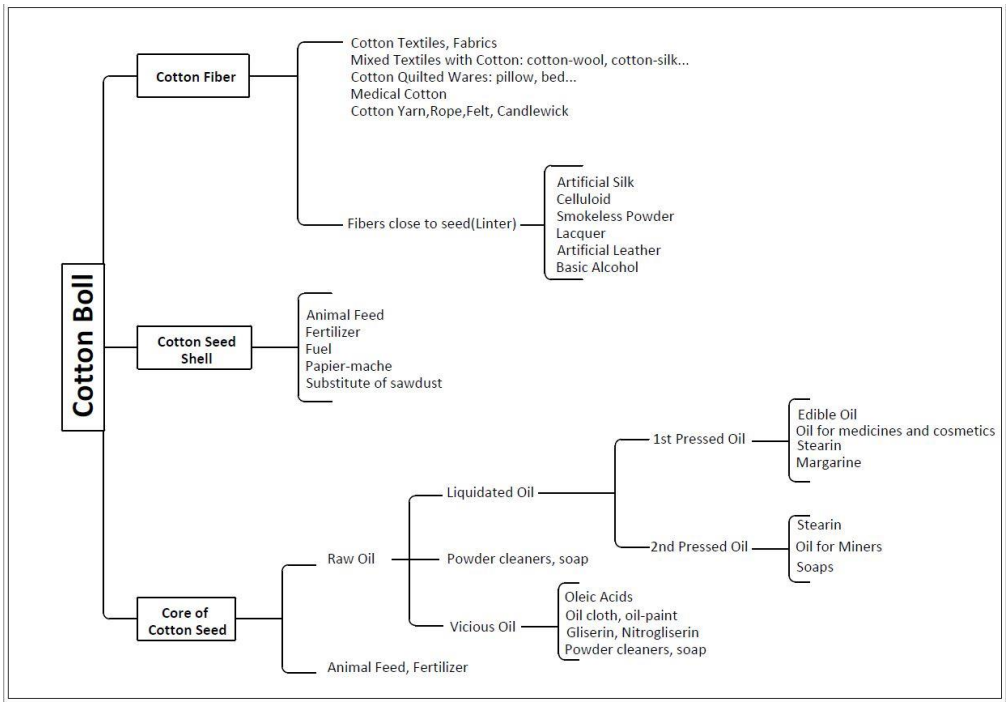


Figure 4.8. Cotton's use in cotton-based industry[91]

areas that are sub-humid climate and cotton plant can grow without agricultural irrigation and D is the semi-desert areas that cotton plant can grow with agricultural irrigation.

[91] This diagram is the translation of the 'cotton in industry' table from Turgay and Bailleux's (1940) book.

In the textile industry, at the end of the 18th century, the fibers used in the European textile industry for garment purposes were c. 1 million tonnes which reached 14 million tonnes in the 20th century. In the 19th century, the 78% of these fibers was wool 18% flax and 4% was cotton, during the 20th century, this ratio changed to 74%cotton, 20% flax, and 6% wool. Due to the innovations in the industry, the process of cotton became easier and to meet the demands of textile production the cultivation of cotton increased (Gençer, 2000:592).

The textile mills of the industrial revolution era are densely located in Europe and North America. While Europe was importing cotton, the cultivation of cotton was present in today's USA. Manchester and Lancaster had been the cities in which the developments are directly related to the textile industry. (Cossons, 1975:259; Girouard, 1985:258) In addition Manchester has been named as 'Cottonopolis' (Berens, 2011:4) In Europe Ghent had been named as 'the Manchester of Flanders', this naming is also used for other European cities that the textiles production had played an important role at the growth of the cities like; Łódź, the 'Manchester of Poland', Bielsko-Biala, the 'Manchester of Silesia', and Gabrovo, the 'Manchester of Bulgaria' due to Manchester's importance and global recognition in textile manufacture ('The International History', 2017).

TICCIH Textile Section documentation collects the discussions in several meetings in Europe that the latest had been held in 2007 ('TICCIH Textile', 2007). The section categorizes the internationally significant textile sites according to their scale. These sites are:

- Individual mills and their content, and no single site of textiles are mentioned.
- Large textile complexes with workers' settlement and varying facilities. Crespi d'Adda and San Leucio in Italy and Saltaire and New Lanark in the UK are some of the given examples of this kind of site.

- Integrated textile landscapes that involve places of transport, power infrastructure, housing and minor productions of agriculture, machine-making, and soap in addition to major textiles manufacture. Derwent Valley Mills in the UK is one of the given examples of cotton textiles and Shirakawa-go in Japan is for silk.

Textile mill typology examinations were done regarding the 'Domestic workshops, the multi-story mill, the roof types, weaving sheds, the multi-story mill, power systems and gardens'. Considering the domestic workshops for cotton, the cotton needs a degree of humid air, so earthen grounds or basements were the proper places for early cotton workshops. The earliest multi-story mills were the 3-7 storey Arkwright's mills that were built in 1772 in Derwent Valley, the first cast-iron frame was built in 1797 in Ditherington Flax Mill UK. The window sizes are increased in the 19th and 20th centuries and reinforced concrete in used few in UK while its use is compared to other parts of Europe. The roof types and weaving sheds are mainly related to the machinery, power systems are changing in time according to technical developments and gardens are related to the locations of the sites ('TICCIH Textile', 2007).

The internationally significant textile sites are classified regarding the 'universal value criterion' as 'Pioneers, Flagships, Giants, International Interchange, Time Capsules, Urbanism, and also Textile Landscapes'. The textile landscapes are divided according to the use of raw material as 'lace-linen, jute, wool, silk, tailoring, and cotton'. Some of the internationally important cotton textiles landscapes are:

- Derwent Valley Mills, in the UK, is a cotton mill colony around the river with settlements and railway.
- Parc Fluvial Navas-Berga, in Catalonia Spain, is a landscape of 15 colonies with housings, church and currently used as museum.

- Melrose and Magnolia plantations in Louisiana USA are the slave plantations including cotton ginneries.

These three examples above are '*rural cotton'* landscapes, concerning the '*urban cotton'* textiles sites, some of the given examples are:

- Puebla, Mexico La Constancia Mexicana
- Lowell National Park, USA
- Mumbai, India
- Ghent Cotton Harbor
- Tampere, Finland
- Ancoats in Manchester, Oldham, Bolton, and Wigan Pier in Lancashire in the UK ('TICCIH Textile', 2007).

While considering Turkey, the domestic textile production between 1300 and 1532 before the industrialization was developed in Denizli, Alaşehir, Adana, and Sivas. Until the end of the 17th century the textile production was advancing and the fabrics of İstanbul, Bursa, Diyarbakır, Malatya, Urfa, Mardin, Musul and Baghdad were famous at the Ottoman Empire surrounding. Due to the industrial innovations in the 17th century in Europe, the export of the Ottoman fabrics decreased and imports had started. This situation became more noticeable in the 18th century and the regression of the textile industry in the Ottoman Empire started while in Europe it was progressing due to industrialization (Anonymous, 1958:4). The further developments of the industry in Turkey related to industrialization are being cited in Chapter 2 of this study, and cotton agriculture and industry in Adana as the case of this study will be mentioned at the following pages.

4.2.2. Development of Cotton Agriculture and Industry in Adana

In Turkey, cotton cultivation was concentrated at four regions in historical process; Aegean Region, Çukurova, Antalya and some parts of South East of Turkey. During the last decade, an important decline occurred at the production of cotton at Antalya and Adana due to the low price of cotton at the global markets and the decrease at the state support for the cotton manufacturers. However, in Aegean and southeast regions some provinces still continue to manufacture large amounts of cotton (Keyder & Yenal, 2013:79).

Başçetinçelik cites that Çukurova had been an arable land by its earth properties and the transportation opportunities created by Seyhan and Ceyhan rivers. The cotton cultivation started to gain importance in these lands in the 15th century by the systematic interventions done in the Ramazanoğulları Principality period. The author quotes from Evliya Çelebi that it was mentioned in the 17th century about the plenitude of Adana plains planted with orange, lemon, olive, fig, pomegranate, sugar cane, and the lands are cultivated with cotton and the people earn money mostly from this (Başçetinçelik, 2000:584).

Later the cotton cultivation prioritized by İbrahim Pasha the son of Egypt Governor Mehmet Ali Pasha during the 1830s. The Egyptian rule at Çukurova between 1832 and 1840 started after the Kütahya agreement between Ottomans and Egyptians. The agreement signed on 29 March and with this agreement, Adana was given to İbrahim Pasha as a '*muhassıllık*' (tax collector authority) with Aleppo and Damascus (Toksöz, 2010:42). İbrahim Pasha brought seeds from Cyprus and Egypt also skillful farmers on cotton cultivation were brought from Egypt and settled in Adana. The labor relations were organized for the first time and measures are taken for better and healthy conditions of the workers in this period (Gençer, 2000:593). These attempts and organizations are still appreciated by the workers. The workers at the croplands for picking cotton pray before the meal to Pasha in Çukurova (Yiğenoğlu, 2000:254). This prayer is called '*İbrahim Paşa Fatihası'* and it is quoted by Toksöz as:

"Respecting the night, waiting the morning we pray to Muhammad our prophet, May God damns the devil and blesses our arms with strength, our landlord with authority, our pocket with earnings, and may God bless the deceased Ibrahim Pasha with compassion." (Toksöz, 2010:41).

The picking of cotton at the croplands creates demand for numbers of workers and it ties people to the settlements. However, it is picked in October season generally and labor for picking the cotton needed in this season, the arrangement of the soil for the coming seasons and harvest works requires the labor force too. The cotton was an important agricultural product in Egypt as it is in Adana. The crop rotation in the fields of Egypt and Çukurova mainly in Tarsus-Adana was similar. The cotton-sesame-wheat and cotton-wheat rotation cultivation were done in Adana-Tarsus from the 16th century onwards. With these similarities, Ibrahim Pasha chose Adana to make the urban center of Çukurova. The sedentary life occurring around cotton cultivation was the most remarkable and continuous gain of the attempts of Ibrahim Pasha. However, cotton was produced earlier than the 19th century in Adana; his attempts resulted in the commercial manufacture of cotton which took Ottoman state's attention to these lands (Toksöz, 2010:45-51). As a consequence of this consideration, the forced settlement attempts occurred that started to change the demography and settled life in and around Adana.

Yiğenoğlu underlines the demographic changes in Adana in the last 150 years in three main striking periods as the first, second and third 'liberal waves'. The drastic demographic change between 1860 and 1950 is referred to as the first liberal wave and named as 'forced immigration' and the second liberal wave after 1950 is named 'voluntary immigration'. In this first liberal wave period starts from İbrahim Pascha rule's end, the forced settlement of tribes is mentioned. This period was a forced settlement to gain labor for agricultural production by Fırka-ı Islahiye army of Ottoman State. The second liberal wave was the voluntary immigration of people to Adana as a consequence of the opportunities created by the cotton agriculture and industrial developments. The third wave is described as a wave that never came to

change the city as a development, on the contrary, a migration of investors from Adana to İstanbul (Yiğenoğlu, 2000:254-255).

Toksöz remarks the formation of the Adana-Mersin region between 1850 and 1908 as 'the making of this region is characterized by five parallel developments; settlement, Egyptian conquest, Ottoman reforms, the foundation of a port city and cotton agriculture' (Toksöz, 2010:10).

As a raw material supplier at first, the workshops of ginneries started to emerge in Adana first. In 1890 there were several textiles and painting workshops, a factory producing military garments, 7 ginneries were present. The purchase and sale of cotton were done in primitive conditions at the beginning of the 19th century. There wasn't any stock market building, which later established in 1894, the vendors were bringing the cotton taken from the ginneries inside the baskets and the trade was taking place at today's Sabancı Merkez Mosque area. In 1922 and 1926 two cotton congresses were held and attempts were made for the foundation for a business school (Gençer, 2000:595).

Quataert mentions the raw material and yarn manufacture of Adana region in Ottoman Period at the end of 19th and at the beginning of the 20th century as "Despite severe labor shortages, the Adana region rose to occupy the second rank among mechanized Ottoman yarn producers." The first was the Macedonia and Salonica region. And the author cites the first mechanized yarning factories established at Adana region as:

- The Mavromati family founded the first spinning mill as early as 1878. Located at Tarsus, it was water-powered.
- By 1900, the Tripani brothers had founded a second steam-powered mill, at Adana.
- Cosma Simyonoğlu owned another factory at Adana.

- Rasim Dokur a Muslim Turk from Egypt founded the last spinning mill at Tarsus in 1911 (Quataert, 1993:44).

The author also gives information about the labor as "At one of the combined spinning and weaving mills at Adana in c. 1907, the spinning section employed 550 persons, who averaged 5 piasters silver per day 12 hours. The headman earned 15-20 piasters. Female and child labor also was common at the cotton gins scattered throughout the area." (Quataert, 1993:47)

Moreover, at the beginning of the 20th century, the reach of the Baghdad railway to Mersin and purchase of Mersin-Tarsus railroad from England by Germany, lead the interest of Germany in Çukurova. On the other hand, migrant labor from distant places such as Harput, Bitlis, and Musul was coming to Çukurova to pick cotton (Pamuk, 2007:220).

Varlık, Emiroğlu, and Türkoğlu cite that there had been numbers of '*masara*'[92] in earlier periods and producing oil from the cotton seeds were not a conversant production until the first years of Republican Period. After ginning the cotton, the cotton seeds were separated as seeds for cultivation and other parts were used as animal food by the earlier cotton processing technologies (Varlık *et al*., 2008:107). The cotton-based industry mainly consisted of ginneries and yarn-weave textile factories before the 1920s.

During 1925 the consideration of the Çukurova cotton raised. Foreign interest was still continuing and the new regime also promoted production. A Manchester company established a ginning factory close to Adana in order to retrench the cleaning costs. Sicmat, an Italian company from Trieste dealing with cotton textile and commerce opened an office in 1924 at Adana. Soon this company became a monopoly in Adana

[92] Masara: Workshops producing oil from sesame.

and Mersin, and then controlled the commerce that ensured the raw material of the factories of Trieste. The main position of foreign capital from European countries proceeds during the 1930s and 1940s (Toksöz, 2010:203-204).

In the 1960s there were more than 70 ginning and press factories alone or within integrated industrial sites. These factories' manufacture was seasonal and the most important of these were Çukobirlik's plants. In 1940 ginneries were the pillars of the industry in Adana; however, due to broader production in the 1970s the ginneries started to be part of integrated plants of textile and oil industry (Varlık *et al*., 2008:173).

After WWII, the Turkish capitalists occurred with the advantages of the 'Varlık Vergisi' (Wealth Tax) proclaimed in 1942. This tax collected at least 350 million Turkish liras generally from non-Muslim minorities of the company owners. During the 1950s the 33% of the cropland and 19% of the large landholdings of Turkey was in Çukurova. In addition, 30% of the entire tractors of Turkey and the most populated seasonal wage laborers were present at Çukurova (Toksöz, 2010:204).

Emiroğlu (2012:270-300) divides the development of industry in Adana, in three periods. The first is between 1860 and 1920 when the cotton agriculture was done for foreign market and owned by foreign investors. The ginning and yarn factories were vast majority in this period. The second is between 1920 and 1950 when foreign owned factories were bought by the encouragement of the state. The third is 1950s when investors of family corporations built and bought factories in Adana.

Adana is one of the cities in Turkey that experienced the developments during the Republican Period conspicuously states Gençer. The city came a long way with the economic field during and following the 1950's. These improvements mainly arise from the cotton agriculture and cotton-based industry that dates back to the middle of the 19th century. Therefore, the people of Adana chose the cotton also named 'Koza'

(boll) as a symbol and organizes the national Golden Boll (*Altın Koza*) Culture and Arts Festival since 1969 (Gençer, 2000:595).

The period after the 1950s is also interpreted by Toksöz as "In short, trends in commodity production, mechanization, urbanization, land area, and output continued into the Republican period and underwent dramatic increases. The 19th-century process of commercialization in fact culminated in the 1950s, and cotton became acknowledged 'the white gold'[93] in the Turkish vernacular. Turkish large landholders of Adana, building on a century of development, had established the Ağa (landlord) image of wealth stemming from agricultural surplus for the first time in Anatolian social history." (Toksöz, 2010:204).

Moreover, agricultural and industrial production of cotton and social alterations had been treated by the artists in their work of arts such as; Yılmaz Güney[94] in the field of cinema, Yaşar Kemal and Orhan Kemal in literature and Abidin Dino in painting (Öymen & Oral, 2018:65). Çelik highlights the reflections of the relation between cotton and Adana at Orhan Kemal novels[95]. The author suggests that Adana at the 1930's and 1940's can be sensed in Kemal's novels which 'the cotton' is everything at that decades for the people of Adana (Çelik, 2012:50). As he worked as a cotton picker at the lands, Yaşar Kemal's novels treat in a different way in his novels (Öymen & Oral, 2018:68). The cotton even has been used at the symbols of certain institutions of the city as logos[96].

[93] (Ak Altın) 'White Gold' term is used for salt, in the brochure of ERIH, while the blue gold is for water and the black gold is used for coal. ('The International History', 2017) As a profitable raw material it is used for cotton in Turkey also.
[94] For instance, the scene around the 10th minute of the movie *'Endişe'* (Apprehension-1974 movie of Yılmaz Güney) shows the migrating people to Adana for picking cotton on the trucks. The images of the cotton cultivation lands and factories like Eski BosSa and BosSa 1 are shown in these scenes. ('Endişe', n.d.)
[95] Orhan Kemal had worked at Milli Mensucat Factory (Saban et al., 2006:102).
[96] The logos of certain institutions are shown at the Appendices B part of this study.

In the last decades, the agriculture and the industry of cotton decreased remarkably in the city. Yiğenoğlu (2000) relates the decline of the agriculture and industry in Adana with the process after the 12 September 1980 coup. With the decline of agricultural production, the large scale industry firms are collapsed one by one. After the collapse of the cultivation production, the agriculture-based industry companies bankrupted. The large scale companies such as Paktaş, Güney Sanayi and Milli Mensucat were closed or were sold under their price (Yiğenoğlu, 2000:258). The author adds that the developments started from the 1950s in Adana lasted in 30 years the neoliberal policies laid by the decisions of 24 January 1980 was the beginning of the end of the economy of Adana. The rich businesses people of the 1950s transferred their savings from fertile agricultural lands as an industrial capital to Marmara region. The decline of the agricultural industry is also related to the transfer of cotton cultivation to Harran (Şanlıurfa). The collapse of agriculture as the locomotive of the economy in Adana turned the city upside down (Yiğenoğlu, 2000:255).

The state of the cotton-based industry and cotton agriculture all over Adana in the year 2000 as; there are 117 ginning and press factories, 14 oil factories, several linter workshops, and 29 yarn, 30 textiles, and 49 garment plants. The cotton cultivation is done 9 of the 13 towns of Adana and 80% of the total farmers deal with cotton agriculture (Gençer, 2000:596-597).

By the time the production had decreased and the industrial sites ceased production. In addition, 'Organize Sanayi Bölgesi' (Organized Industrial Site) had been founded in 1998 at Adana. The site is at Ceyhan Road on the outskirts of the city (Varlık *et al*, 2008:202).

It is seen that the cotton-based productions are decreased in Adana during the last decades**.** The graphic of the change of the textile industry share at the manufacturing Industry in Adana in 1964, 1978 and 2019 are given below. However, the numbers have raised the share decreased. And it should be added that the textile industry

counted in these graphics is not only the textile factories that are based on cotton (Varlık *et al*., 2008:173, 179; Karakuş, 2019).

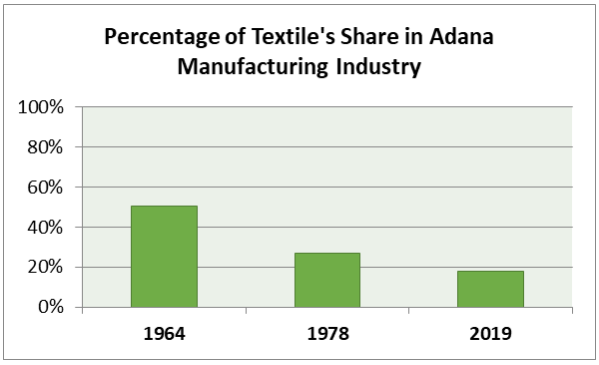


Figure 4.9. Graphic of textile's share in Adana manufacturing industry, produced by the author according to (Varlık *et al*., 2008:173, 179; Karakuş, 2019)

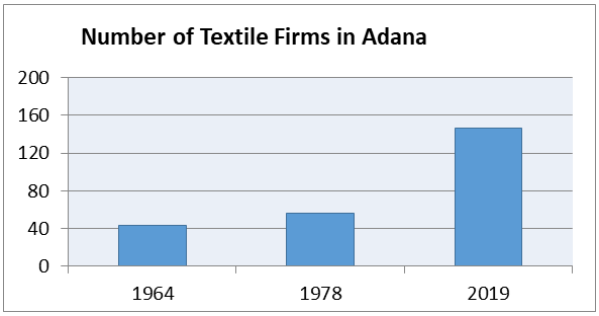


Figure 4.10. Graphic of number of textile firms in Adana, produced by the author (Varlık *et al.*, 2008:173, 179; Karakuş, 2019).

Related with the decrease in the textile industry, in 1969 Adana shares the 39% of the cotton cultivation area and 82% of the cotton production in Turkey, while in 1999 this percentage decreased to 6% of the cultivation area and 15% of the production as seen at the graphic below (Gençer, 2000:596).

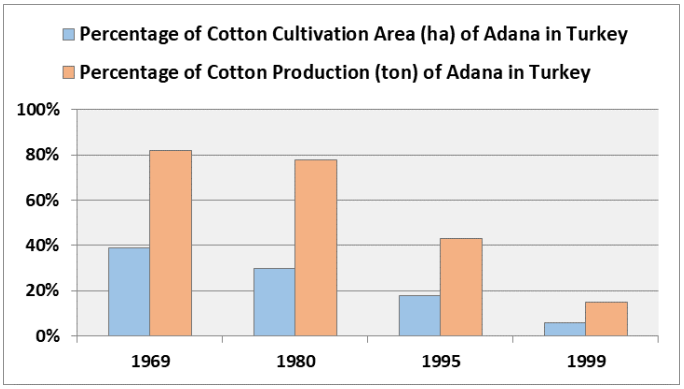


Figure 4.11. Graphic of percentage of cotton cultivation area and cotton production, produced by the author (Gençer, 2000:596)

As it is cited before, the cotton agriculture and based industry have been started to go into a decline since the beginnings of the 1980s. The decline of cultivation of cotton and related to cotton-based industry downturn should have global, countrywide and local reasons. As a result of these downturns having multiple reasons, the industrial sites located at the urban center of Adana ceased production which resulted in the demolishment and deterioration of the buildings on sites.

The sites taking place at the city center of Adana as a matter of this study will be mentioned and analyzed at the following pages thoroughly.

4.3. Cotton-based Industrial Heritage in Study Area

The historical process of the cotton agriculture and cotton-based Industry in Adana were cited at the previous pages. In the 20th century, the number of industrial sites increased. The information about the names and numbers of the factories that were present in 1931-32 (see Table 4.1), 1944 (see Table 4.2) and 1949 (see Table 4.3*)* are given below. The first table includes the machinery and the power used in the factories. The second table includes the names and the third includes the names and the districts of the factories.

Firstly, it is seen in Table 4.1, the factories in Adana in 1931-1932 that all the factories manufacture was cotton-based production. 5 of 23 ginning factories include the press machines for bailing and it is seen that there were factories only including press machines. The total workers at these factories were 3.677 at that time (Varlik *et al*., 2008:140-145) 9 of the 23 factories are determined that are analyzed in this study.

Secondly, it is seen in Table 4.2 that there were 23 ginning factories in 1944 at Adana. 8 of these 23 factories were analyzed in this study. (Varlik *et al*., 2008:131) Thirdly, in Table 4.3, there are 14 factories mentioned in 1949 at Adana. (Kurtuluş, 1949: VII) 5 of these 14 factories were analyzed in this study. It will be wrong to say that these factories all took place at Adana city center. Moreover, some of these may be other names of the industrial sites that were mentioned in this study. As it is seen the locations of the factories are lacking or not precise in these tables.

In addition to analyzed sites, there are industrial buildings of different functions around the cotton-based industry sites. These are shown in Figure 4.13 with the cultural and governmental buildings on the map. These sites are Old Train Station, Şakirpaşa Airport, Adana Bus Terminal, SaSa Factory, TemSa Factory, Imsa (CocaCola&Elvan) Factory and Çukobirlik Headquarters and Factory at Seyhan District. Kanara (Abattoir), Algan Brick Factory, Adana Brick Factory, Adana Çimento at Yüreğir District. Also in Figure 4.13, 34 cotton-based industrial sites' locations are shown with certain buildings in Adana. Figure 4.14 is the map of these sites with the names.

Table 4.1. *Table of Factories at Adana in 1931-1932 (Varlik et al., 2008:140-145)*

Name of the Factory	***Production-Machinery***	**Names of the factories analyzed in this study**	***Analyzed in this Study***
Eski Belçika	Ginning, Press	*Eski Çukobirlik*	**X**
Meto zade	Ginning	-	-
Salih Efendi	Ginning, Press, Flour	*Eski BosSa*	**X**
Sagas	Ginning, Press	-	-
Ziraat B. Mensucat F.	Ginning, Press, Flour,	*Tripani Factory*	-
Milli Mensucat F.	Ginning, Press, Linter	*Milli Mensucat*	**X**
Brazzafoli	Press	-	-
Mürşit Ef.	Ginning, Flour	-	-
Halk	Ginning, Flour	-	-
Kalağ zade	Ginning, Flour, Ice	-	-
Kokanaki	Ginning, Flour, Ice	*Cokinaki*	**X**
İş	Ginning, Flour	-	-
Doğruluk	Ginning, Flour		
Mahmut Paşa	Ginning	-	
Pabuçcuoğlu	Ginning, Flour	*Pabuçcuoğlu*	**X**
Eski Şinasi	Ginning, Press	*Eski Sümerbank*	**X**
Asım Bey	Ginning, Flour, Ice	-	-
Abidin Bey	Ginning, Flour	-	-
Aziz Efendi	Ginning	-	-
Çifçi	Ginning, Flour, Ice	-	-
Elhadef	Press	-	-
Gilodo	Press, Linter	*MarSa*	**X**
Cumhuriyet	Ginning, Flour	*Cumhuriyet Un*	**X**

Table 4.2. *Table of Ginning Factories at Adana in 1944(Varlik et al., 2008:131)*

Name of the Factory	*Notes from the main source,* Names of the factories analyzed in this study	Analyzed in this Study
Yeni Çırçır Fabrikası	-	-
Ziraat Bankası Pamuk Müessesesi	Tırpani F.	-
S.R. Gilodo	MarSa	**X**
İş Fabrikası	*The factory of Karabucak family in Reşatbey Quarter*	-
Suphi Paşa	-	-
Asım Özbilen	-	-
Salih Bosna	Eski BosSa	**X**
Kalağoğlu	-	-
İbrahim Burduroğlu	Boduroğlu Factory	**X**
Ergirler	Ulaş ÇırçırYağ Prese	**X**
Ahmet Mürşit Görgün	-	
Milli Mensucat	Milli Mensucat	**X**
Çiftçi	-	-
Adana Mensucat	-	-
Cumhuriyet	Cumhuriyet Un Çırçır	**X**
İsa Şakir	-	-
Kısacak Kol. Şirketi	*In Oymaklı Village*	-
Nuri Has	*In İncirlik Village*	-
Halis Koyutürk	*In Hacıhansan Village*	-
Toros	*Old Dimitri Kokonaki Factory,*	**X**
Aziz Pamukçu	-	-
Ünal	*The factory of Mustafa Karabucak in Döşeme Quarter*	-
M.Çulpan	*In Zeytinli Village*	-

Table 4.3. *Cotton Industry Firms at Adana in 1949(Kurtuluş, 1949: VII)*

Name of the Factory	*Address from the main source*, Names of the factories analyzed in this study	Analyzed in this Study
Milli Mensucat Sanayii İşletmesi TAŞ	*Kara Ali Street No. 39 39 A,* Milli Mensucat	**X**
Çukurova Dokumacıları Küçük San'at Kooperatifi	*Around Yağcami*	-
Salih Bosna Kollektif Şirketi	*Karşıyaka,* Eski BosSa	**X**
T.C. Ziraat Bankası Pamuk Müessesesi	*Döşeme Neighborhood,* Tırpani F.	**X**
Abidin Ramazanoğlu Evlatları Eshamlı Pamuk Çırçır Fabrikacılığı Türk Komandit Şirketi	*Around Old Station*	-
Sümerbank Çırçır ve Prese Fabrikası	*Around New Station* Eski Sümerbank	**X**
Toros Fabrikası	*Saydam Avenue*, Cokinaki	**X**
Ali Karabucak ve Evlatları ve Kardeşleri İş Fabrikası	*Reşatbey Neighborhood*	-
Mustafa Karabucak Ünal Fabrikası	*Döşeme District*	-
Ahmet ve Emin Demirci	*Zeytin Yeni Factory*	-
Rıza ve Hüseyin Kısacık	*Oymaklı Village*	-
Asım Tamerli	*Döşeme Neighborhood*	-
Abdurrezzak Şayan ve Ortakları	*Saydam Avenue*	-
İsmail Burduroğlu	*Across Uçak Square*	-

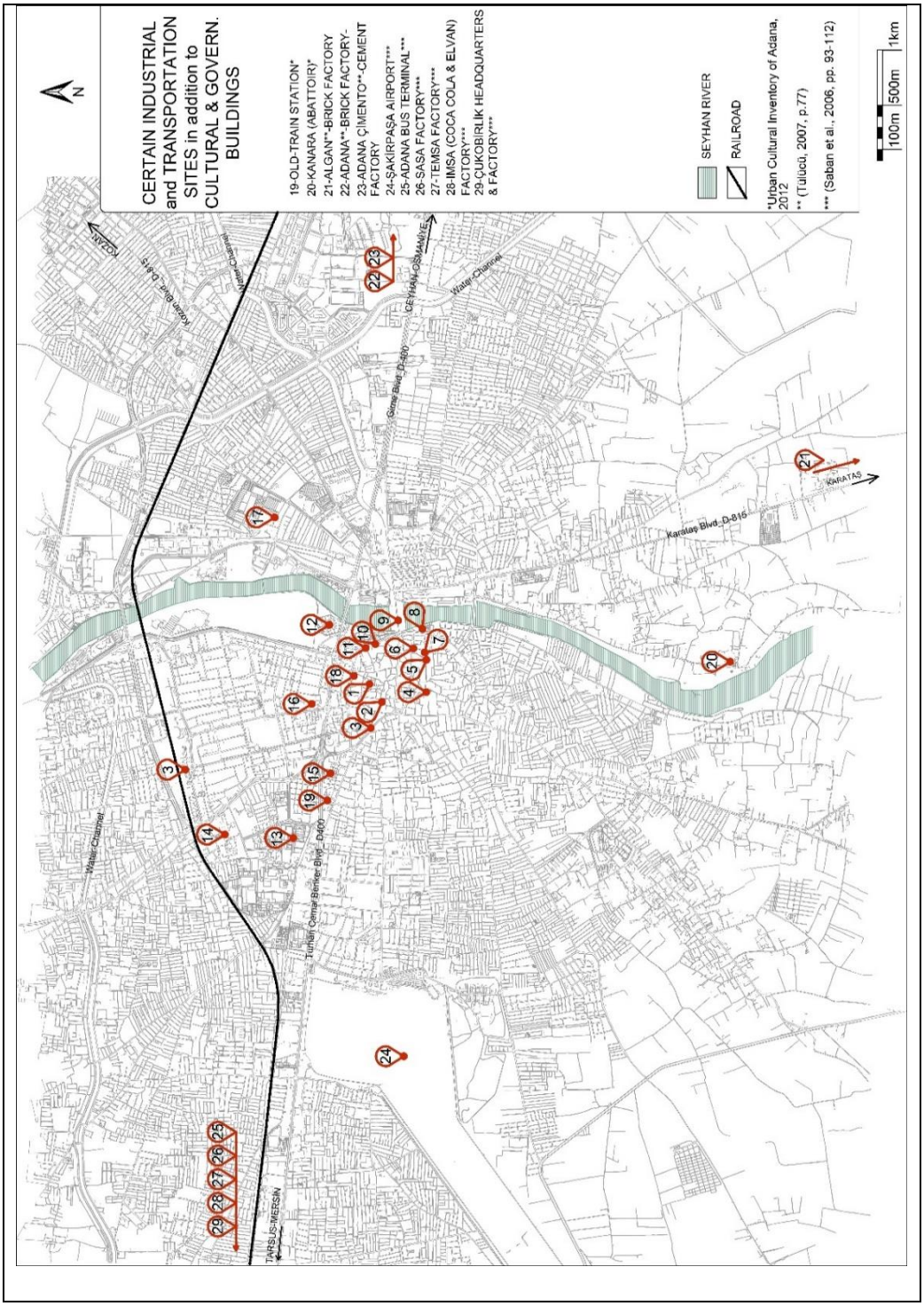


Figure 4.12. Map of cultural-historic, governmental, certain industrial and transportation buildings in study area (Author, 2019)

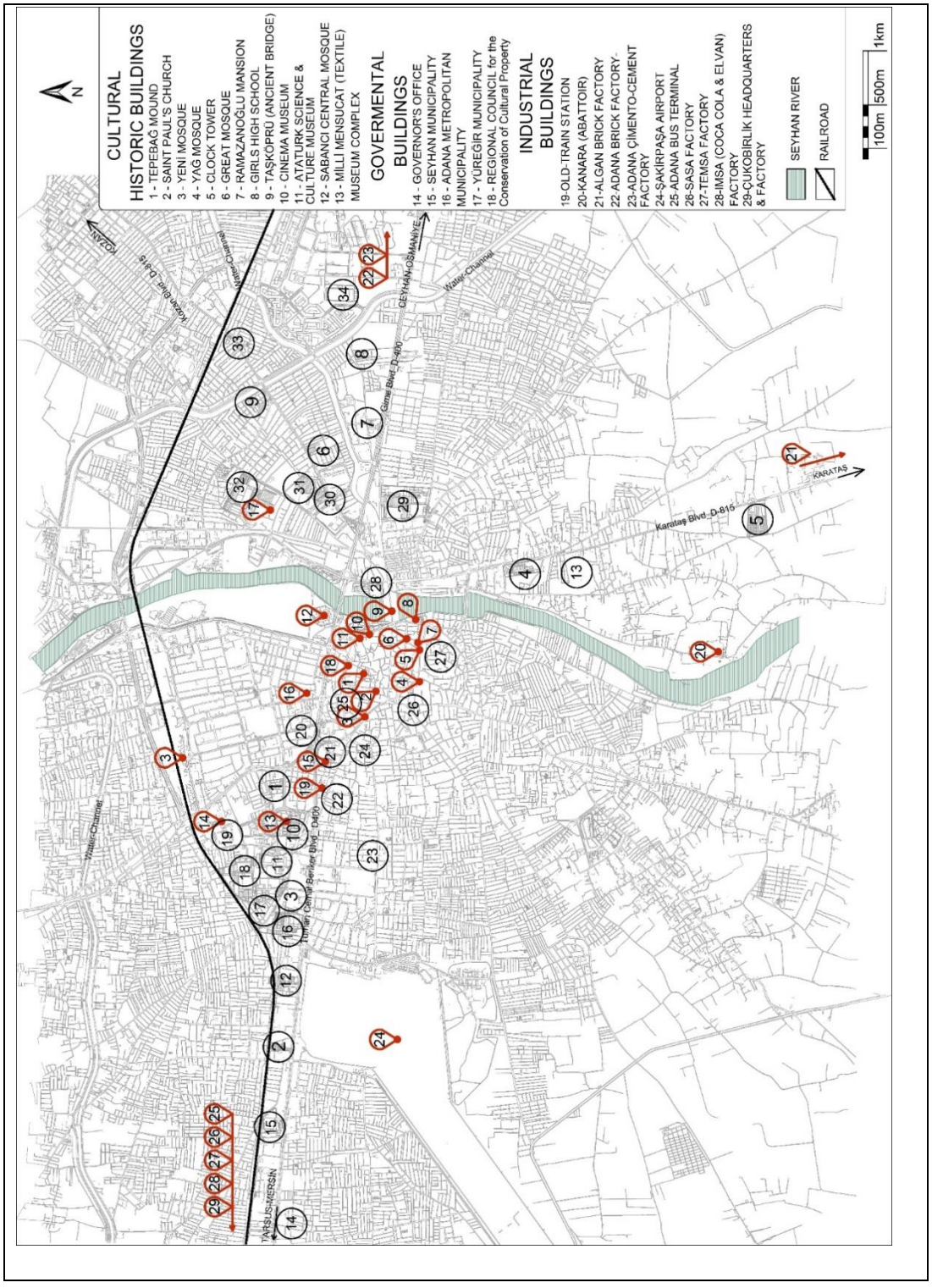


Figure 4.13. Map of certain buildings and cotton-based industrial buildings in study area (Author, 2019)

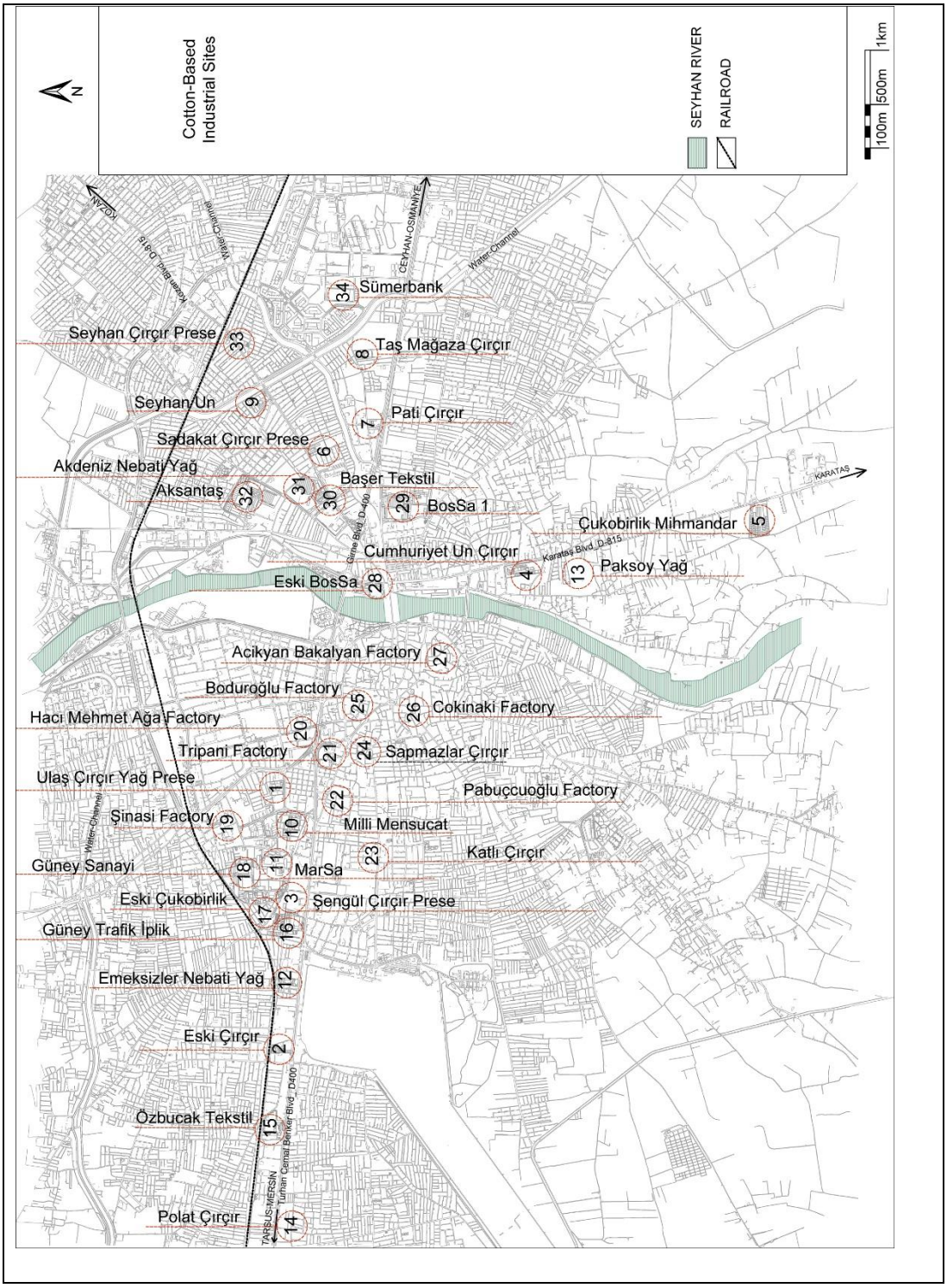


Figure 4.14. Map of the location of cotton-based industrial heritage in study area (Author, 2019)

Name of the Factory: **Ulaş Çırçır Yağ Prese,** Ulaş Ginning Oil Press (1)

Area and Location: The trapezoid-shaped floor space of the industrial site is 18.000 m2 located in the Seyhan district. The south and entrance part of the site faces Cumhuriyet Street which across a neighborhood exists, the east and north elevations are adjacent to two-three storeyed high houses and at the west side of the site, there is a private hospital called Ortopedia Hospital.

Historical and Technical Development: In Tülücü's study (2007:159), it is cited as the factory stopped its production during the 1990s and works as storages partially having 70 roller-gin machines, 1 bail press. The factory was established in 1900 by Germany "Deutsch Levantiniche Baumwolle Gesellschaft" (German Levantine Cotton Society) as a ginning and press plant. In 1923 the factory had taken by France from Germany after WW I, as war damage compensation and changed the name to Adana İstikbal Pamuk (Adana Istikbal Cotton) T.A.Ş. (Varlık *et al.,* 2008:90) The factory continued its production as with the names Ergirler Kolektif Sti between 1925 and 1966. The oil workshop building on the site had been opened in 1971 and the factory continued its production as Ulas Kolektif Sti between 1966 and 1985. (Tülücü, 2007:159) During the field study, it is observed that this factory is also still called as "Alman Fabrikası" (German Factory).

Current Situation-Field Study Notes: The factory is not continuing its production. It is not totally abandoned, there is a security officer and the open spaces of the factory are being used for car parking. The site was not allowed to visit during the field study by the officer.

Name of the Factory: **Eski Çırçır,** Old Ginning (2)

Area and Location: The rectangular shaped floor space of the site is 7.500 m2 located in Seyhan district. The south and entrance part of the site faces Turhan Cemal Beriker Boulevard (D400, Tarsus-Mersin/Adana Road). The east and west sides of the factory are adjacent to small scale production buildings and the north elevation faces street 55002 near the railroad.

Historical and Technical Development: The factory had been built after the 1950s; the information about the factory derived from 2006 Adana Base Map, was not present at any other source and the factory can have another name.
Present Situation-Field Study Notes: The factory is not continuing its original or any other production. The site is derelict with a locked entrance.

Name of the Factory: **Şengül Çırçır Prese**, Şengül Ginning Press (3)

Area and Location: The trapezoid-shaped floor space of the site is 8.000 m2 located in the Seyhan district. The north side of the site faces 59011 Street across Güney Sanayi and Park Adana Mall (Former Eski Çukobirlik site); the east and entrance part faces Esas 01burda Mall building with Dede Korkut Avenue between. The south side faces Türk Telekom, Courthouse additional service building and a gas station. The west part faces an open parking area.
Historical and Technical Development: The factory had been established in 1950-51 as a ginning factory. After it's bankrupt in 1966 the site is used for rice milling for a while and it has not been continuing any production since 1992.

Present Situation-Field Study Notes: The information about the factory was gathered from 82 years old Nurettin Bey who was working as a security officer during the site visit and he stated that he had worked at the factory since its establishment and retired from the firm.

Name of the Factory: **Cumhuriyet Un Çırçır,** Cumhuriyet Flour Ginning (4)

Area and Location: The L shaped floor space of the industrial site is 30.000 m2 located in Yüreğir district. The east and entrance side of this site faces Karataş Boulevard (D815, Karataş Road), at the west side there is an empty land in front of a neighborhood, at the north there is street 24 which across commercial buildings exist and there are a school and housing apartment having shops at the ground floor on the south part of the site.

Historical and Technical Development: In Tülücü's study, it is cited that the factory established in 1920 as a flour factory processing the wheat in Adana which the ginning workshops added later in 1938. (2007:185)

Present Situation-Field Study Notes: The factory is not continuing its production. It is not abandoned; there are small scale different manufacturers at the built and open areas of the site. Such as vehicle repair shops and wooden palette workshops. The site was not allowed to visit during the field study by the officers. It is observed from the entrance open part of the site that some parts are demolished due to new productions taking place at the site and annexes are being built to the open areas. There are many signboards of manufacturers at the entrance of the site.

Name of the Factory: **Çukobirlik Mihmandar** (5)

Area and Location: The trapezoid-shaped floor space of the site is 53.000 m2 located in Yüreğir district. The entrance and the east side of the site face Karataş Boulevard (D815, Karataş Road), On the west side, there is planted land, the north, and south parts are neighboring commercial buildings and planted area.

Historical and Technical Development: The industrial site had been established in 12.02.1956 as storage which the factory parts are developed later (Tülücü, 2007:153). Çukobirlik is a Union of Cooperatives with 275 partners founded in 15.10.1940 by Adana, Ceyhan ve Tarsus Agriculture Sales Cooperatives. The union has cooperatives from in many cities such as Mersin, Şanlıurfa, Mardin, Hatay, Adana… The union has 6 saw gin plants: Mihmandar, Headquarter, Ceyhan, Misis, Reyhanlı, and Yemişli in Çukurova, 4 roller gin plants in Adıyaman, Diyarbakır, Kırıkhan and Nusaybin in other parts of Turkey as accorporated by Mihmandar Cooperatives and an Oil Factory at the Çukobirlik Headquarters ('Çukobirlik Tarihçe', n.d.). The headquarters of Çukobirlik is at 19th km of Adana-Tarsus road, approximately in the middle of these two towns.

Present Situation-Field Study Notes: In Tülücü's study, it is cited as the factory was continuing its production; however, it is observed at the field study that there are small scale different manufacturers at different parts of the site rather than the original products such as wooden palette workshops, building material storages.

Name of the Factory: **Sadakat Çırçır Prese,** Sadakat Ginning Press (6)

Area and Location: The rectangular shaped floor space of the industrial site is 15.000 m2 located in Yüreğir district. The north and the entrance side of the site face Kozan Avenue (D815, Kozan Road). The east and west sides are adjacent to houses except the north parts facing the main road which are commercial buildings.

Historical and Technical Development: The factory was established in the 1950s, it was continuing the production and included the saw-gin machines in 2007 (Tülücü, 2007:155).

Present Situation-Field Study Notes: During the field study, the machinery of the industrial site was not present at the ginning workshop. The parts of the industrial site are used as storage of different manufactures rather than the original production.

Name of the Factory: **Pati Çırçır,** Pati Ginning (7)

Area and Location: The trapezoid-shaped floor space of the industrial site is 11.000 m2 located in Yüreğir district. The south and the entrance part of the site face Girne Boulevard (D400, Ceyhan Road) which across Asri Cemetery exists. The east and west sides are adjacent to commercial areas. The north side faces Kadife Avenue which commercial areas exist across.

Historical and Technical Development: The factory established in the 1950s with the name Adana Çırçır, the ownership and the name changed to Pati Çırçır in 1980s. The factory was continuing its original production in 2007 (Tülücü, 2007:171).

Present Situation-Field Study Notes: The parts of the industrial site are being used as storage of different manufacture rather than the original production.

Name of the Factory: **Taş Mağaza Çırçır**, Taş Mağaza Ginning (8)

Area and Location: The trapezoid-shaped floor space of the industrial site is 12.800 m2 located in Yüreğir district. The south and the entrance of the site there is an empty land facing Girne Boulevard (D400, Ceyhan Road. The east side is an empty lot and the west is adjacent to houses. The north part faces Kadife Street which has a neighborhood across.

Historical and Technical Development: The factory had been established in the 1950s before 1956. The ownership changed in 1982 and the factory's name became Yeni Taş Mağaza. In 1990 cube sugar production had been added, in 2002 the ginning machines are taken down and the yarning workshop had been added (Tülücü, 2007:161).

Present Situation-Field Study Notes: During the field study, there was not any security officer and it is observed that the site was abandoned and not safe to visit the whole parts.

Name of the Factory: **Seyhan Un,** *Seyhan Flour* (9)

Area and Location: The trapezoid-shaped floor space of the industrial site is 30.000 m2 located in Yüreğir district. The south and the entrance part of the site face Kozan Avenue (D815, Kozan Road). The west side is adjacent to commercial and housing areas. The east side is facing commercial areas near Akıncılar Water Channel. The north side faces street 3958 which housing areas exist across.

Historical and Technical Development: The production plant was established in 1961 as one of the first four flour factories of Adana. The ginning and oil factories were active between 1961 and 1995. Due to the decline of the agricultural cotton production in Adana, the cotton-based production areas are closed and flour production had continued (‘Seyhan Un’, n.d.). This industrial site contains built areas as Storage Buildings, Porch Storages, Weighing Machine and Weigh Building, Ginning Workshop, Flour Workshop, Oil Workshop, Lodgments and Administrative Building.

The storages which are one-storied exist on the east and west side parts of the parcel, the five-storied flour factory is in the north part and the ginning building is in the middle which is two-storied (Tülücü, 2007:187). There are green areas in the open area parts of the industrial site.

Present Situation-Field Study Notes: It is told that the factory is not continuing its production. It is not totally abandoned, there is a security officer. The site was not allowed to visit during the field study by the officer.

Name of the Factory: **Milli Mensucat**, Milli Textile (10)

The trapezoid-shaped floor space of the industrial site is 52.200 m2 while in 1918 it was 28.000 m2 at Seyhan district. The industrial plant's entrance and west side face street 60064 which has neighborhood and Acıbadem private hospital (from south to north) across. The south part of the site face street 60012 which has Çukurova Development Agency, Adana Chamber of Industry and an empty lot (from west to east) across. In the north part of the factory, there is street 60097 which has apartment neighborhood and Adana Maternity and Children Hospital (from east to west) across. At the west part of the site, there is Erdal Acet Street which has MarSa Oil Factory across.

The industrial site was producing textiles while the plant was active. It was founded in 1907 by Aristidi Kozma Simyonoğlu; the factory had been rented to Milli Ticaret T.A.Ş. by a French company after the ownership transferred to the company from the first owner. The ownership shifted to Milli Emlak İdaresi (National Real Estate Directorate) and named after Milli Fabrika. In 1927 the factory named Milli Mensucat and in 1983 named Milsan Mensucat due to changes of proprietorial. Orhan Kemal had worked as an officer in this factory and his famous novel "Bekçi Murtaza" Guard Murtaza takes place in this factory and residential areas around this factory (Saban *et al*., 2006:102). The industrial site has been transformed to Adana Archaeology Museum at the present time, the project of the whole site has not been finished yet. The project is continuing.

Name of the Factory: **MarSa** (11)

The rectangular-shaped industrial site is 90.000 m2 at Seyhan District. The north and west parts are adjacent to Güney Sanayi's empty site, the south side faces 59011 street having Esas 01burda Mall and the east part faces Erdal Acet Avenue having Adana Maternity and Children Hospital across.

The industrial site had been established in 1926 to produce cottonseed oil. It was known as 'Rus'un Fabrikası' (The Factory of Russian) at that time of foundation, the owner was Salamon Rafael Gilodo a Russian citizen. The ownership had passed to Sabancı Family in 1945 and named after Toroslar Yağ Fabrikası. The factory was producing both cottonseed oil and soap in 1958. The company changed its name to MarSa (the combination of the first two letters of Margarine and Sabancı) in 1973. The factory changed its name with a new partnership as MarSa KJS after 1993 (Varlık *et al*., 2008: 108,111,183). Today the factory is continuing its production and the buildings are completely renovated since the establishment.

Name of the Factory: **Emeksizler Nebati Yağ,** Emeksizler Oil (12)

The L shaped floor space of the site is 13.500 m2 located in Seyhan district. The south and the entrance part of the site face Turhan Cemal Beriker Boulevard (D400, Tarsus-Mersin/Adana Road) which has Adana-ŞakirPaşa Airport across. The east and west sides are adjacent to commercial sites. The north side faces street 59011 having neighborhood across and railway at the northwest direction of the industrial site.

The factory was established in 1953 and continues its production periodically with a lower capacity than the earlier dates. The industrial plant produces oil and animal food from cottonseed. In addition, the lint bales are being sold to be used in different industries such as gunpowder production.

This industrial site contains built areas as Storage Buildings, Porch Storages, Weighing Machine and Weigh Building, Linter Workshop (with no machinery), Administrative Building, Oil and Press Workshop, Oil Storage, Soap Workshop and

Barrels. The storages which are one-storied exist on the east and west side parts of the parcel. There are green areas in the open area parts of the industrial site.

During the field study, the production was continuing. The site and the production process has taken place and the basic cotton industry was introduced as verbal information for this study by the manager who did not want his name to be mentioned. It is also mentioned that one linter machine from the linter workshop was given as a decoration for 'Bekçi Murtaza' theatre play adaptation of Orhan Kemal's novel.

Name of the Factory: **Paksoy Yağ**, Paksoy Oil (13)

The floor space of the factory is 80.000m2 located in Yüreğir district. The east and entrance part face Karataş Boulevard (D815, Karataş Road); the north and south parts are adjacent to neighborhoods having small scale manufacture buildings in the east part. The west and back elevation face Hasan Tugal Avenue having a neighborhood of two-storied houses with garden across.

The industrial site had been established in 1951 for the production of vegetable oil and soap from cotton seeds. The factory also has been producing biodiesel fuel since 2013 ('Paksoy Yağ', 2019).

This industrial site contains built areas as Storage Buildings, Porch Storages, Weighing Machine and Weigh Building, Oil Workshop, Soap Workshop, Linter Workshop, Cottonseed Silo, Cotton paste Storage, Raw Oil Storages, Feed Storages and Administrative Building (Tülücü, 2007:210).

The factories below mostly demolished and some are standing partly.

Name of the Factory: **Polat Çırçır**, Polat Ginning (14)

The rectangular-shaped floor space of the industrial site is 4.300m2 in Seyhan district. The building was present in 2007 (Tülücü, 2007:173) however the site is empty now. The factory established as a ginning factory in the 1940s, and continued production until the 1970s. After the 1970's it was used as storage before the demolishment.

Name of the Factory: **Özbucak Tekstil**, Özbucak Textile (15)

The industrial site's floor space is 45.000 m2 located in Seyhan district. The buildings were demolished between 2010 and 2011. (Özüdoğru, 2011:74) Now, the factory's buildings are demolished except the administrative building which is composed of only concrete walls and the roof and there is not any new building at the site. The factory was founded in 1928 and took Özbucak name in the 1950s, the textile production was continuing in 2007. The site consisted of 58 units including social buildings (Tülücü, 2007:147). In Adana Architecture Handbook it is cited as the factory was founded in 1974 (2006:100).

Name of the Factory: **Güney Trafik İplik,** Güney Trafik Yarn (16)

The industrial site's floor space is 40.000 m2 located in Seyhan district. All the buildings of the industrial plant had been demolished and now, there is an amusement park on the site. The site had been established in the 1960s. The buildings were one and more storied, and the cotton-yarn production of the site was continuing in 2007 (Tülücü, 2007:143).

Name of the Factory: **Eski Çukobirlik Fabrikası,** Old Çukobirlik Factory (17)

The industrial site's floor space is 48.000 m2 located in Seyhan district. In 1940 map the site exists with 20.000m2 floor space cited as Belçika Fabrikası (Belgium Factory. There is a mall named Adana Park on the site and no remaining left from the industrial plant. The Belçika Fabrikası had been established in the first years of the Republican Period. It had been transferred to Ziraat Bankası (Agriculture Bank) and then in 1951, the factory was sold to Çukobirlik. Ginning and press processes had taken place at the factory. (Varlık et al., 2008:159) The factory also exists in 2006 Adana Base Map.

Name of the Factory: **Güney Sanayi,** Güney Industry (18)

The industrial site's floor space is 160.000 m2 located in Seyhan district. In 2007 the plant was still active with the highest production of Lycra fabric in Europe. (Tülücü, 2007:141) At the present only remaining of the site is administrative building from

the 1950's which some walls are demolished during the destruction at the site. The buildings are demolished after 2011 (Özüdoğru, 2011:74).

The site had been founded in 1953 as a yarn and textile factory which was one of the biggest textile plants in Turkey at the time of establishment. In 1967 new buildings added to the site which are designed by Zeki Yüzüak and Ertuğrul Arf (Saban et al., 2006:105) The industrial plant does not contain lodgments on the site. However, at Emek Neighborhood, that is at the east side of Şakirpaşa Airport and approximately 600 meters away from the industrial site across Güney Trafik İplik Factory, houses for the employees of Güney Sanayi had been built during 1960's and 1970's (Durukan et al., 2009:51). The two-storied houses with gardens were built in 1967 and the four-storied blocks were built in 1976 (Saban et al., 2006:15).

Name of the Factory: **Şinasi Factory** (19)

The name of the factory in the 1940 map is Şinasi Factory and its floor space was 40.000 m2. The factory had been located at today's Adana Governer's Building site. The factory was built in 1924 processing cotton as a ginning factory (Varlık *et al*., 2008: 97,142). The Governorate had moved to this old Sümerbank Factory site during the 1980s (Saban *et al.,* 2006:23). The site of the factory is also known Eski Sümerbank area.

Name of the Factory: **Hacı Mehmet Ağa Factory** (20)

Its floor space was approximately 4.600 m2 and the ice factory near was 1.700m2 in Seyhan. The factory had been located at today's crossways of the Seyhan Municipality Building site. The factory had been established in 1902; it was processing the cotton by ginning factory and producing ice (Varlık *et al*., 2008:76).

Name of the Factory: **Trıpani Factory** (21)

Its floor space was approximately 15.000 m2. The factory had been located at today's Seyhan Municipality Building site and some part of the Turhan Cemal Beriker Boulevard before this road was built.

The factory was founded in 1885 for ginning. In 1901 the yarning workshops added, in 1919 the factory had been rented for a short period of time by Rasim Dokur who had a textile factory in Tarsus-Mersin which do not exist today (only the chimney had left). The factory had been bought by Sümerbank in 1946; Sümerbank factory later founded Adana Bez Fabrikası (Cloth Factory-Cotton Mill) and in 1949 Adana Pamuk Satın Alma ve Çırçır Fabrikası (Cotton Purchasing and Ginning Factory) affiliated to Sümerbank Kayseri Pamuklu Sanayii (Varlık *et al*., 2008: 70,157)

Name of the Factory: **Pabuççuoğlu Factory** (22)

The floor space of the factory was nearly 2.000 m2 in the Seyhan district. The factory was established before 1918 for processing cotton as a ginning factory and producing flour (Varlık *et al*., 2008: 97,143). The site of the factory is empty today.

Name of the Factory: **Katlı Çırçır,** Katlı Ginning (23)

The floor space of the factory was nearly 13.000m2 at Seyhan district. It was founded between 1944 and 1950. The factory is not included in the table of 1944 Adana Factory and it is apparent in 1950 aerial photo of Adana. The industrial site had worked until 1975; it was used as storages in the following five years. The buildings were used as carpenter's shop before it was demolished around 2007 (Tülücü, 2007:169).

Name of the Factory: **Sapmazlar Çırçır,** Sapmazlar Ginning (24)

The factory's floor space was 11.000 m2 located in Seyhan district. The factory exists on the 2006 Adana base map. The factory had been demolished and today there is a multi-storeyed commercial building on this site. Tülücü states that Sapmazlar Çırçır had been established in 1937, and nearly half of the Factory had been bought by Sabancı family and used as yarn and textile storage named PolSa İplik (Yarn). Later between 1975 and 1984, the factory had been used as storage by Board of Regie (Tekel İdaresi). Originally the site contains ginning workshop at the center and storages around however the factory had been rented piecemeal and the buildings changed a

lot. (2007:165) There is Gülbenikan Factory having 5.000m2 floor spaces at the site of this factory on the 1918 map.

Name of the Factory: **Boduroğlu Factory** (25)

The factory floor space was 4.500 m2 in the Seyhan district. The factory is also referred to as Burduroğlu Factory, Asım Bey and Muhtar Bey Factory. There is Çakmak Plaza named shopping mall which was built during 1990s on the site of the factory at the present time. The factory was built before 1918, producing flour and ice also processing cotton as a ginnery (Varlık et al., 2008:97, 143).

Name of the Factory: **Cokinaki Factory** (26)

The floor space of the factory was 2.500 m2. The factory is also referred to as Kokonaki, Habib Efendi and Toros Factory. There is a building at the site with trade use at the present time. It was built before 1918, producing ice and flour also processing cotton as a ginnery (Varlık et al., 2008:97, 143, 149).

Name of the Factory: **Acikyan Bakalyan Factory** (27)

The floor space of the factory was 3.500 m2 in the Seyhan district. There are small scale food manufacturers on the site at the present time. The factory is built before 1918 also named Aşkiyan, was producing ice and flour also processing cotton as a ginnery. (Varlık *et al*., 2008:97).

Name of the Factory: **Eski BosSa,** *Old BosSa* (28)

The floor space of the factory was 15.000 m2 in Yüreğir district. There is HiltonSa Hotel at the site of the factory at the present time and the chimney of the factory still remains.

Eski BosSa (Old BosSa) is the first flour factory founded by Bosnalı (Bosnian) Salih Efendi in 1902. The ginnery function added later and then in 1950, the company participates with Sabancı with the name BosSa, the combination of the first letters of Bosnalı and Sabancı (Varlık et al., 2008:97).

Name of the Factory: **BosSa 1** (29)

The floor space of the site is 130.000 m2 in Yüreğir district. The factory is present at the 2006 base map and now it is demolished and the whole site is empty. The industrial plant was producing yarn and textiles which was active in 2007. It was demolished between 2010 and 2011 (Özüdoğru, 2011:74; Tülücü, 2007:151). The site was remarkable with administrative buildings and lodgments in addition to production buildings (Saban *et al*., 2006:107).

Name of the Factory: **Başer Tekstil,** *Başer Textile* (30)

The entire site floor space was 14.000 m2 at Yüreğir district. The corner part of the prior site had been left with a 5.000 m2 floor space nearly half of the site. At the demolished part of the site, there are housing apartments. The parts left were originally weaving workshops and storages which now used as small manufactures rather than its original production. The site was producing weave and yarns as a textile factory (Tülücü, 2007:149).

Name of the Factory: **Akdeniz Nebati Yağ,** Akdeniz Oil (31)

The site floor space was 66.000 m2 at Yüreğir district. The entire buildings are demolished and the site is empty at the present time. The factory was founded in 1953 producing oil and soap from cotton seeds and textiles. It continued its production until the 1990s (Tülücü, 2007:183). The buildings of the site were demolished after 2011 (Özüdoğru, 2011:74).

Name of the Factory: **Aksantaş** (32)

The site floor space was 112.000 m2 at Yüreğir district. The buildings are demolished and at the present time, there are TOKI (Housing Development Administration of Turkey) houses and Yüreğir Municipality building at the site. The buildings were demolished between 2010 and 2011 (Özüdoğru, 2011:74). The factory was established in 1951 as PAKTAŞ name. It was ginning the cotton and manufacturing textiles. It

had been sold to Sümerbank in 1985 and then continued its production for a while with the name Aksantaş (Varlık et al., 2008:164).

Name of the Factory: **Seyhan Çırçır Prese,** *Seyhan Ginning Press* (33)

The site floor space was 4.500 m2 at Yüreğir district. The buildings had been demolished between 2010 and 2011 (Özüdoğru, 2011:74). At the present time, there is a private hospital called Altın Koza (Golden Boll). The factory had been established in the 1950s, it was a ginning factory (Tülücü, 2007:157).

Name of the Factory: **Sümerbank** (34)

The floor space of the industrial site was 85.000 m2 in Yüreğir district. There are TOKI (Housing Development Administration of Turkey) housing apartments and a park on the site of the factory at the present time. The information about the factory is derived from the 2006 base map.

These industrial sites were analyzed in the following parts of this study according to this information about the sites collected from the sources.

4.4. Analyses of Cotton-based Industrial Heritage

4.4.1. Area Size

The areas are the lot sizes of the industrial sites which were derived from the base map of 2006. The area sizes of the buildings which do not take place at this map were determined according to 1918, 1940 maps and 1950 aerial photo. The areas are the total areas of the industrial sites' lots which contain open and semi-open and porch areas in addition to the built areas. On the following mappings, circles are used rather than the original site shapes because of these varying measurements of the sites (see Figure 4.16) in order to follow the classification presentations on the mappings (see Figure 4.17 for mapping).

Table 4.4. *Table of Area Size Classifications (Author, 2019)*

AREA SIZES	ACRONYM
Between 2.000m^2 and 15.000m^2	**A-1**
Between 15.000 m^2 and 60.000 m^2	**A-2**
Between 60.000 m^2 and 160.000 m^2	**A-3**

4.4.2. Period of Emergence

The actual construction dates of all of the factories were not certain at the sources. Due to this, the construction dates are divided into time zones of three and they are acquired both from the sources and maps. The first period consists of industrial buildings that are built between the 1850s and the 1920s. The second period is between 1920's-1950 and the third one is between 1950's-1970 (see Figure 4.18 for mapping).

Table 4.5. *Table of Period of Emergence Classifications (Author, 2019)*

PERIOD OF EMERGENCE	ACRONYM
Between **mids of 19th century and 1920**	**P-1**
Between **1920 and 1950**s	**P-2**
1950's	**P-3**

4.4.3. Type of Production

The production took place on factory sites were classified into five types in this study. The first type of production which is called basic is detaching of the cotton from its ingredients. These ingredients are mainly Cotton Fiber and Cotton Seeds. This is called ginning. After the ginning process fibrous parts used for textile production and the cottonseed parts used for animal nutrition and vegetable oil production are segregated. (Güzel, 2010:26) The cotton's industrial process after picking from the croplands is shown in the figure below. This figure is adapted from Güzel's study

(2010) considering the production of industrial sites in this study. Figure 4.15 is the scheme of cotton's use in industry and types of production determined at the sites in Adana.

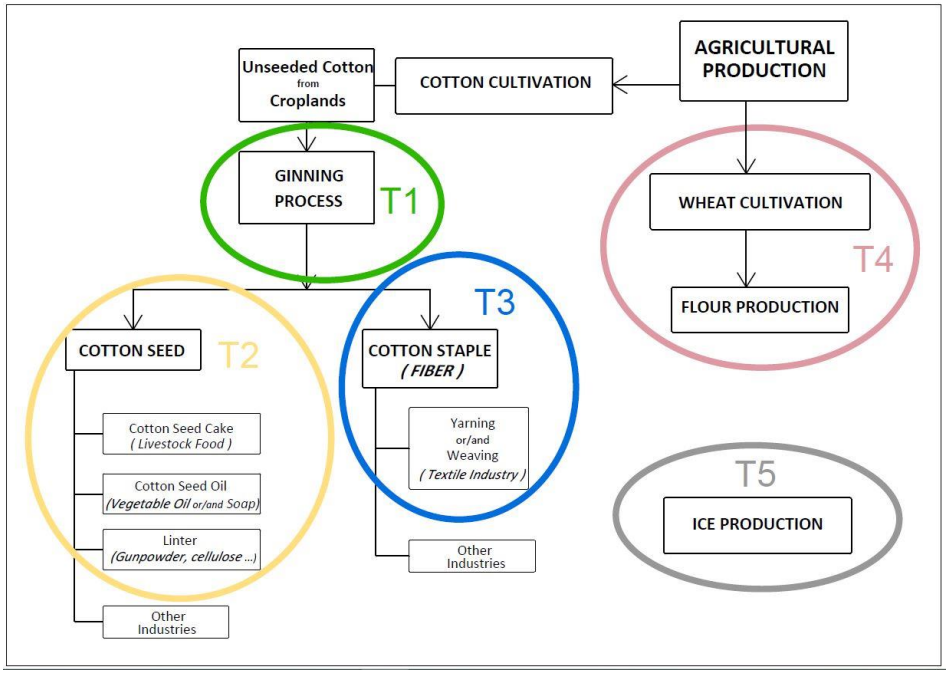


Figure 4.15. Types of production determined at the studied sites in Adana (Author, 2019)

The first three types may exist alone or coexist with other types of productions mentioned above. The fourth type is the flour production and the fifth type is ice production which also seen with ginneries. Due to these coexistences, the types are visualized and shown on the mappings. The symbols are influenced by ERIH's symbols of the categories of industrial heritage (see Figure 4.19 for mapping). The cotton is generally covered under textile production, however in this case there are different manufactures other than textiles. According to 'HAER classification' stated in the second chapter of this study, the production types determined below are under 'bulk production' title. According to this classification,

- the ginning (T-1) takes place under 'agricultural and rural' (AGRI) subcategory,

- textiles (T-2) takes place under ‘textiles’ (TEXT) subcategory,
- soap production (T-3) under ‘chemical industry’ (CHEM), and
- flour production (T-4) under ‘food processing’ (FOOD) named as ‘grains and cereals’.
- Ice (T-5) and cotton-seed oil (T-3) production have not been found on the list. (Falser, 2001: Appendices)

Table 4.6. *Table of Type of Production Classifications (Author, 2019)*

TYPE of PRODUCTION	ACRONYM
Ginning, Pressing, Storage- Basic	**T-1**
Cotton Seed based: Oil, Lint, Soap	**T-2**
Cotton Fiber based: yarning /weaving, Textile	**T-3**
Flour production	**T-4**
Ice Production	**T-5**

It would be misleading say that all of the factories of these production buildings were built at the same time on their sites and factories continued these manufactures while they were functioning. To illustrate Güney Trafik İplik (16) was producing synthetic textiles instead of cotton in 2007, and Eski BosSa (28) was built as a flour factory at the beginning and ginning facility was added later. Also Paksoy Yağ was both producing cotton seed oil and sunflower oil.

4.4.4. Zones

The factories are in different parts of the city[97]. Four zones are determined according to the location and density of the sites for this study (see Figure 4.20 for mapping).

[97] Certain buildings in these zones can be seen in Figure 4.14

Zone 1 is located in Seyhan District. A large part of this zone is inside the boundary of 'Adana Conservation Development Plan' area which is first planned in 1998, and after revision plan is approved in 2016. Saban Ökesli cites that this area had been registered with 21.04.1994 dated 1807 numbered decision as 'Urban Conservation Site' by 'Adana Regional Council for the Conservation of Cultural and Natural Property'. The first 'Conservation Development Plan' of this site was approved with 30.06.1998 dated 3106 numbered decision of the Council, however, this plan had problems with the implementation due to the earthquake occurred in 27.06.1998 in Adana (Saban Ökesli, 2015:52). The other part of Zone 1 includes Old Station building and surrounding area which is in 'Urban Renewal Area'. This transformation area's large part is at the west part of Zone 2, according to '1/25.000 2017 Revision Master Development Plan of Adana'. In addition to these parts, there are areas planned as commercial-residential and central business district neighbouring this renewal area and Turhan Cemal Beriker Boulevard. The south part of these areas is planned as dense residential areas.

Zone 2 includes the west industrial development area of Adana 1940 Jansen Plan[98], located in Seyhan District. There were already built industrial sites on this plan. In addition to this planned area, the zone includes the areas reaching Turhan Cemal Beriker Boulevard and its west side extent. This zone involves planned areas as commercial-residential and public service areas (governor's office) at the north part, urban renewal area at the west part, cultural area (museum) and, central business district at the Turhan Cemal Beriker Boulevard side according to the master plan. Moreover, this zone includes one of the oldest neighborhoods developed between Old Train Station, Milli Mensucat (10) and Ulaş Çırçır (1) factories at the beginnings of the 20th century, 'Old Döşeme' district (neighborhood)[99]. The east part of this zone is

[98] As indicated on the Urban Growth map (Figure 4.4) in this study.
[99] *Döşeme Mahallesi,* also called 'İstaston Mahallesi' (Station District) related with the old train station, Retrieved from http://www.yeniadana.net/kose-yazilari/doseme-mahallesi-1428.html

in ‘Urban Transformation Area’ which involves the neighborhood[100]. There are 20 registered residential buildings in this neighborhood.

Zone 3 includes the south part of the east industrial development area of 1940 Adana Jansen Plan, as indicated on the Urban Growth map in this study, located in Yüreğir District. In addition to this planned area, the zone includes the areas reaching Girne Boulevard in south. This zone involves planned areas as commercial-residential areas around Kozan Road, central business district around Girne Boulevard. The rest of the zone is planned as middle dense residential areas except from the low-density residential area at former BosSa 1 (29) site and highly dense TOKİ residential area according to the master plan.

Zone 4 is the area between Seyhan River and Karataş Road starting from the north of Ancient Bridge, located in Yüreğir District. This area and the factories in this area continue to the south side. This zone involves planned areas as tourism area at the north of Ancient Bridge (Taş Köprü) which is former Eski BosSa (28) area[101] educational areas, and commercial-residential areas around Karataş Road. The areas at the inner parts of this road are planned as low and highly dense residential areas according to the master plan.

Table 4.7. *Table of Zone Classifications (Author, 2019)*

ZONES	ACRONYM
Adana historic city center part	**Z-1**
Jansen Plan’s West part and its extension	**Z-2**
Jansen Plan’s East part and its extension	**Z-3**
Between the Seyhan River and Karataş Road	**Z-4**

[100] The plan of the registered sites was taken from KUDEB Seyhan Municipality.
[101] Present HiltonSa Hotel site.

4.4.5. Current Condition

Current Condition defines the physical conditions of the factories regarding demolishment and presence of the buildings on sites. (see Figure 4.21 for mapping). This is classified into four types. The first named C-1 defines the sites that the buildings are still standing on site. The second C-2, the sites that the buildings are demolished and no construction took place yet, and some buildings or parts are still standing from the former industrial buildings. The third C-3 defines the sites which buildings are demolished largely and new construction took place however some parts of buildings are left on the site. The fourth and the last C-4 describe the sites that all the buildings are demolished and no buildings or parts left on the site and other buildings are built at the site.

Table 4.8. *Table of Current Condition Classifications (Author, 2019)*

CURRENT CONDITION	ACRONYM
Buildings existing on the site	**C-1**
Buildings demolished, no new building on-site yet, some parts of the buildings are left	**C-2**
Buildings demolished, new building on-site, some parts of the buildings are left	**C-3**
Buildings demolished, new buildings on-site or no building on-site	**C-4**

4.4.6. Current Use

This classification was done regarding the industrial sites that are still present, (C-1). The demolished sites are not considered in these classifications. (see Figure 4.22 for mapping). The first group includes factories that are no longer used for any purpose. The second group is the use that is seen in the factories which are not used for their original cotton-based manufacture. The third is the factories that still continue their

original cotton-based manufacture. The fourth one is the other adaptive reuse of the factories which is only seen at one site.

Table 4.9. *Table of Current Use Classifications (Author, 2019)*

CURRENT USE	ACRONYM
Derelict	**U-1**
Some parts are used for small scale different manufacture rather than the original production	**U-2**
Continuing the original production	**U-3**
Other (museum)	**U-4**

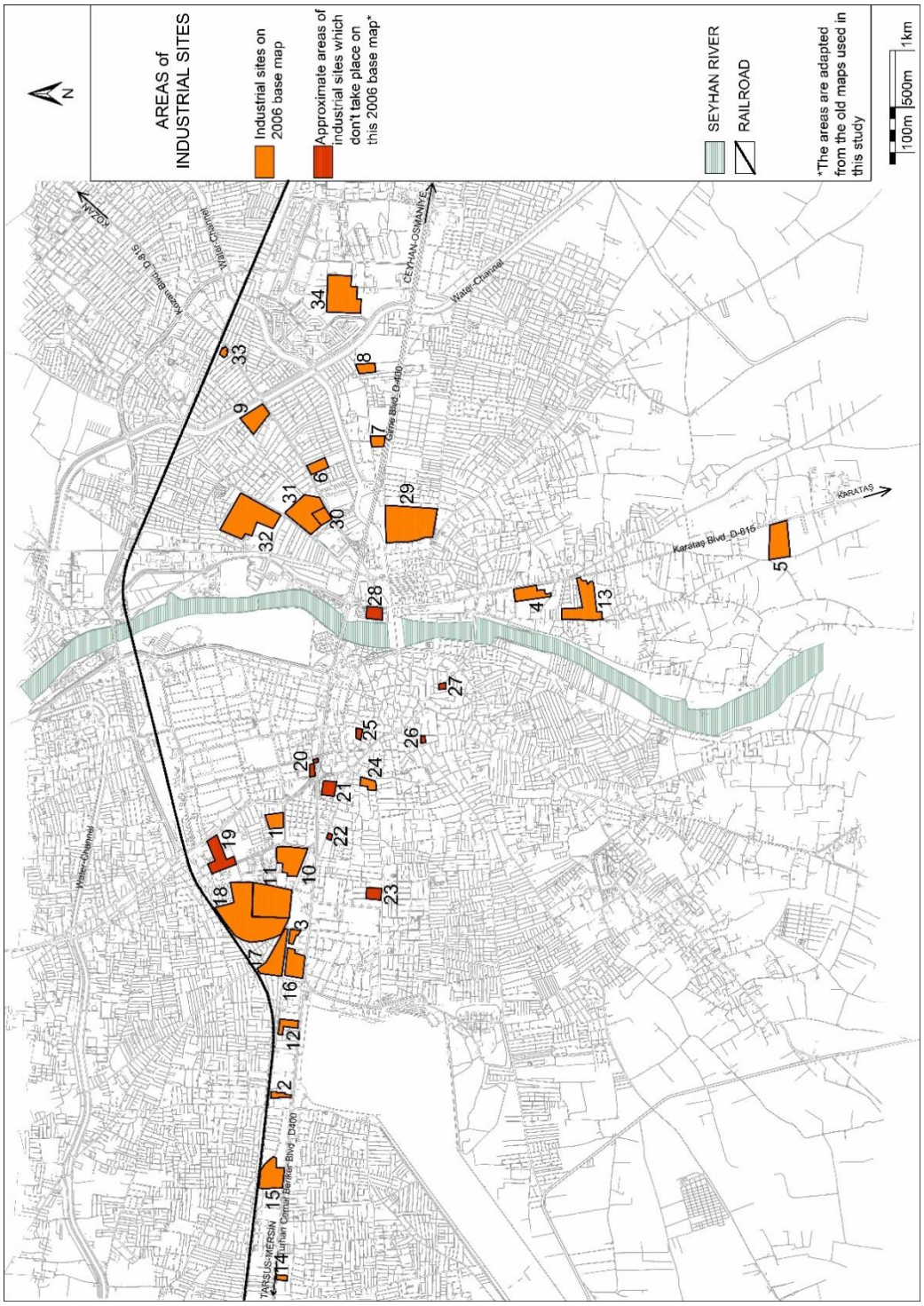


Figure 4.16. Map of site shapes and areas of the sites (Author, 2019)

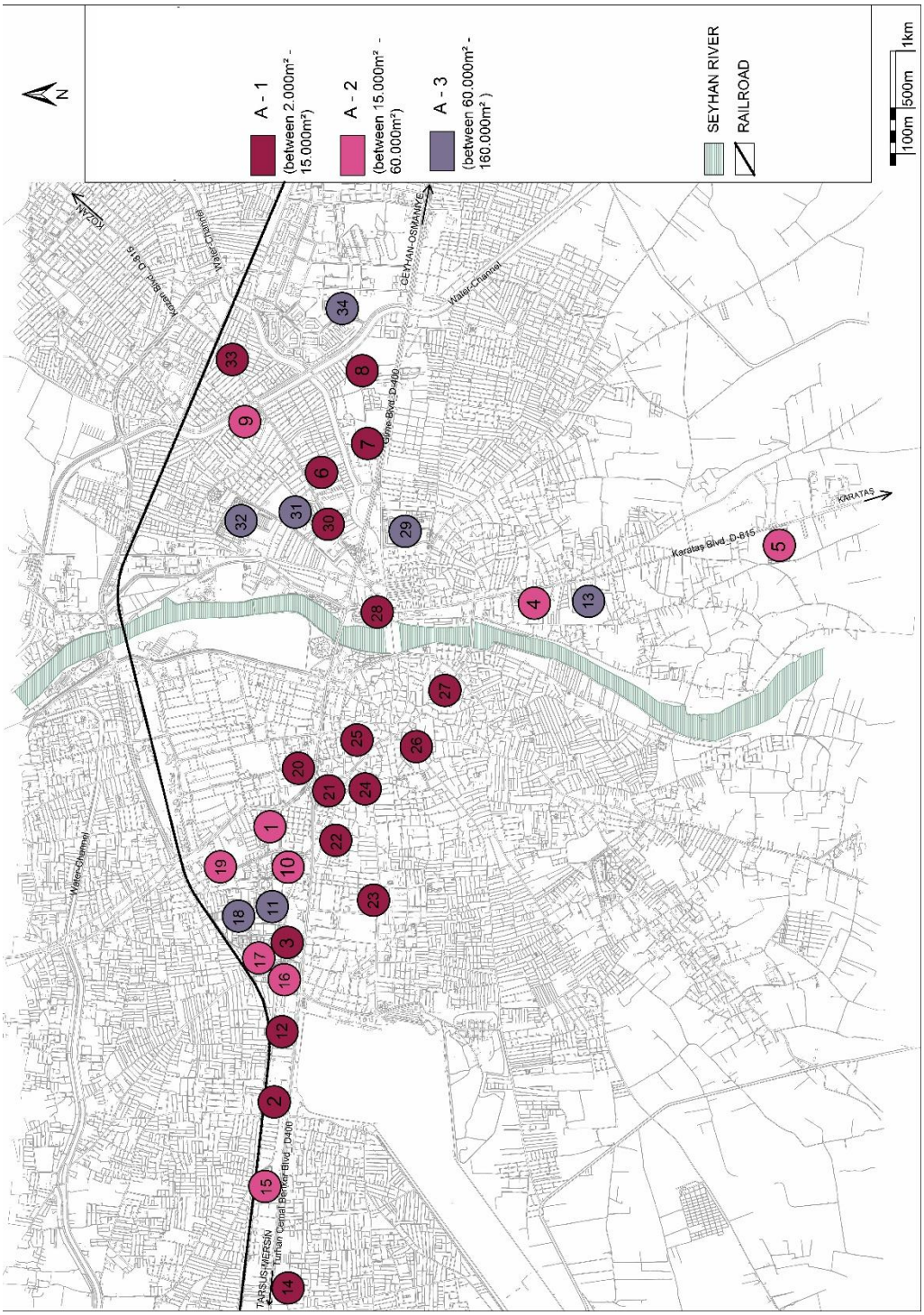


Figure 4.17. Mapping of Area Size analysis (Author, 2019)

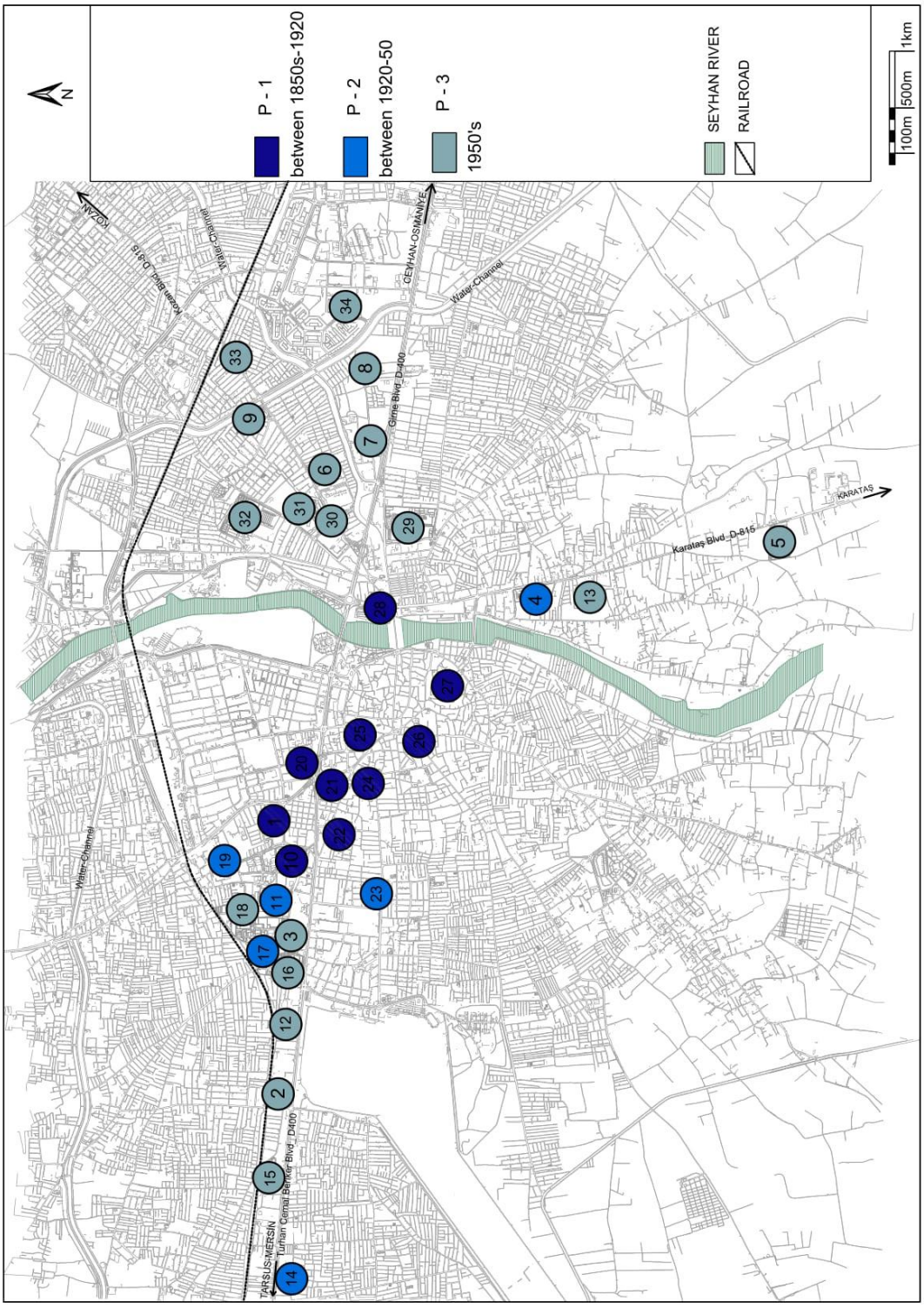


Figure 4.18. Mapping of Period of Emergence analysis (Author, 2019)

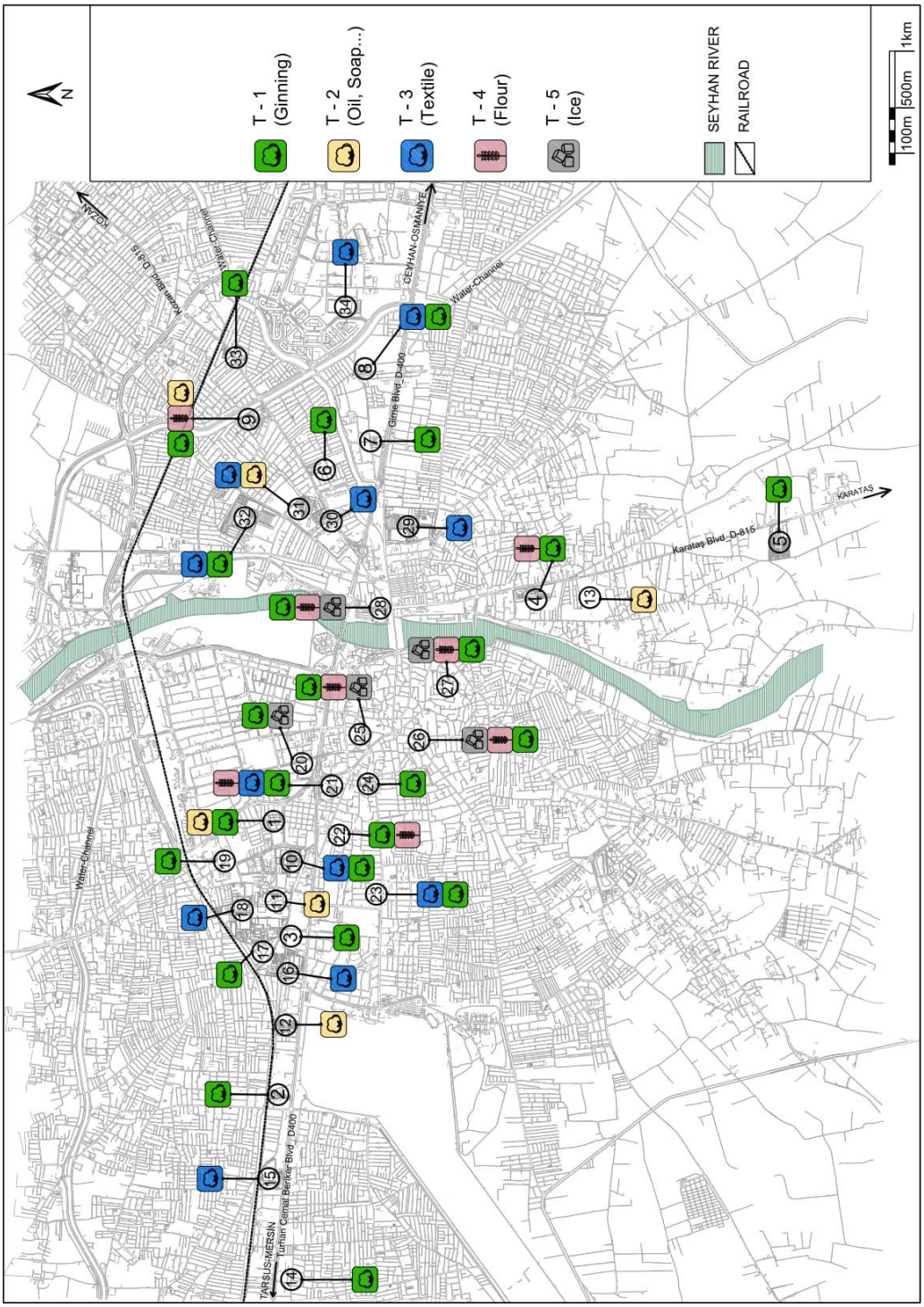


Figure 4.19. Mapping of Type of Production analysis (Author, 2019)

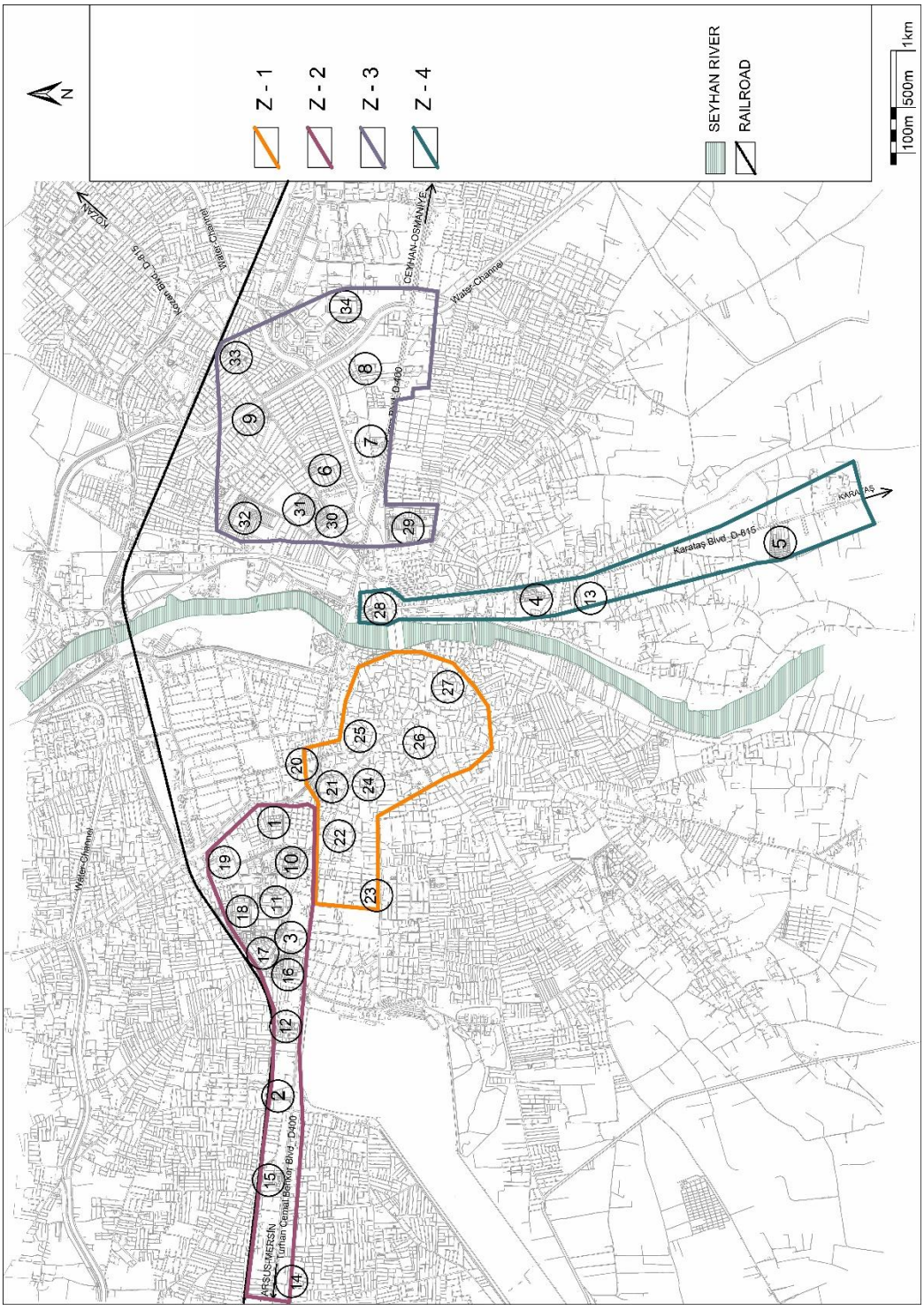


Figure 4.20. Mapping of Zone analysis (Author, 2019)

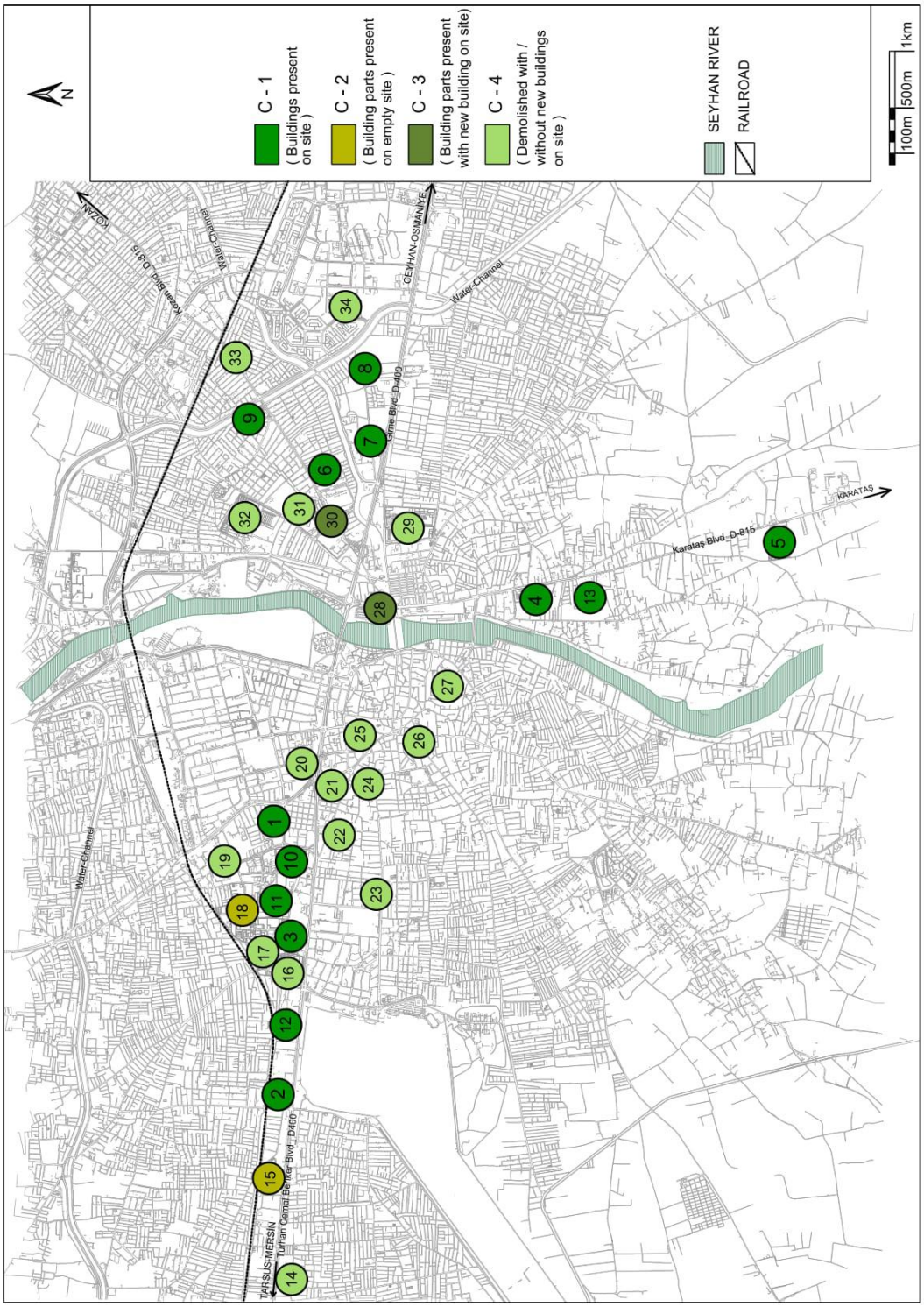


Figure 4.21. Mapping of Current Condition analysis (Author, 2019)

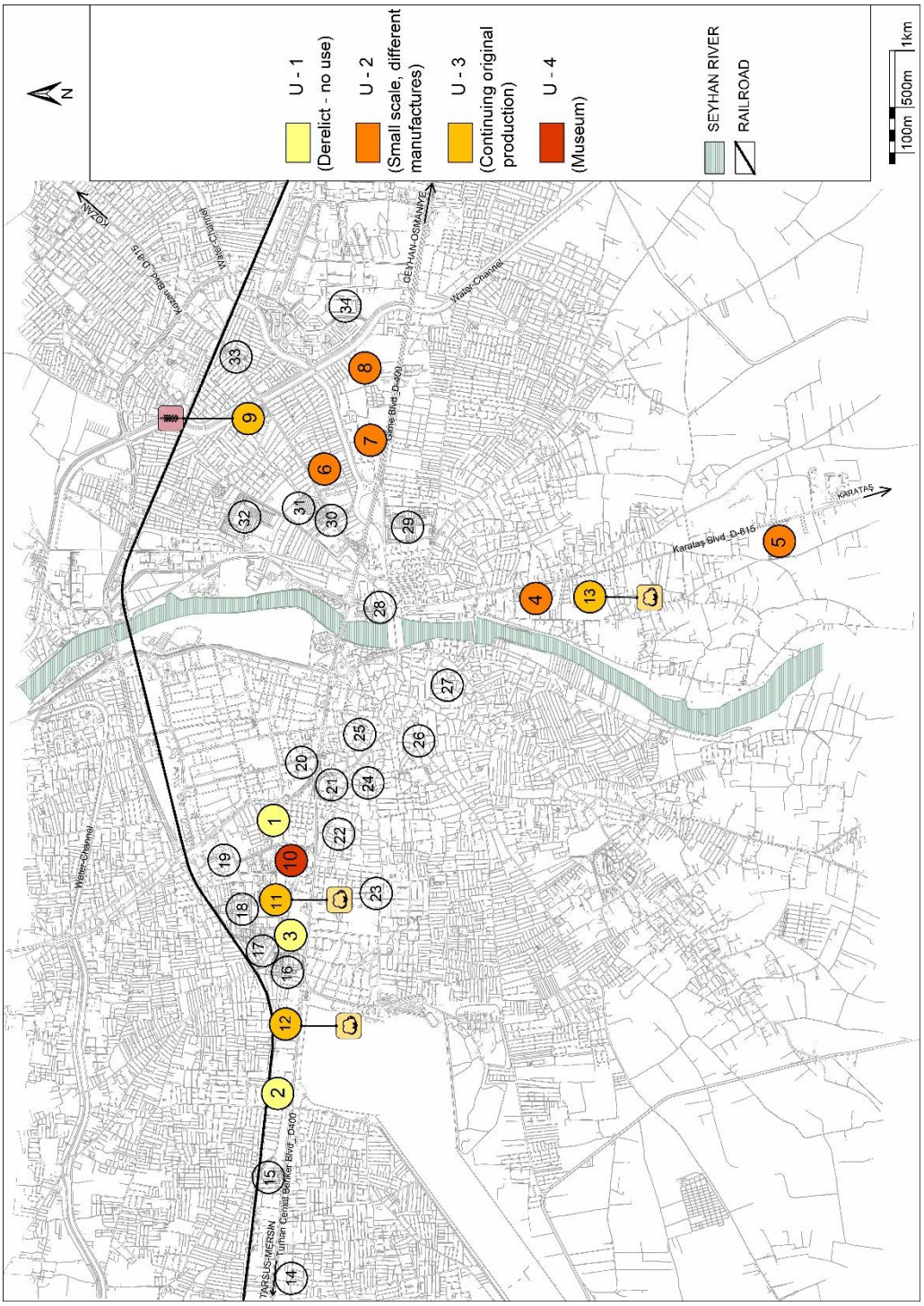


Figure 4.22. Mapping of Current Use analysis (Author, 2019)

4.4.7. Evaluation

The earliest examples of cotton-based industrial sites in Adana had been densely located in Zone-1 which is the current historical-commercial center of the city at the south part of Old Train Station. These buildings in this zone were producing ice, processing cotton as ginneries and processing wheat as flour mills. All of these sites demolished earlier than the other analyzed sites in this study[102].

The earliest examples were also established in Zone 2, close to Old Train Station. These earliest examples in this zone were mainly textile factories producing yarn when they emerged and ginning factories. The first factories in this zone were Tripani Factory (21) which is not present now, Simyonoğlu[103] (10) which is now a museum, Ulaş Çırçır[104] (1) The cotton seed oil production had emerged the latest within the types of production determined in this study. The first cotton seed oil factory was Gilodo (11) which later became MarSa that the buildings on site were mostly changed in time. Alongside these earliest examples, Eski Çukobirlik[105] and Şinasi Factory were present on sites that are planned as industrial areas by Jansen Plan.

Later the factories in this zone expanded to the west part of the planned area parallel with Mersin-Adana railroad, and current Adana-Mersin road. In the planned area during 1950s one of the largest textile factories of Adana, Güney Sanayi (18) was emerged. Other largest factory in this zone was Özbucak Textile (16) at the expansion of planned area, which both are demolished during 2010. 6 of the 12 analyzed sites are demolished in Zone 2. Two of these 6 sited are continuing their production, both of them are cotton seed oil factories[106]. Milli Mensucat (10) is being used as Adana Archaeology Museum, which is a part of the whole site. This is the completed first stage of the conservation project that implemented. The on-going restoration project

[102] 20, 21, 22, 23, 24, 25, 26 and 27 numbered factories on mappings and building sheets.
[103] Milli Mensucat.
[104] German Factory.
[105] Also named Eski Belçika/ *Old Belgium* Factory on Jansen Plan 1940.
[106] Emeksizler Nebati Yağ (12) and MarSa (11).

includes TESK[107] at the other parts of the site. (Özgönül et al., 2017:35) The other parts are under restoration. The other three factories are Ulaş Çırçır (1), Eski Çırçır (2) and Şengül Çırçır (3) are ginning factories that are not continuing their original production and these sites are derelict.

In Zone 3 all the buildings were emerged at the beginnings of 1950s. The north part of this zone was planned as industrial area in Jansen Plan, the other parts were expanded around Adana-Kozan road at the north-east and Adana- Ceyhan road at the east part. This zone included 4 of the largest of the analyzes industrial sites which were BosSa 1 (29), Aksantaş (32), Akdeniz (31) and Sümerbank (34) which were all demolished between 2007 and 2011. One of the present sites Seyhan Un (9) is continuing to produce flour, which was before oil, ginning and flour factory. The other 3 ginning factories Sadakat (6), Pati (7) and Taş Mağaza (8) are not continuing their original function and small scale manufactures are being done at the buildings of the site.

Zone 4 is the area that is between Seyhan River and Adana-Karataş road, in this zone there had been 4 cotton-based factories determined in this study. Eski BosSa (28) was producing flour and ice and processing cotton as a ginning factory. This factory was near the ancient bridge (Taş Köprü). One of the present sites Paksoy Yağ (13) is continuing production. Cumhuriyet Un (4) is a flour and ginning factory built in 1920 and Çukobirlik Mihmandar is a ginning factory with cotton-seed silo which is located on a large site. These two site are not continuing their original function and there are small scale different types of manufactures taking place on these sites now.

According to these analyses 8 cotton-based industrial sited (Figure 4.24) that buildings on sites are mostly remaining[108] and ceased functioning[109] were examined at the next title.

[107] Tarım, Sanayi, Etnografya ve Kent Müzesi – Agriculture, Industry, Ethnography, and City Museum.
[108] C-1 at current condition mappings.
[109] U-1 and U-2 at current use mappings.

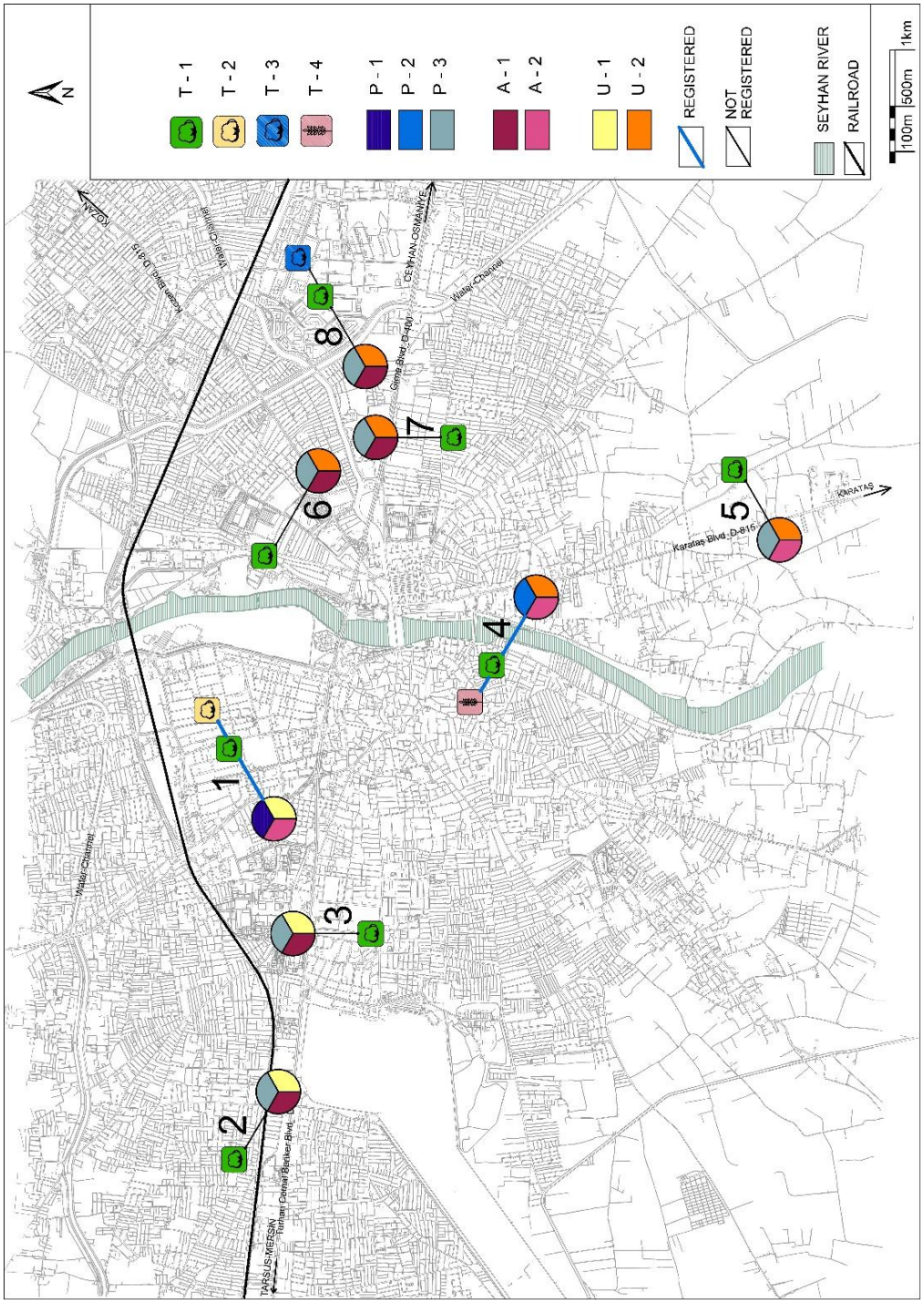


Figure 4.23. Mapping of classifications of selected sites (Author, 2019)

4.5. Analyses of Eight Cotton-based Industrial Heritage

In this part of the study, the eight of the factories were analyzed concerning the functions, construction techniques and materials of the buildings on sites. In addition, the land uses assigned and registration status, as the future decisions[110] were stated. The functions of the buildings on sites are shown on the mappings.

Ulaş Çırçır (1) is the earliest example of present ginning factories which cottonseed oil production structures are added later. The site includes a chimney and takes place at Zone 2. Ginning and storage buildings had been constructed by composite structure system, concrete skeleton and brick tile infill. The ginning factory is two-storied while storages are single. Weighing building was constructed by masonry brick tiles. The ginning factory and storages at the north east part of the site are plastered while the other storages are not. There are later additions of concrete brick walls. The chimney has a rectangular plan and built by brick tiles and plastered. The roofs of the buildings and porch storages were removed during the field study.

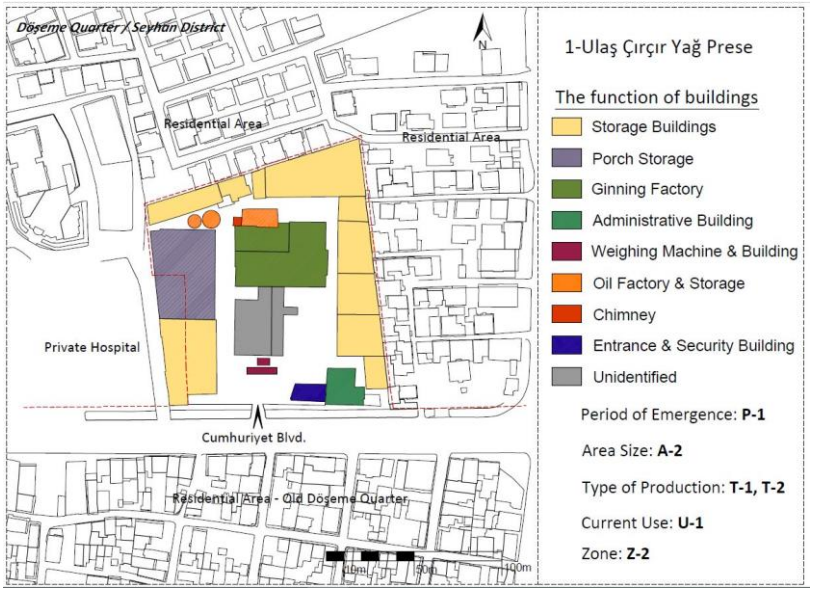


Figure 4.24. Mapping of analysis of Ulaş Çırçır Yağ Prese (Author, 2019)

[110] Images of land uses assigned by 1/1000 implementary development plans and registration sheets take place at Appendices B part of this study.

It is planned as a central business district without any height limit. Nearly half of the lot is planned as green area. ('Development Plan Seyhan', 2019) The site is registered as a cultural property. In addition to this, the site is inside the urban transformation area of Döşeme District Urban Renewal Area by 08.06.2015 dated 71 numbered decision of Seyhan Municipal Council and approved by Adana Metropolitan Municipal Council 08.09.2015 dated 263 number decisions.

Eski Çırçır (2) is the example of ginning factories that built in 1950s at Zone 2. Unlike other ginneries, due to elongated site shape the ginning factory building takes place at the side of the site.

Except for the porch storages, ginning and storage buildings had been constructed by composite structure system, concrete skeleton and brick tile masonry infill. Weighing building was constructed by masonry brick tiles. The walls of the buildings are not plastered but painted. There are entrance buildings on other sites (i.e. security, administrative…) however in this site there is not any. The roofs are pitched and roof covering material is corrugated iron.

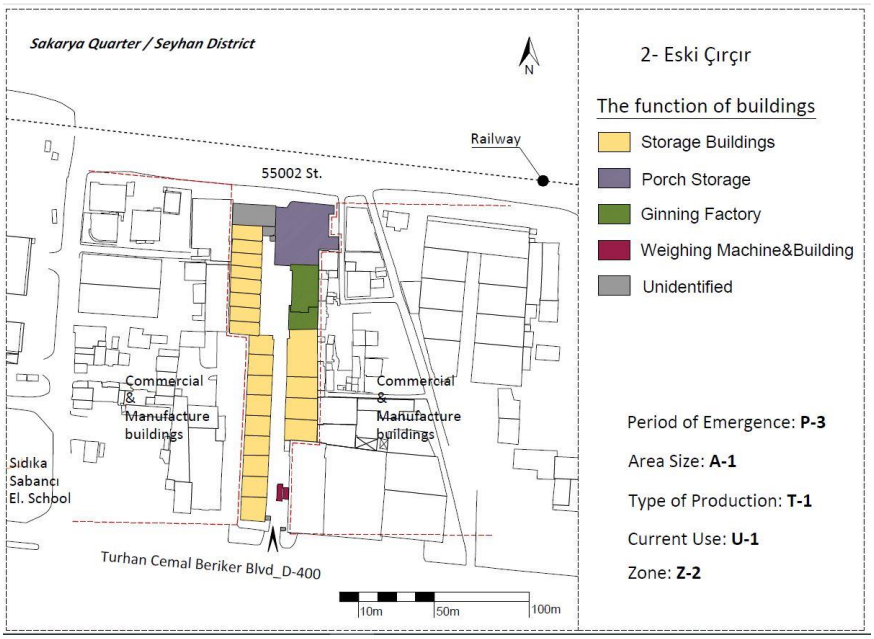


Figure 4.25. Mapping of analysis of Eski Çırçır (Author, 2019)

The site was unable to visit so that the machinery inside was not examined. The site is not registered and is planned as non-residential urban project area with 30.50m height limit with its surrounding manufacture area in Seyhan.

Şengül Çırçır (3) is an example of ginning factories built in 1950s at Zone 2. It has a typical ginning factory arrangement. There is not any machinery left at ginning factory. However, the original waterways at open areas around the ginning factory and the places of the machineries are observable.

Two storied ginning factory is constructed by composite structure system, concrete skeleton. The first floor is built with stone masonry infill and the second floor is brick tile masonry infill. The pitched monitor roof is covered with corrugated iron and built with timber trusses. The storage buildings are constructed by stone masonry with concrete bond beams. In this buildings gable walls are built with brick tile masonry. The roofs of the storages are pitched roof with timber trusses and covered with corrugated iron. These buildings are not plastered while the buildings at the entrance (i.e. housing, weighing building…) are plastered.

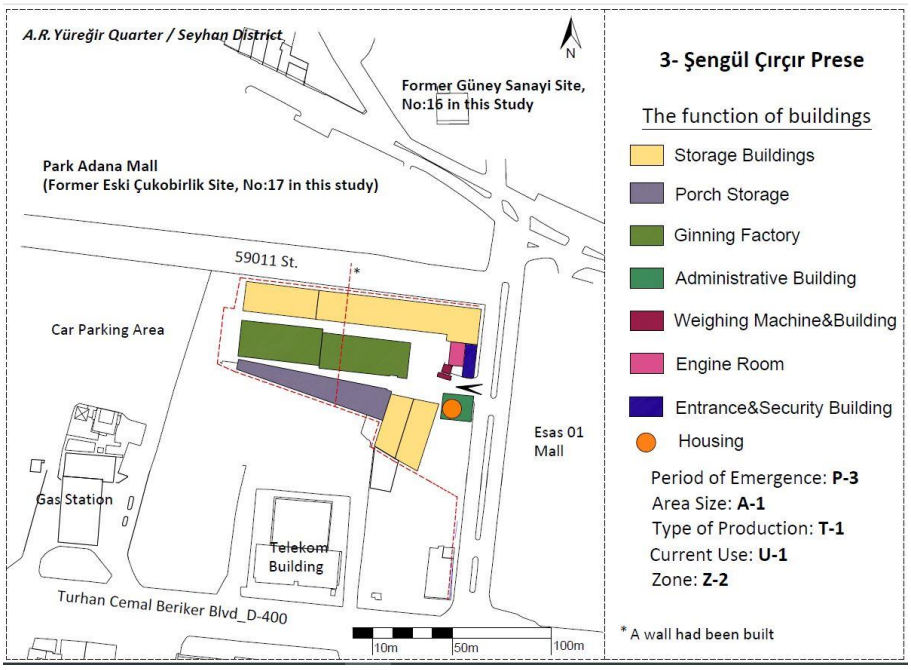


Figure 4.26. Mapping of analysis of Şengül Çırçır (Author, 2019)

The site is not registered and the future decision provides the division of the site. The land use assigned is central business area without height limit and half of the site is planned as green area in Seyhan.

Cumhuriyet Un Çırçır (4) is flour and ginning factory, firstly built as flour factory in 1920 and ginning function added later, the site is located at Zone 4.

The flour factory and silo buildings are nearly 8 storied. These buildings are plastered and pitched roof covering materials are roof tiles. There are pointed arch openings at the first floors of Administrative, Ginning Factory and Flour factory. The two storied ginning factory was constructed by composite structure system, concrete skeleton. The roof of this factory is pitched monitor roof covered with corrugated iron material. The storages, which are partly observed from the entrance, are constructed by stone masonry with concrete bond beams

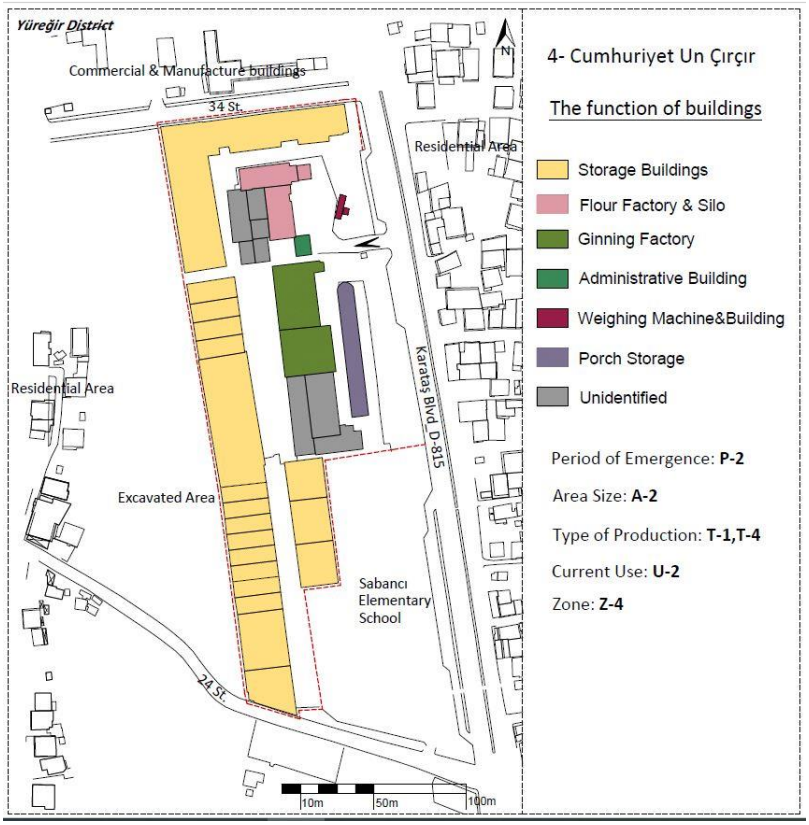


Figure 4.27. Mapping of analysis of Cumhuriyet Un Çırçır (Author, 2019)

The site is at the first stage of Yüreğir implementary development plan. This stage has been approved by Adana metropolitan municipal council with 14.05.2018 dated 313 number decision and Yüreğir municipal council with 05.09.2018 dated 58 numbered decision latest. This site is planned as a social facility area; it is registered as a cultural property. This site is at risk because of the damages caused by small scale manufacture's taking place at the buildings. While compared with the photos at the registration sheet, the pointed arch openings of the ginning factory had been closed by an additional wall that is plastered.

Çukobirlik Mihmandar (5) is an example of ginning that was built in 1950's at Z-4. However, it has a typical ginning factory arrangement; it is different at size as the largest. Also it is a more complex site with the social and administrative buildings, than the other ginneries in Adana. It is one of the sites of Çukobirlik Cooperative's cotton network around the region.

Figure 4.28. Mapping of analysis of Çukobirlik Mihmandar (Author, 2019)

The two storied ginning factory, administrative building and social buildings are built with composite structure system with concrete skeleton. These buildings are partly plastered and some walls are exposed brick tiles. These buildings are flat roofed. The storage buildings at the north part of the site are constructed by stone masonry with concrete bond beams. In this buildings gable walls are built with brick tile masonry. The other storage buildings are constructed with concrete skeleton and brick tile infill with flat roofs. There are cotton seed silo and the bunker at the site.

The site is not registered and the small scale manufactures poses risks for the buildings. In addition, the future decision provides the division of the site. is also at the first stage of Yüreğir plan. In this plan the parcel of the site is divided and the part close to the road is planned as commercial-residential while the other parts are planned as a low-density residential area with 12 storried height limit. This is the only site that has unity concerning the design of weighing building and entrance building, also ginning factory, social and administrative building and storages at the south are designed in unity.

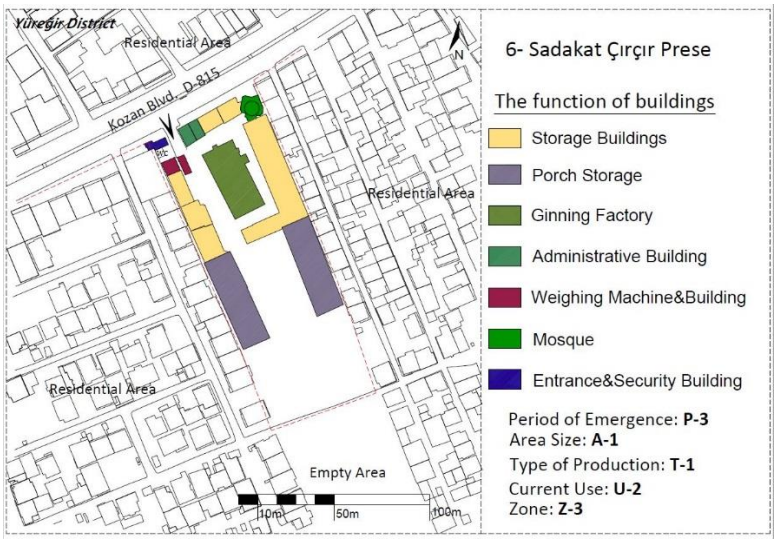


Figure 4.29. Mapping of analysis of Sadakat Çırçır Prese (Author, 2019)

Sadakat Çırçır (6) is the example of ginning factories that was built in 1950's at Zone 3. There is not any machinery left except for the weighing machine, however in 2011

there were the saw-gin machines at the ginning factory, it has a typical ginning site arrangement and also different from other ginneries there is a mosque at the site.

Two storied ginning factory is constructed by composite structure system, concrete skeleton. The first floor is built with brick masonry infill and there are additional concrete block additions at the second floor. The pitched roof is covered with corrugated iron and built with steel trusses which was seemed as a later addition. The storage buildings are constructed by stone masonry with concrete bond beams, in some parts the walls are changed with concrete blocks. The roofs of the storages are pitched roof and covered with corrugated iron. These buildings are not plastered while the buildings at the entrance (i.e. administrative and weighing building, mosque…) are plastered.

The site is not registered and the future decision does not provide the division of the site. is at the Kozan Road stage of Yüreğir plan. This stage has been approved by Adana metropolitan municipal council with 14.05.2018 dated 328 number decision and Yüreğir municipal council with 05.09.2018 dated 57 number decision. This site is planned as a high-density residential area with 13 storey limit and at the roadside as commercial-residential area. There are roads at the east and west side of the site on the plan.

Pati Çırçır (7) is the example of ginning factories that was built in the 1950's at Zone 3. There is not any machinery left except for the weighing machine and it has a typical ginning site arrangement except the weighing machine and building are outside the entrance.

Two storied ginning factory is constructed by composite structure system, concrete skeleton. with brick masonry infill. The pitched monitor roof is covered with corrugated iron and built with timber trusses. The storage buildings are constructed by brick tile masonry with concrete bond beams, in some parts (storages at the west) the walls are stone masonry. These buildings are not plastered but painted, while the single

storied buildings at the entrance (i.e. administrative and weighing building, dorm…) are plastered.

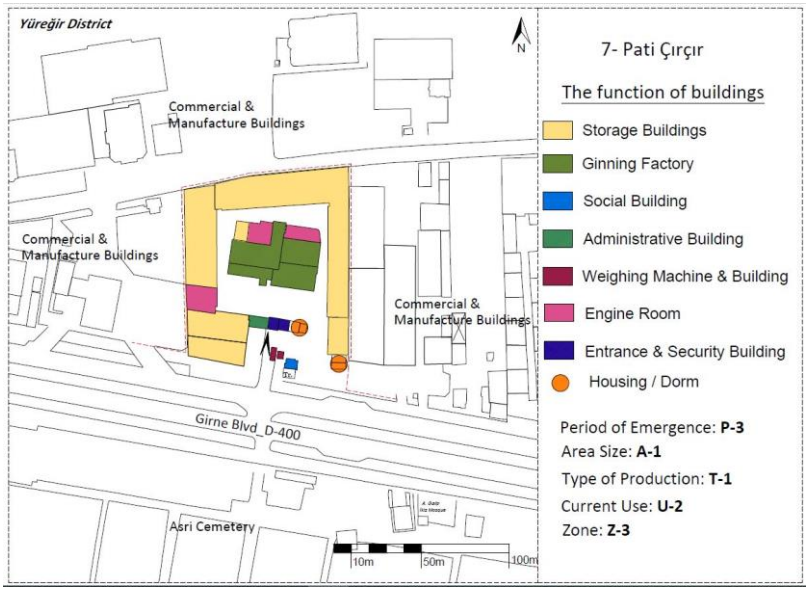


Figure 4.30. Mapping of analysis of Pati Çırçır (Author, 2019)

The site is not registered and the future decision does not provide the division of the site. is at the sixth stage of Yüreğir plan. This stage has been approved by Adana metropolitan municipal council with 14.05.2018 dated 327 numbered decision and Yüreğir municipal council with 05.09.2018 dated 61 numbered decision. The site is planned as a commercial area without height limit.

Taş Mağaza Çırçır (8) is the example of ginning factories that was built in 1950's at Zone 3 with later yarning workshop addition. The site was not able to visit all the buildings.

Two storied ginning factory, single storied yarn factory, administrative, dorm and entrance buildings are plastered with flat roofs. Storage buildings are constructed with composite structural system with stone infill and have flat roofs. The site is not registered and the future decision does not provide the division of the site. It is at the sixth stage of Yüreğir plan. This site is planned as non-residential urban project area with 30.50 m height limit.

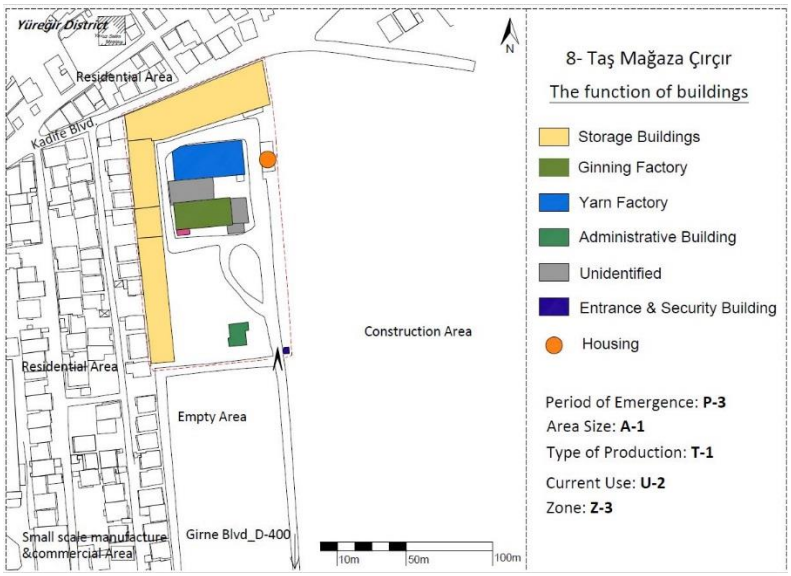


Figure 4.31. Mapping of analysis of Taş Mağaza Çırçır (Author, 2019)

4.6. Value Assessment for Cotton-based Industrial Heritage

The values can be embodied or represented in the materials or elements of buildings and sites, though some values can be immaterial to be linked to a specific physical element (Mason, 2002:24; Orbaşlı, 2008:38). Some of the values stated below were linked physically and particularly to structures or buildings, while some were less tangible and attributed to all.

The values of the sites were grouped mainly as; Historical Values, Environmental Values, Social-Cultural Values and Economic (Re-use) value. Some of the values stated below may seem similar however, a wide range of values may encounter different stakeholders, experts, institutions or groups of people. So that further studies and decisions of conservation may differ and enhance. (Mason, 2002:11)

Historical Values of cultural heritage is being the testimony and record of past because of a specific event or change, experience and progress (Madran& Özgönül, 2005:62). The historical value of industrial heritage is cited as being records of actions that caused and still causing thorough historical results (‘The Nizhny Tagil Charter’,

2003:1). In this case, all of the eight factories are the physical remains, which are the testimonies of progress of cotton-based industry and development of the city in the past. They can also be interpreted as a component of industrial history of Turkey. The values grouped as historical values are:

- **Technical Value** of industrial heritage defined as being important in construction, production and engineering history ('The Nizhny Tagil Charter', 2003:1). In this case, as stated while defining the group value below, the process of production can be seen with the arrangement of buildings on factory sites. However, there is not machinery left at most of the sites except for the weighing machines, the places of ginning machines are apparent. The present sites are from every period, that were determined at the period of emergence analysis in this study. This is also important to be able to follow the development of industry and construction techniques in time regarding all of the sites.

- **Documentary Value** is related to the archival, documentary and research potential considering the technical-scientific and socio-cultural qualities of the sites, as being the records of the past developments and experiences to be studied (Mason, 2000:11; Madran & Özgönül, 2005:74). In this case, the textile buildings in the city had been studied before, also they are being planned to be studied by DGA Lab's inventory project which is stated in the second chapter of this study (see Figure 2.16 at page 38).

- **Educational Value** is value based on gaining knowledge about the qualities and significance of the cultural heritage of the past which is related to the documentary value. (Mason, 2000:11; Madran & Özgönül, 2005:73) In this case, the factories offer the cited opportunities.

- **Age Value,** defines the oldness of cultural heritage (Orbaşlı, 2008:40). In this case this value can be attributed to Ulaş Çırçır (1) and Cumhuriyet Un Çırçır (4). The former had been emerged in 1901 and the latter in 1920. These sites are the earliest built factories that are present, while compared to the other present cotton-based factories in Adana according to the *period of emergence* analysis. There had been 10 factories determined at study area which had been built at the same period with Ulaş Çırçır (1), however only remaining site from this period is this site. There had been six factories from the same period with Cumhuriyet Un (4), four of them were demolished. Other present site from this period is MarSa (11) [111] which the buildings on site were mostly modified in time.

- **Authenticity in Design** involves the significance of cultural heritage in design of planning and architecture. In this case authenticity in design is determined as group value, and architectural-aesthetic values.

    - **Group Value** defines the heritage value of co-existence of structures or layers of remains of cultural heritage; in this case this is related to the industrial production processes (Madran & Özgönül, 2005:170). The varying *type of production* at the factory sites was analyzed in this study. The buildings on sites are the places that production processes occurred.

This process can be examined by the arrangement of structures on sites, according to the *analyses of the selected sites* concerning their functions, as: The unseeded cotton from the croplands enters the site by passing from *weighing machine and buildings*. The unseeded cotton is stored at the *storage buildings* which are mostly located at the sides of the sites until ginning. The unseeded cotton is processed at the second floor of *ginning factories* by ginning machines which is detaching the fibers and seeds for different manufacture purposes. Later the fiber parts are pressed at the first floors of these buildings. The pressed cotton as bales and cotton seeds are stored at *porch*

[111] Established as Gilodo name.

storages and exit the site for other processes of manufacture by passing from the *weighing machine and buildings.*

These arrangements of the buildings as a group are seen at factories with ginning functions. At Şengül Çırçır Prese (3), Sadakat Çırçır Prese (6) and Pati Çırçır (7) the ginning factories are located at the center of the site. At Eski Çırçır (2) the ginning factory is located at the side of the site due to elongated parcel shape. At Ulaş Çırçır Yağ Prese (1) site, there are oil storage structures that are built later. Taş Mağaza Çırçır (8) includes yarning factory built later. Çukobirlik Mihmandar (5) site involves also a *cotton seed silo and bunker* as being the largest site with ginning facility. Cumhuriyet Un Çırçır (4) includes both *flour factory and silo building* and *ginning factory and storages.* This co-existence of flour and cotton based production is seen also at the demolished Eski BosSa (28) and present Seyhan Un (9) factory that is functioning. This co-existence of ginning and flour factory can be caused by the seasonal work of the ginneries or crop-rotation system (cotton-wheat) of the agricultural lands.

The coexistence of building categories related with the production types, and also the coexistence of factories at the *zones* are the group values of all factories.

- **Architectural-Aesthetic Value,** architectural value defines the qualities of buildings or elements of architectural features, and aesthetic value is one of the most personal values that is related with the observed qualities (Mason, 2002:12). In this case, not all of the buildings on factories were constructed by aesthetic concerns. Most of them were built related with the needs of the industrial production taking place at the buiildings. The material, construction techniques and the arrangement of the buildings produce their distinctive qualities, while compared to other buildings of commercial or residential functions. These characteristics of the buildings define the architectural and aesthetic values of the factories.

All of the factories have both open areas and built areas. The architectural qualities are changing according to function of the buildings. To illustrate, ginning factories have monitor pitched roofs[112] due to the need of light for processing cotton, and these buildings are two storied due to the press machines take place at the ground floor. Flat roofed ginning factories[113] have clerestory windows on the walls.

The storage buildings mostly involve openings of large storage doors except from the window openings. These buildings have pitched roofs and composite structure system of concrete skeleton or bond beams, filled with brick tiles or/and stone masonry. The back walls of the storage buildings also determine the boundaries of the factories except entrance.

The arrangement of ginning factories represents a typological organization due to processes occurring on sites. They also have peculiar qualities. To illustrate, Çukobirlik Mihmandar (5) is a ginning site built on the largest area, most of the buildings of on this site were built in unity concerning the material and forms of the buildings. Also the pointed arched openings at the ground floor façades of flour factory, administrative building and ginning factory are in unity in design at Cumhuriyet Un Çırçır (4) site.

There are some distinctive buildings on factories. Such as Sadakat Çırçır (6) involves a mosque which can be entered from the outside and inside of the site. Pati Çırçır (7) involves dorm, and the weighing machine and building is outside the entrance of the site. At the small scale ginning factories in addition to typical elements, the entrance buildings (i.e. security, weighing machine, administrative rooms or buildings) are more elaborated while compared to storages. The entrances of the factories are large for the entrance of the vehicles.

[112] Pati Çırçır (7), Şengül Çırçır Prese (3) and Cumhuriyet Un Çırçır (4).
[113] Taş Mağaza Çırçır (8) and Çukobirlik Mihmandar (5).

Since the architectural assets remaining from the older civilizations are limited at the historic city center and the newly built areas present uniformity of apartment blocks, the architectural and aesthetic values of these factories enriches the appearance of the city as the industrial buildings of 20th century modern architectural heritage.

Environmental Values are in the most general sense, the significance of this production both in the agricultural and industrial processes for the urban and the rural areas of Adana and Çukurova region.

Unlike the other cities of Turkey such as the ones that are shaped by the republican regime or the ones that are developed in usual progress, Adana owes its development to the international market that American Civil War activated when it's focused on the urban development histories of the cities. The acceleration acquired with this development, Adana shaped quickly between the last quarter of the 19th century and Republican Period. The development of the urban area around the industrial district that is shaped near Old Train Station in the 1880s is a piece of evidence for this. Çukurova region turned into the most important region of cotton 'monoculture' and industry investments during 1950s in Turkey (Toksöz &Yalçın, 1999:446, Toksöz, 2010:1) This also changed people's life and altered civic life socially and culturally.

- **Regional Significance**: Regionally cotton manufacture of agriculture at first and then industry had changed the demographic structure of the region from 'the forced settlements' to the 'voluntary', from the 'seasonal migrations' (Figure 4.32) to the 'permanent' at the urban area and around the city. In addition to the examined factories in the study area, there have been other cotton-based industrial heritage around the city. Some of them, such as Çukobirlik Headquarters on the road of Tarsus-Adana and ginning factory at Tarsus which is now used as Gözlükule Research Center were mentioned in the previous parts of the study. Also it shoud be noted that Çukobirlik Mihmandar (5) is a large ginning factory that is one of the factories of the

Çukobirlik Cooperative network. There are 10 ginning plants of Çukobirlik, which are also located beyond the boundaries of Çukurova.[114]

Figure 4.32. The illustration[115] of Oral, cotton-picker's seasonal migration (Oral & Öymen, 2018:68)

- **Urban Significance:** Adana is a city formed on the fertile lands of Çukurova, for a long period of time the economy of the city hinged on agriculture and agricultural industry that the vast majority was cotton production. Largest factories like BosSa 1 (29), and Güney Sanayi (18), which are not present now, had been factories[116] that thousands of people labored with 3 times work shifts a day, nearly for 55 years. The life inside and around all of the cotton-based factories were experienced by many people in the city. Even with their physical presence, these sites cover large fields during the 1960s urban area of Adana and the emergence of the periods of the factories are parallel with the urban growth (Figure 4.33). The cotton-based industrial heritage should also have impacts on people who worked and experienced the factories and also the residents of the city. Madran states about the urban identity of Adana as, the city is multilayered and multicultural, one of the first cities that was planned, a city of river, agriculture and industry. (Madran, 2011:532-533) These cotton-

[114] There are ginning plants of Çukobirlik in Adıyaman, Diyarbakır, Reyhanlı… (Çukobirlik Tarihçe, n.d.) One in study area Eski Çukobirlik (17) had been demolished, the others are not known.
[115] It is cited 'Adananın yolları', *'Roads of Adana'*.
[116] http://blog.milliyet.com.tr/dev-fabrikalar-alisveris-merkezine-donusuyor/Blog/?BlogNo=114750

based factories as the places of agricultural and industrial production are also an important component of urban identity.

- **Rarity Value** defines the uncommon and rare elements or buildings (Orbaşlı, 2008:40). This value can be assessed by comparison. In this case, the comparison can be done within the analyzed factories in the study area. The chimney of Ulaş Çırçır is the only chimney observed at the analyses of eight factories. As the oldest factory within the industrial heritage, at the earlier periods the factory was producing power while electricity power was used at the other sites for manufacture. The chimney is square planned; chimney of Eski BosSa (28) factory is another structure left in studied area which has round plan and still standing at the site of HiltonSa Hotel. The ginning factories having typical building arrangement also have distinctive buildings as stated in group value. Cumhuriyet Un Çırçır (4) as the earliest remaining flour and ginning factory is rare in façade design.

- **Multiplicity Value** defines the plurality of typical elements or structures of cultural heritage in a setting or a place (Madran & Özgönül, 2005:171). In this case, even the number of present sites is fewer than the quarter of the factories that were once present; there are examples of different periods, at different zones with different type of cotton-based production according to the analyses. The plurality of industrial heritage also represents distribution and intensity of the zones they emerged, related with the urban planning of the past of the city. The factories have common and and distinctive characteristics. To illustrate, the arrangement of ginning factories is common, however their construction techniques and materials may differ.

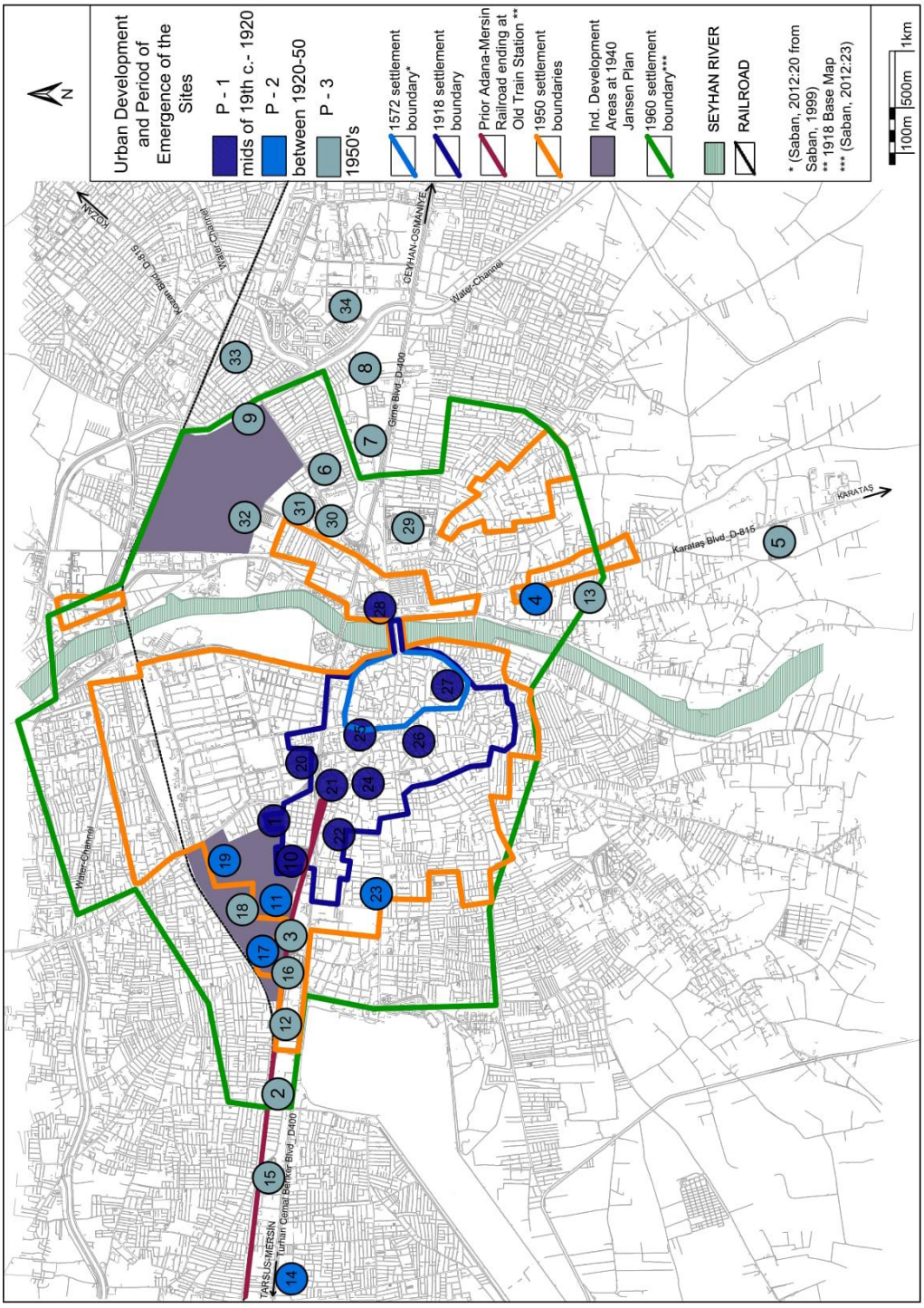


Figure 4.33. Map of urban development and period of emergence of the factories (Author, 2019)

- **Location and Setting Significance:** The remaining factories are located at the zones where once cotton-based and other types of industrial buildings were densely present. These factories also shaped the settings and neighborhoods where they were built. The industrial heritage can also be interpreted as the reflection of industrial characteristics of the zones (Zone 2 in Figure 4.34) they emerged.

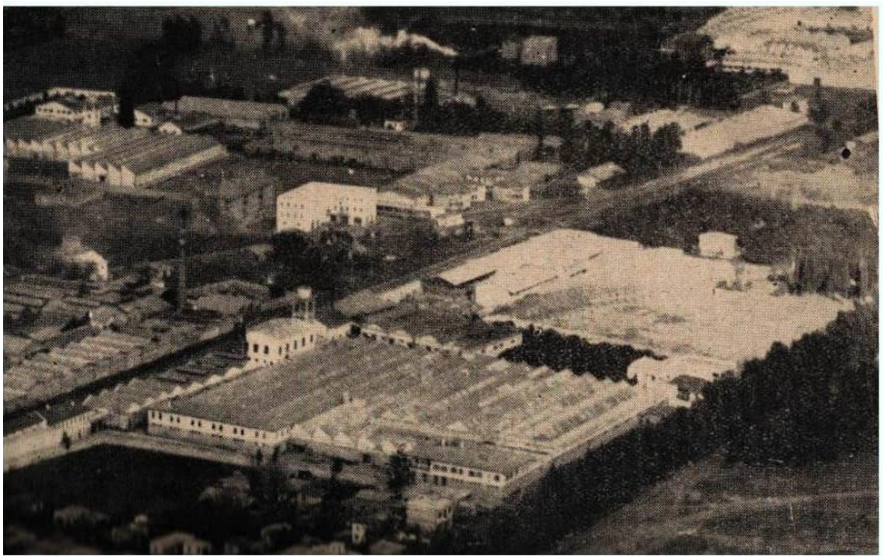


Figure 4.34. An old photo of a part of Zone 2 (Anonymous, 2014:45)

Social-Cultural Values of industrial heritage is defined as being evidence of the way of life of ordinary people of societies that also creates the impression of identity. ('The Nizhny Tagil Charter', 2003:2) In this case, social-cultural values can be attributed to all factories as they are the tangible remains and industrial places of a production that created social and cultural impacts. These impacts were cited above while defining the environmental values, and social-cultural values are determined as political and memory value.

- **Political Value** of cultural heritage can be defined as the possibility to be used as a political tool to enforce political ideologies by the symbolic meaning of

the heritage. In addition, industrial heritage reflects the political processes at work. These political reflections can be physically apparent at the places of work or surroundings. The industrial sites as the places of labor also reveals the class ideologies. (Barthel, 1998:346, Mason, 2002:11; Orbaşlı, 2008:42)

In this case, the development of cotton-based industrial heritage reflects the political shifts in historical context. To illustrate the earliest built factory that is present Ulaş Çırçır (1), had been established as German Factory when foreign capital was dominant at production and cotton was broadly exported. The factory was bought by France after WWI as a war compensation, after the foundation of the Republic of Turkey the factory was bought by the state and later sold to a private company. (Varlık et al, 2008:90) The political shifts can be seen at the ownership transfers or establishments of the factories.

Moreover, while industry created labor force, it also created rich investors. The characters of the 1950s and 1960s Turkish movies were landlords and factory owners from Adana. In addition, the struggles that labor of cotton agriculture and industry faced were treated by the movies and novels. (Emiroğlu, 2012:268; Toksöz, 2010:204; Öymen & Oral, 2018:65)

This can also be seen at Oral's illustrations that the first treats the 'cotton's evolution' (Figure 4.35). The other is the illustration (Figure 4.36) of general image of Adana in 1980s[117], which remarks the dominance of countrywide famous capitalist holding Sabancı[118]'s buildings and factories' in the city.

- **Memory Value** of the cultural heritage is anchoring the collective memory of people as concrete testimony of the past. (Barthel, 1996:345) Studies showed that individual and collective memory is not like the storage of computers, for remembering indicator is needed. (Neyzi, 2014:1) Collective memory has a

[117] The book covers the observations and interviews done by the authors at the beginnings of 1980s as a serial of Cumhuriyet Newspaper. (Oral & Öymen, 2018)
[118] The companies and factories were including the first two letters SA, such as: BosSA and SaSA.

strong relationship with places and urban spaces, and spatial images that forms and shapes recalling. (Halbwachs, 2017: 152-153) Also forgetting is related to places and the rapid transformation of urban architecture is one of the reasons that lead societies forget. (Connerton, 2009:15)

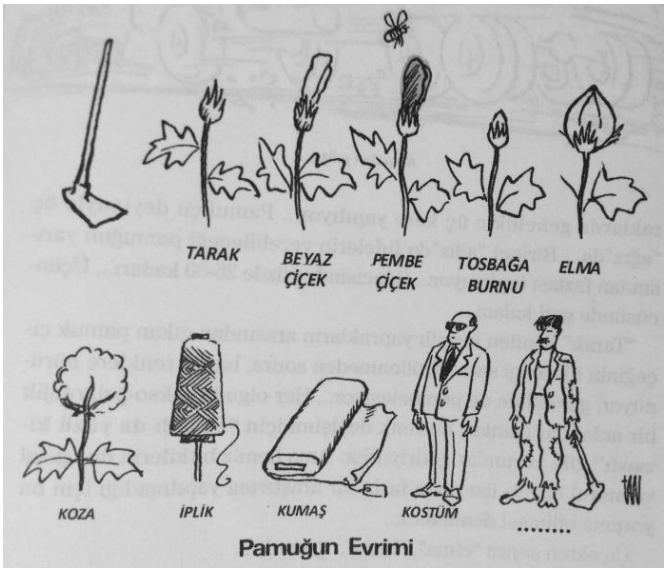


Figure 4.35. The illustration[119] of Oral, 'Evolution of Cotton' (Oral & Öymen, 2018:67)

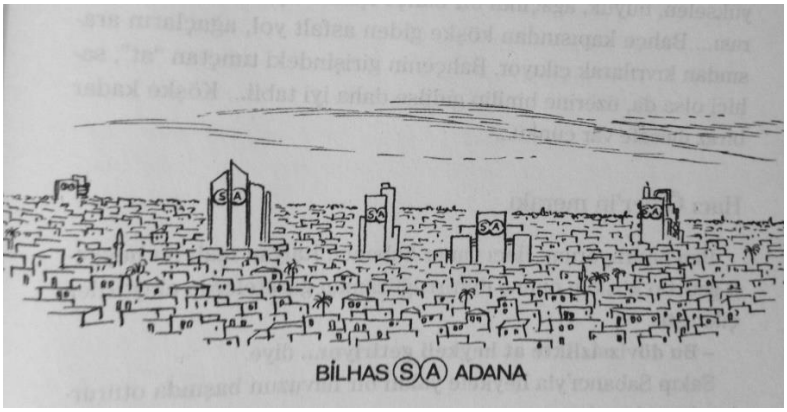


Figure 4.36. The illustration[120] of Oral, a general view from Adana in 1980s (Oral & Öymen, 2018:67)

[119] The local names given to cotton plant's growth stages are cited at the illustration, *tarak*: rake, *beyaz çiçek:* white flower, *pembe çiçek:* pink flower, *tosbağa burnu:* tortoise nose, *elma*: apple, *koza:* boll. And also *iplik:* yarn, *kumaş:* fabric, *kostüm:* suit and …

[120] 'Bilhassa' means especially and exclusively in Turkish.

In this case, the impacts and importance of industrial and agricultural production for the city and people of the city were cited. The cotton-based industrial heritage, as being the production and workplaces of this importance can be interpreted as the anchors of the past and indicators of remembering also. The physical appearance, the work inside and life around these factories were experienced by people live in the city. These experiences and the places should have left marks on people's mind. In addition, the cultural imprints of the cotton agriculture and based industry can be seen at the works of art. [121] This is also acknowledged by people by these novels and movies. This acknowledgment associated with Adana and Çukurova should also have impacts on people's mind, who also inhabit outside the city and the region.

In addition to these values, **economic value** can be elicited by different tools of methodologies rather than the ones of this study used. (Mason, 2002:15-22) The value is classified by Mason as, use, non-use and bequest value. While different tools are used in this study, the economic value can be interpreted as the re-use value of cotton-based industrial sites because they ceased their original function. The factories offer this opportunity due to their location, which are also accessible to urban infrastructure.

To sum up, in this chapter firstly the general information about Adana, development of the urban area, cotton-based agriculture and industry were examined. The emergence of the cotton-based industry in Adana was strongly related to the commercialization of cotton cultivation in the city around the 1850s. The cotton agriculture created the necessity of labor, until this era people were not living in Çukurova plain, they were mostly nomads living in the mountainous areas. The city and the plain was 'almost inhabited marshland in 1800'[122]. The people started to settle in the plain area related to this agricultural production.

[121] As stated in '4.2.2. Development of Cotton Agriculture and Industry in Adana' part of this study, the agricultural and industrial production and their socio-cultural impacts were treated by the artists, and the cotton is used as symbols of local institutions and annual film festival of the city.
[122] (Toksöz, 2010:1)

While considering the emergence of industry in Adana, as a raw material supplier to the 'English cord' [123] and foreign markets for textiles, the ginneries established in today's historical-commercial city center at first. During this era, the inventions in the textile industry had been advanced in western Europe. Later at the beginnings of the 20th century first large textile factories have emerged Milli Mensucat and Tripani around the old train station in Adana. Between 1908 and 1923, occupation and wars occurred and ethnicity of bourgeois elements started to change[124]. Until the 1950s there were factories established producing oil from cotton-seed and also ginning factories continued to be built. Some of the factories were bought by the state. To illustrate Tripani factory was bought by Sümerbank. In 1950s large integrated textile factories[125] were emerged, in different parts of the city. The decrease in the industrial and agricultural production of cotton, related to global and national changes in the economy caused the sites to cease functioning. Furthermore, with the extension of urban area the factories remained in the center of the city.

Secondly, the information about the 34 factories were were cited and these sites were analysed in urban context. There are 13 remaining factories at the study area and eight of them ceased functioning. These eight factories[126] were analyzed in site scale regarding the function, construction techniques and material of the buildings on sites. Finally, the heritage values of the industrial heritage determined. These values are:

- Historical Values (Technical, Documentary, Educational, Age Value Authenticity in Design involving Group and Architectural-Aesthetic Values),
- Environmental Values (Regional Significance, Urban Significance involving Multiplicity and Rarity Values, Location and Setting Significance),

[123] (Emiroğlu, 2012:270).
[124] (Toksöz, 2010:202).
[125] Such as: BosSa, Güney Sanayi, Aksantaş.
[126] Ulaş Çırçır, Eski Çırçır, Şengül Çırçır Prese, Cumhuriyet Un Çırçır, Çukobirlik Mihmandar, Sadakat Çırçır, Pati Çırçır and Taş Mağaza Çırçır factories.

- Social-Cultural Values (Political and Memory Values),
- Economic (Re-use) value

It should be noted that the heritage values assessed are outcomes of the research and analyses that this study covered for the case. These heritage values are relevant with the studied cotton-based industrial heritage in Adana. The heritage values were reffered to the values sorted by the scholars and organizations, which is illustrated in Figure 4.37 below.

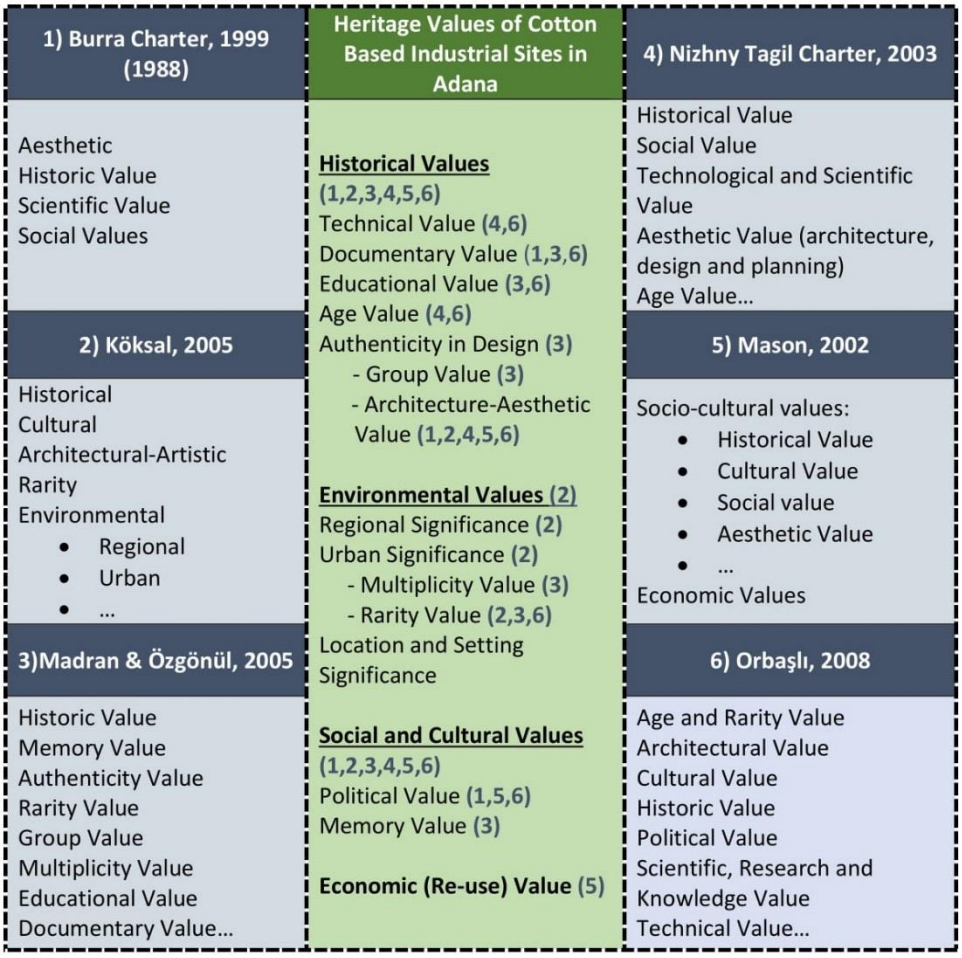


Figure 4.37. Heritage values of cotton-based industrial heritage and referred sources (Author, 2019)

CHAPTER 5

CONCLUSION

The industrial revolution is a phenomenon that leads developments afterward, which created impacts by shaping landscapes of urban and rural environments. Moreover, due to industrial revolution and industrialization, our present culture evolved and way of livings changed throughout the world. Economic shifts and rapid urban growth affected the situation of industrial buildings and sites. Industrial heritage which ceased functioning mainly due to financial, environmental and technical reasons started to be at the risk of demolishment and decay. Thus industrial heritage became a matter of conservation of cultural heritage.

Considering the appreciation of 'industrial heritage' in Turkey, the legislative framework can be cited as insufficient, that 'the law on the conservation of cultural property' does not cover a definition of industrial heritage and heritage values. In the case study, cotton-based industrial sites in Adana were covered. 34 factories were determined during field studies and research. 13 of the sites are present now, 3 of these sites are legally listed as cultural property, only one of these is being conserved. This situation showed that the heritage values of these sites were ignored or not appreciated.

The assessment of cultural heritage values in historical context, there had always been attitudes towards historic structures to protect them. The values of cultural heritage appreciated were mostly 'aesthetic' and 'historic' values. Moreover, to protect a historic structure was also used as a tool to undermine or glorify a period related to the dominant ideologies of the era. Conservation of cultural heritage had become scientific field, and there are studies of scholars and organizations about the assessment of cultural heritage. In this study, these publications were examined and

referred to determine the heritage values of the case[127], after understanding the case by research, field study and analyses.

The case of this study was conducted after examining the two conceptual frameworks to search the answers of the questions leaded at the 'aim of the study'. The information collected at literature survey and field studies were cited, and treated by analyses. In order to understand the context, general information about the town, recent history related with the agricultural and industrial development of cotton production, and urban development of the city were cited and examined. The information collected about the factories according to field studies and literature survey were stated, and treated by the analyses. The common and distinctive features, distribution and intensity of the industrial heritage were determined by the use of mappings of analyses in urban scale. By use of these tools, the sites were evaluated and present eight sites which ceased production were analysed in site scale concerning the buildings at factories.

Therefore, finally heritage values assessed to the cotton-based industrial heritage. These values are: Historical Values (Technical, Documentary, Educational, Age Values, and Authenticity in Design involving Group and Architectural- Aesthetic Values), Environmental Values (Regional Significance, Urban Significance involving Multiplicity and Rarity Values, Location and Setting Significance), Social-Cultural Values (Political and Memory Values), and Economic values (Re-use value).

The 'understanding cultural significance'[128] of a place is the first stage of 'Burra Charter Process: steps in planning and managing a place of cultural significance'[129]. According to this process after assessing the cultural significance, the following steps should be 'develop policy' and 'manage in accordance with policy'. It is also

[127] See Figure 4.37.
[128] This first step is widened as 'understand place' (explained in Article 5-7, 12, 26 of the Charter) and 'assess cultural significance' (explained in Article 26 of the Charter).
[129] Burra Charter, 2013.

recommended to involve ‘community’ and ‘stakeholders’ in every stage of the process.

The heritage values elicited were widened under main groupings stated above, because conservation process may interest different stakeholders, institutions, people and disciplines. Historical values were widened as the values are related with historical context and each may concern diverse disciplines about documentation and conservation decisions. Within the social values, political and social values may concern different groups of people or specialists in documentation and conservation practice. Environmental values were classified related with the scale of places, because regional value may interest regional institutions or stakeholders, while urban values may produce engagement of others. To illustrate, in case of conservation implementation in regional scale such as Ruhr Region[130], the stakeholders to involve in the conservation process may differ. Economic values can be elicited by other methodologies and tools rather than this study conducted, however it is interpreted as the re-use value for developing conservation policies.

Regarding these values, age, authenticity in design (group, and architectural-aesthetic), multiplicity, and rarity values were physically linked to specific sites or structures according to the analyses done in urban scale[131] and site scale[132] in this study. At the previous chapter, while defining these values the analyses that were utilized were refered. Technical, documentary, educational, political, memory, and environmental values were attributed to all sites and some determined immaterial. By further studies with the involvement of methodologies of diverse disciplines such as: measured drawings, interviews, and archival studies, these values may be linked to a specific site or an element, and also definition and range of values may enhance. The cotton-based industrial heritage in Adana is also modern architectural heritage of the 20th century.

[130] Stated in Chapter 2 of this study.
[131] Area, type of production, period of emergence, current condition and current use analyses.
[132] Analyses of selected 8 sites.

Moreover, the heritage values of demolished factories[133] which are not present now, may be revealed and reclaimed related with urban identity and memory. By further through examinations, these factories can be to be integrated and presented by future cultural heritage conservation implementations and studies.

In conclusion, the assessment of cultural heritage determines the approaches of implications of protecting the heritage, and guides 'how' and 'why' to conserve. The wide range of heritage values of a landscape, buildings or a structure may interest different institutions and disciplines. As the effects of industrial revolution and industrialization had been in many ways, the multidisciplinary characteristic of industrial heritage also creates the need of diverse disciplines to involve in the processes of value assessment and conservation of industrial heritage. Recently, it is underlined by Sevilla Charter [134], as 'avoiding the predominance of one single disciplinary focus'.

It should be noted that there is no single heritage value of a place or only one authority to determine heritage values. The significance of cultural heritage and values may change in time according to people, amount of information[135], and disciplines. Broader examinations, studies, and definitions of cultural heritage values procure the richness of cultural heritage. Moreover, the assessment of values shape decisions, management, and approaches of conservation of cultural heritage. Furthermore, unnoticing or unbalancing heritage values may result in wrong implications or destructions, which may imperil the values of cultural heritage and cause permanent damage.

The values determined, documentation and analyses done in this study for cotton-based industrial factories in Adana are a preliminary study, that should be further developed or treated by specialists from diverse disciplines, for future cultural heritage conservation practices, and studies.

[133] 21 sites determined in this study.
[134] https://ticcih.org/sevilla-charter-of-industrial-heritage/, the article 4.2. covers the methodology and tools of conservation of industrial heritage.
[135] (‘Burra Charter’, 2013).

REFERENCES

Ahunbay, Z. (2002), 20. yy Mimari ve Endüstri Mirasının Korunması Sempozyumu, In Mimarlık, vol. 308, pp. 42-43.

Anonymous, (1958), Türkiye'de Pamuk İpliği ve Pamuklu Mensucat Sanayii, Ankara: Türkiye Ticaret Odaları-Sanayi Odaları ve Ticaret Borsaları Birliği

Anonymous, (1981), Adana, In Yurt Ansiklopedisi: Türkiye il il, dünü, bugünü, yarını vol.1, pp. 7-181, İstanbul: Anadolu Yayıncılık

Anonymous, (2014), Adana Sanayi Tarihi, Adana: Adana Valiliği İl Bilim Sanayi ve Teknoloji Müdürlüğü

Anoymous, (1994), Çukurova, In Ana Britannica vol.9, pp.217-218, İstanbul, Ana Yayıncılık

Bahar, B. (2016). 'Biz Endüstri Mirası ile ilgili yeni düşler kurmak istedik: Tasarım Düşleri'Retrieved from https://www.arkitera.com/soylesi/biz-endustri-mirasi-ile-ilgili-yeni-dusler-kurmak-istedik-tasarim-dusleri/

Barthel, D. (1996), Getting in touch with history: The role of historic preservation in shaping collective memories. In Qualitative Sociology, Vol. 19, No:3, pp. 345–364.

Batur, A. (2018). 'Aydın Boysan Strüktür'ün Şiirini Yazan Mimar' Retrieved from http://www.mimarlikdergisi.com/index.cfm?sayfa=mimarlik&DergiSayi=413&RecID=4343

Başçetinçelik, A. (2000), Sabandan Uyduya: Çukurova'da Tarım. In E. Artun & M. S. Koz (Ed.), Efsaneden Tarihe, Tarihten Bugüne Adana: Köprü Başı (1st ed. pp. 582-589). İstanbul: Yapı Kredi Yayınları.

Berens, C. (2011), Redeveloping Industrial Sites – A Guide for Architects, Planners, and Developers, New Jersey, USA: John Wiley & Sons Inc., Hoboken

Boratav, K. (2014), Türkiye İktisat Tarihi 1908-2009, 19th ed., Ankara: İmge Yayınevi

Bozdoğan, S. (2012), Modernizm ve Ulus'un İnşası: Erken Cumhuriyet Türkiyesi'nde Mimari Kültür. T. Birkan (Trans), 3rd ed., İstanbul: Metis Yayınları

Burke, S. (2001), 'Trends Threaths and Risks' in ICOMOS World Report 2001-2002 on monuments and sites in danger. Retrieved from https://www.icomos.org/risk/2001/synthesis.htm

Canaran, C. (2009), An Integral Framework for Sustaining Industrial Buildings in the Urban Context, Ph. D Thesis, METU, Ankara

Cengizkan, M., (2007), 'Vakko Fabrikası için bir Şans Yaratılabilir mi?' http://www.mimarlikdergisi.com/index.cfm?sayfa=mimarlik&DergiSayi=287&RecID=1620

Chu, C. Uebegang, K. (2002), Saving Hong Kong's Cultural Heritage, Civic Exchange

Cossons, N. (1975), The BP Book of Industrial Archaeology, USA: Newton Abbot David and Charles.

Connerton, P. (2014), Modernite Nasıl Unutturur, K. Kelebekoğlu (Trans.), İstanbul: Sel Yayıncılık

Çelik, K. (2000), Milli Mücadele Yıllarında Adana ve Çevresi. In E. Artun & M. S. Koz (Ed.), Efsaneden Tarihe, Tarihten Bugüne Adana: Köprü Başı (1st ed. pp. 582-589). İstanbul: Yapı Kredi Yayınları.

Çelik, B. (2012). 'Adana ve Orhan Kemal' B. Çelik (Ed.) In Adana'ya Kar Yağmış-Memleket Kitapları, (pp. 45-64), İstanbul: İletişim Yayınları

De la Torre, M. (2013). Values and Heritage Conservation, In Heritage & Society, vol. 60, No. 2, pp. 155–166

Durukan Kopuz, A. (2017), 'Spatial evaluation of primary sugar factories in early republican period in Turkey' In *ITU A-Z, vol. 14,* No.3, pp. 127-141

Durukan, İ., Karaman, F., Saban, D., Erman, O. (2009). Adana Kentsel Kültür Varlıkları Envanteri 2004-2005 /Adana Inventory of Urban Cultural Heritage 2004-2005, In Turkish Academy of Sciences Journal of Cultural Inventory vol.7, pp.26-45

Eldek, H. (2007), Value Assessment for Defining the Conservation Principles for Kayseri Sümerbank Bez Fabrikası, Ms. Thesis, METU, Ankara

Emiroğlu, K. (2012), Adana'da Sanayi ve Sanayiciler Hakkında, B. Çelik (Ed.), In Adana'ya Kar Yağmış-Adana Üzerine Yazılar, (pp. 267-304), İstanbul: İletişim Yayınları

Erder, C. (2007), Tarihi Çevre Bilinci, Ankara: ODTÜ Mimarlık Fakültesi Basım İşliği

Falser, M. (2001), Is Industrial Heritage Underrepresented on the World Heritage List? UNESCO World Heritage Centre Asia-Pacific Region. Retrieved from: http://whc.unesco.org/archive/ind-study01.pdf

Freyer, H. (2014), Sanayi Çağı, B. Akarsu & H. Batuhan (Trans.), M. R. Ayas (Ed.), v.112 Sosyoloji 26, Ankara, Doğu Batı Yayınları

Gençer, O. (2000), Penbeden Pamuğa. In E. Artun & M. S. Koz (Ed.), Efsaneden Tarihe, Tarihten Bugüne Adana: Köprü Başı (1st ed. pp. 590-599). İstanbul: Yapı Kredi Yayınları

Girouard, M. (1985), Cities & People, A Social and Architectural History, New Haven Yale University Press

Glendinning, M. (2013), The Conservation Movement a History of Architectural Preservation, Antiquity to Modernity, Routledge, New York, USA

Güzel, G. (2010), Tekstilde Pamuğun Standardizasyonunun Önemi Üzerine Bir Araştırma, Ms. Thesis, Çukurova Üniversitesi, Adana

Halaçoğlu, Y. (2000), Adana Tarihçesi. In E. Artun & M. S. Koz (Ed.), Efsaneden Tarihe, Tarihten Bugüne Adana: Köprü Başı (1st ed. pp. 582-589). İstanbul: Yapı Kredi Yayınları

Halbwachs, M., (2017), Kolektif Hafıza / Mémoire Collective, B. Barış (Trans.), Ankara: Heretik Basın Yayın

Hudson, K. (1971), A Guide to the Industrial Archaeology of Europe, Great Britain: Fairleigh Dickinson University Press

Jokilehto, J. (2005), A History of Architectural Conservation, Ph.D. Thesis, Institute of Advanced Architectural Studies, The University of York (1986)

Judson P., Iyer-Raniga, U., (2010) Reinterpreting the Value of Built Heritage for Sustainable Development, In Amoeda, R., Lira, S. & Pinheiro, C. (Ed.) Heritage 2010: Heritage and Sustainable development 22-26 June 2010. Evora, Portugal: Green Lines Institute for Sustainable Development

Karakuş, M. (2019), Adana Chamber of Industry, Rakamlarla Adana 2019, Retrieved from https://issuu.com/mkarakus/docs/rakamlarla_adana_2019

Keyder, Ç., Yenal, Z. (2013), Bildiğimiz Tarımın Sonu: Küresel İktidar ve Köylülük, İstanbul: İletişim Yayınları

Kıraç, B. (2001), 'Türkiye'deki tarihi sanayii yapılarının günümüz koşullarına göre yeniden değerlendirilmeleri konusunda bir yöntem araştırması' Ph. D Thesis, MGSÜ, İstanbul

Kıraç, B. (2010), Endüstri Mirasının Korunması ve Yeniden Değerlendirilmesi, In D. Özkut & N. Özaslan (ed.), Mimari Korumada Güncel Konular, Eskişehir: Anadolu Üniversitesi Yayınları

Köksal, G. (2005), İstanbul'daki Endüstri Mirası için Koruma ve Yeniden Kullanım Önerileri, Ph. D Thesis, İTÜ, İstanbul

Köksal, G. (2012), Kültürel miras yönetimi ve endüstri mirası. In Aksoy, A.and Ünsal, D., (Ed.) Kültürel miras yönetimi. Eskişehir: Anadolu Üniversitesi Yayınları.

Köse, B. (2018), Responding the Challenges of Preserving an Industrial Network as Heritage: Turkey Cellulose and Paper Factories (SEKA), Ph. D Thesis, METU, Ankara

Kurtuluş, S. (1949). Çukurova'da Sanayi 1949, Ticaret Firmaları, Mıntıkada Tanınmış Tüccar ve İşadamlarının İsim ve Adresleri, Mersin: Yeni Mersin Toros Basımevi

Labadi, S. (2007). “Representations of the nation and cultural diversity in discourses on World Heritage”. Journal of Social Archaeology 2007, Vol. 7; pp. 147-170

Madran, E. (2011), Kentsel Kimlik / Kentsel Koruma: Adana Örneği, In Adana Kent Sorunları Sempoyumu 2, (pp. 527-537), Türk Mühendis ve Mimarlar Odası Birliği, Adana il Koordinasyon Kurulu

Madran, E., Kılınç, A. (2008), Korumada Yeni Tanımlar Yeni Kavramlar, ‘Endüstri Mirası’, Ankara: TMMOB Mimarlar Odası

Madran, E., Özgönül, N. (2005) Kültürel ve Doğal Değerlerin Korunması, TMMOB Mimarlar Odası, Ankara

Martal, A. (1999). Osmanlı sanayileşme çabaları: Xix. yüzyıl. In Eren, G. (Ed.), *Osmanlı*, Vol. 3, pp. 279–285. Ankara: Yeni Turkiye.

Mason, R. (2002), Assessing Values in Conservation Planning: Methodological Issues and Choices, M. De la Torre (Ed.), In Assessing the Values of Cultural Heritage, Research Report, (pp. 5-30) Los Angeles: The Getty Conservation Institute

Neyzi, L. (2009), Nasıl Hatırlıyoruz? Türkiye’de Bellek Çalışmaları, İstanbul: Türkiye İş Bankası Kültür Yayınları

Oevermann, H., Mieg, A. H. (2015), Industrial Heritage Sites in Transformation, Clash of Discourses, New York, USA: Routledge

Orbaşlı, A. (2008), Architectural Conservation-Principles and Practice, Malden MA: Blackwell Publications

Öymen, A., Oral, T., (2018), 01 Adana-80’li Yıllarda Adana, İstanbul: Doğan Egmont Yayıncılık

Özen, H., Sert, A. (2006), ‘Karadeniz’de Unutulan Endüstri Mirası’, In Gazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol. 21, No. 3, pp. 499-508, Ankara

Özgönül, N., Nalbant, K., Özcan D. Z. (2017), Simyonoğlu- Milli Mensucat Fabrikası'ndan Adana'nın Yeni Müzesi'ne Şehrin İzleri / ikinci bölüm, In Güney Mimarlık vol. 23, (pp. 32-39), TMMOB Mimarlar Odası Adana Şubesi

Özkut, D. (2018), Korumanın Yasal Yönetsel Boyutu, In B. Y. Gönül (Ed.), Yerel Ölçekte Geleneksel Mimarinin Korunması, Beykent Üniversitesi, İstanbul

Özsoy, M. (2011), Fabrikadan Üniversiteye, In Ege Mimarlık. vol.79, pp. 26-31, İzmir

Özüdoğru, A. A., Erman, O. (2011), Adana'da Dokuma Sanayi Yapıları, In Güney Mimarlık vol. 3. pp. 71-75

Özüdoğru, A.A. (2010), Adana'da Dokuma Sanayi Yapılarının Endüstri Mirası Kapsamında İncelenmesi. Ç.Ü. Ms. Thesis, Adana, Turkey (unpublished)

Pamuk, Ş. (2018), Osmanlı Ekonomisinde Bağımlılık ve Büyüme (1820-1913), İstanbul: Türkiye İş Bankası Kültür Yayınları

Pamuk, Ş. (1997), 100 Soruda Osmanlı-Türkiye İktisadi Tarihi, 1500-1914, İstanbul: Gerçek Yayınevi

Pamuk, Ş. (2007), Osmanlı Türkiye İktisadi Tarihi 1500-1914, İstanbul: İletişim Yayınları

Polymeros K., Mattas, K., (2000), Competitiveness and Changes in Trade patterns of the World Cotton Industry, In Proceedings of 'The Inter-Regional Cooperative Research Network on Cotton, September 2000, Adana-Turkey', pp. 284-289

Quateaert, D. (1993), Ottoman Manufacturing in the Age of the Industrial Revolution, Cambridge: Cambridge University Press

Riegl, A. (1996), 'The Modern Cult of Monuments: Its Essence and Its Development' (1903), In Historical and Philosophical Issues in the Conservation of Cultural Heritage, (pp. 69-83), Los Angeles: The Getty Conservation Institute

Saban, D. (2012), Adana'nın Kentsel Gelişimi. İ. Durukan, F. Karaman, D. Saban, O. Erman, D. Baş Yanarateş, G. Ramazanoğlu (Ed.), In Adana Kentsel

Kültür Envanteri 2012, (pp. 17-26), Adana Kültür ve Tabiat Varlıklarını Koruma Bölge Kurulu Müdürlüğü Envanterler Dizisi:1, Adana: Adana Valiliği Yayınları

Saban, D., Karaman F., Erman, O., Durukan, İ. (2006), Adana Mimarlık Rehberi 1900- 2005, Adana: TMMOB Mimarlar Odası Adana Şubesi

Salman, İ. (2012), Adana Kültürel Mirasın İlk Kaynakları. İ. Durukan, F. Karaman, D. Saban, O. Erman, D. Baş Yanarateş, G. Ramazanoğlu (Ed.), In Adana Kentsel Kültür Envanteri 2012, (pp. 12-16), Adana Kültür ve Tabiat Varlıklarını Koruma Bölge Kurulu Müdürlüğü Envanterler Dizisi:1, Adana, Adana Valiliği Yayınları

Say, P. N., Yücel, M., Ökten, Ö. S., (2012), Adana Kenti'nin Mekansal Gelişimi ve Tarım Toprakları Üzerine Etkisi, In KSÜ Doğa Bilimleri Dergisi Özel Sayı, pp. 2-7

Şağan, A. (2005), Birinci Sanayi Planı ve Türkiye'nin Kalkınmasına etkileri (1933-1938), Ms. Thesis, Marmara Üniversitesi, İstanbul

Tanyeli, G., İkiz, D. (2009). 'İstanbul'da bir Endüstriyel Miras Örneği: Bomonti Bira Fabrikasi' (An Industrial Heritage case study in İstanbul: The Bomonti Brewery) In Tüba-Ked, vol. 7, pp. 109-121

Tekeli, İ. (2009). Kültür Politikaları ve İnsan Hakları Bağlamında Doğal ve Tarihi Çevreyi Korumak, İlhan Tekeli Toplu Eserler-5, Tarih Vakfı Yurt Yayınları, İstanbul

Toksöz, M. (2010), Nomads, Migrants and Cotton in the Eastern Mediterranean: The Making of the Adana-Mersin Region 1850-1908, The Ottoman Empire and its Heritage v.45, Leiden, The Netherlands: BRILL

Toksöz, M., Yalçın, E. (1999), Modern Adana'nın Doğuşu ve Günümüzdeki İzleri. Ç. Kafesçioğlu & L. Thys-Şenocak (Ed.), In Aptullah Kuran için Yazılar-Essays in Honour of Aptullah Kuran, (pp.435-453), İstanbul: Yapı Kredi Yayınları

Turgay, N. and Bailleux, G. (1940), Pamuk ve Türkiye'de Ziraati, Ankara: T.C. Ziraat Vekaleti Neşriyatı

Tülücü, T. A. (2007), Adana kenti tarihi endüstri yapılarının yapısal analizi ve korunmaları için yöntem araştırması. Ph. D thesis, (Unpublished Doctoral Dissertation). Gazi University, Turkey.

Uygur H. S., Baltacı M. (n.d.), Tarihi Fotoğraflarla Adana-Adana with old Photos 1833-1960, vol.36, Adana: Adana Büyükşehir Belediyesi Altınkoza Yayınları

Valeri M., Başyazıcı, B., Eriş. E., Çağlayan M., İnce. Ş., Salomoni, F., Taşlıoğlu, M., & Yurdaçalış E., (2016), Design Chronology Turkey –Industrial Buildings, prepared for 3rd Istanbul Design Biennial - ARE WE HUMAN? İstanbul. Retrieved from: http://arewehuman.iksv.org/wpcontent/uploads/2016/11/industrial_buildings.pdf

Varlık, B. M., Emiroğlu, K., and Türkoğlu, Ö. (2008), Adana Sanayi Tarihi, Adana Sanayi Odası, Adana

Yiğenoğlu, Ç. (2000), Adana'ya Bakışlar E. Artun & M. S. Koz (Ed.), In Efsaneden Tarihe, Tarihten Bugüne Adana: Köprü Başı (1st ed. pp. 250-267). İstanbul: Yapı Kredi Yayınları

'Adana Base Map 2006', Adana Büyükşehir Belediyesi (Metropolitan Municipality of Adana)

'Adana Nüfus', (2017) Retrieved from http://www.adana.gov.tr/ilcelerimiz

'Aerial Photo of Adana' Adana Büyükşehir Belediyesi (Metropolitan Municipality of Adana)

'BAU Documentary', (2016), Retrieved from https://bau.edu.tr/icerik/11219-sumerbanklilar-bir-okudular-bin-dokudular-belgeseli-gosterime-giriyor last accessed on 10.09.2019

'Burra Charter', (2013), Retrieved from https://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf

‘Burra Charter’, (1999), Retrieved from https://australia.icomos.org/wp-content/uploads/BURRA_CHARTER.pdf

‘Convention’, (1985), *‘Convention for the Protection of the Architectural Heritage of Europe’* Retrieved from https://rm.coe.int/168007a087

‘ÇEKÜL’, (2018) Retrieved from https://www.cekulvakfi.org.tr/proje/sanayilesme-seruvenimizin-taniklari-endustri-mirasi last accessed on 10.07.2019

‘Çukobirlik Tarihçe’, (n.d.). Retrieved from http://www.cukobirlik.com.tr/?tekd=2&syf=Tarihce

‘DGA Lab’, (2019) Retrieved from http://www.dilagokalp.com/urban/endustri-mirasi-kesfi/ last accessed on 18.08.2019

‘Dublin Principles’, (2011) Icomos-Joint Principles- Dublin, Retrieved from https://www.icomos.org/Paris2011/GA2011_ICOMOS_TICCIH_joint_principles_EN_FR_final_20120110.pdf

‘ERIH’ (2019). Retrieved from https://www.erih.net/

‘Endişe’, (n.d.) Retrieved from https://toplumsal.web.tv/video/endise-film-1974-yilmaz-guney__jtizt13zxwy

‘Jansen Adana’, Retrieved from https://architekturmuseum.ub.tuberlin.de/index.php?p=51&SID=15614894725464

‘Law Number 2863’ Published in the Official Gazette on: 23/07/1983 number: 18113 Retrieved from: http://www.kulturvarliklari.gov.tr/TR-43249/law-on-the-conservation-of-cultural-and-natural-propert-.html

‘Paksoy Yağ’, (2019). Retrieved from http://www.paksoy.com.tr/hakkimizda.asp

‘Seyhan Kent Rehberi’, (n.d.) Retrieved from https://keos.seyhan.bel.tr/keos/ last accessed 19.08.2019

‘Seyhan Un’, (n.d.). Retrieved from http://www.seyhanun.com/tr/hakkimizda

‘Sevilla Charter’, (2018) Retrieved from https://ticcih.org/sevilla-charter-of-industrial-heritage/

‘Sümerbanklılar’, (2016) Retrieved from http://www.tekstilisveren.org.tr/yayinlar/kitaplarimiz last accessed on 10.09.2019

‘The International History’, 2017 Retrieved from https://www.erih.net/fileadmin/Mediendatenbank/Downloads/Leaflets/BROCHURE_EUROPEAN_INDUSTRIAL_HERITAGE_THE_INTERNATIONAL_STORY_10.2017.pdf

‘The Nizhny Tagil Charter’, (2003) Retrieved from https://www.icomos.org/18thapril/2006/nizhny-tagil-charter-e.pdf

‘TICCIH Textiles’, (2013) Retrieved from: http://ticcih.org/wpcontent/uploads/2013/04/the_international_context_for_textile_sites_ticcih.pdf

‘Tüba-Ked’, (2019) Retrieved from http://tubaked.tuba.gov.tr/index.php/tubaked/about/editorialPolicies#focusAndScope

‘WHL’, (2019), https://whc.unesco.org/en/list/

‘Yüreğir Uygulama İmar Planı’, Yüreğir Belediyesi

APPENDICES

A. BUILDING SHEETS

No: **1**	Name/ Other Names **Ulaş Çırçır Fabrikası** / Alman Fabrikası, Ergirler Kollektif Ltd.Şti., Adana İstikbal Pamuk	Lot / Block Number: 1891/1, 1882/705, 5514/18	District: **Seyhan**	Date: **1900**

Registration Status: decision dated **28.12.2018** and numbered **10606**

General Layout (Google Earth Image)

Visual Data 1,2,3 (1: A view from entrance F. S, 2018, 2: A view from the roof of next building F. S,2019, 3: Storage building from outside F.S, 2018)

Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1**	Period of Emergence: **P-1**
Area Size: **A-2**	Zone: **Z-2**	Current Use: **U-1**

Field Study Notes: Additional buildings and roof covrings were dismantling on site.	**Field Study dates** April 2018, June 2019

No: **2**	Name/ Other Names **Eski Çırçır Fabrikası**	Lot / Block Number: 1486/295	District: **Seyhan**	Date: **1950's**

Registration Status: not Registered

General Layout (Google Earth Image)

Visual Data 1,2,3 (Views from entrance 1, 2 & 3: Field Study 2018)

Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1**	Period of Emergence: **P-3**
Area Type: **A-1**	Zone: **Z-2**	Current Use: **U-1**
Field Study Notes: The entire site was not able to visit; it is observed from the entrance only.		**Field Study dates** June 2019

No: **3**	Name/ Other Names **Şengül Çırçır Fabrikası**	Lot / Block Number: 1159/7	District **Seyhan**	Date: **1950's**

Registration Status: not Registered

General Layout (Google Earth Image)

Visual Data 1,2,3 (1: Storage Building 2: Entrance buildings, view from inside the site 3: Ginning Factory, F.S, 2019)

Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1**	Period of Emergence: **P-3**
Area Type: **A-1**	Zone: **Z-2**	Current Use: **U-1**

Field Study Notes:	**Field Study dates** June 2019

No: **4**	Name/ Other Names **Cumhuriyet Un Çırçır**	Lot / Block Number: 9371/5	District **Yüreğir**	Date: **1920**

Registration Status: decision dated **09.11.2009** and numbered **5503**

General Layout (Google Earth Image)

Visual Data 1,2,3 (1&3: Flour Factory, Silo and administrative building 2: Ginning Factory, F.S, 2018)

Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1, T-4**	Period of Emergence: **P-2**
Area Type: **A-2**	Zone: **Z-4**	Current Use: **U-2**

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **5**	Name/ Other Names **Çukobirlik Mihmandar**	Lot / Block Number: 11331/1-2	District: **Yüreğir**	Date: **1950's**

Registration Status: not Registered

General Layout (Google Earth Image)

Visual Data 1,2,3 (1: Cotton seed silo, 2&3: Storage buildings and porch storage F.S, 2018,)

Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1**	Period of Emergence: **P-3**
Area Type: **A-2**	Zone: **Z-4**	Current Use: **U-2**

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **6**	Name/ Other Names **Sadakat Çırçır Prese**	Lot / Block Number: 10824/29	District: **Yüreğir**	Date: **1950's**

Registration Status: not Registered

General Layout (Google Earth Image)

Visual Data 1,2,3 (1: Ginning Factory 2: Storage buildings 3: Sadakat Mosque F. S,2018)

Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1**	Period of Emergence: **P-3**
Area Type: **A-1**	Zone: **Z-3**	Current Use: **U-2**

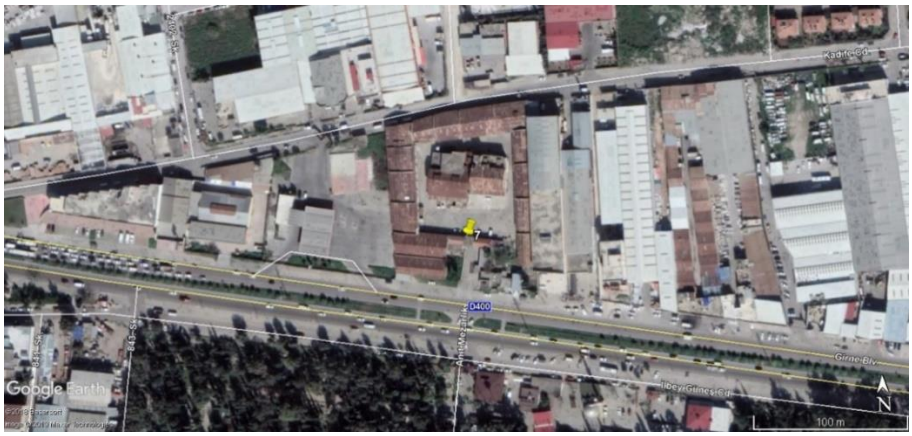
Field Study Notes: The ginning machinery had been removed nearly 7-8 years ago

Field Study dates
April 2018, June 2019

No:	Name/ Other Names	Lot / Block Number:	District:	Date:
7	**Pati Çırçır /** Adana Çırçır	10875/2	**Yüreğir**	**1950's**

Registration Status: not Registered

General Layout (Google Earth Image)



Visual Data 1,2,3 (1: Ginning Factory 2&3: Entrance Buildings from outside of the site & Storage Buildings: F.S,2018)

Analyses Classifications:

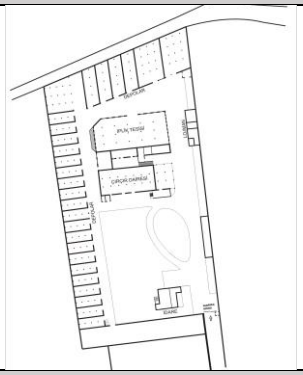
Current Condition: **C-1**	Type of Production: **T-1**	Period of Emergence: **P-3**
Area Type: **A-1**	Zone: **Z-3**	Current Use: **U-2**
Field Study Notes:		**Field Study dates** April 2018, June 2019

No: **8**	Name/ Other Names **Taş Mağaza Çırçır**	Lot / Block Number: 10894/?	District: **Yüreğir**	Date: **1950's**

Registration Status: not Registered

General Layout (Google Earth Image)

Visual Data 1,2,3 (1: Ginning Factory 2: Housing Building F. S, 2018, 3: Tülücü, 2007:160)



Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1, T-3**	Period of Emergence: **P-3**
Area Type: **A-1**	Zone: **Z-3**	Current Use: **U-2**

Field Study Notes: The site was not safe to visit, it is observed that it is not derelict and used for small scale manufacture.	**Field Study dates** April 2018, June 2019

No: **9**	Name/ Other Names **Seyhan Un**	Lot / Block Number: 765/304-346	District: **Yüreğir**	Date: **1950's**

Registration Status: not Registered

General Layout (Google Earth Image)

Visual Data 1,2,3 (1: View from entrance, 2: Entrance buildings F. S, 2018, 3: Tülücü, 2007:186)

Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1, T-2, T-4**	Period of Emergence: **P-3**
Area Type: **A-2**	Zone: **Z-3**	Current Use: **U-3**

Field Study Notes: The factory continues only flour production with a lower capacity.	**Field Study dates** April 2018, June 2019

No: **10**	Name/ Other Names **Milli Mensucat,** Simyonoğlu Factory, Milli Factory, Milsan Mensucat	Lot / Block Number: 12373/2	District: **Seyhan**	Building Date: **1906**

Registration Status: decision dated **29.09.2006** and numbered **1701**

General Layout (Google Earth Image)

Visual Data 1,2,3 (1: Storage Buildings under restoration F.S, 2018, 2: View from outside F.S, 2019, 3: Özgönül et al., 2017:39)

Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-1, T-3**	Period of Emergence: **P-1**
Area Type: **A-2**	Zone: **Z-2**	Current Use: **U-4**

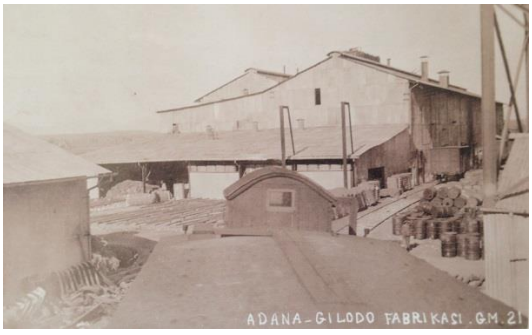
Field Study Notes: The buildings of the completed parts of the project are being used as Adana Archaeology Museum.	**Field Study dates** April 2018, June 2019

No: **11**	Name/ Other Names **MarSa KJS,** Gilodo Factory, Toros Oil Factory, MarSa	Lot / Block Number: 12990/1	District: **Seyhan**	Date: **1926**

Registration Status: not Registered

General Layout (Google Earth Image)

Visual Data 1,2 - 1: View from outside F. S, 2019, 2: Old Photo (Uygur & Baltacı, n.d.:99)



Analyses Classifications:

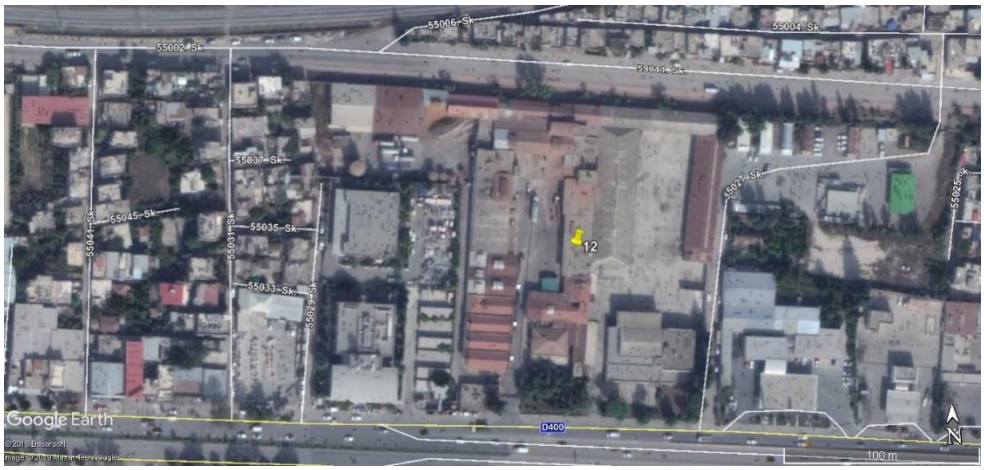
Current Condition: **E-1**	Type of Production: **T-2**	Period of Emergence: **P-2**
Area Type: **A-3**	Zone: **Z-2**	Current Use: **U-3**

Field Study Notes: Most the buildings of the factory had changed since the establishment.	**Field Study dates** June 2019

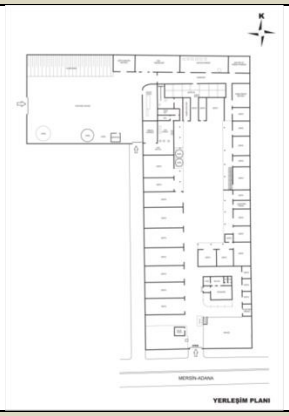
No: **12**	Name/ Other Names **Emeksizler Nebati Yağ**	Lot / Block Number: 8441/266	District **Seyhan**	Date: **1953**

Registration Status: not Registered

General Layout (Google Earth Image)



Visual Data 1,2,3 (1: Linter Workshop, F.S, 2018, 2: Linter Bale F.S, 2018, 3: Tülücü, 2007:162)



Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-2**	Period of Emergence: **P-3**
Area Type: **A-1**	Zone: **Z-2**	Current Use: **U-3**

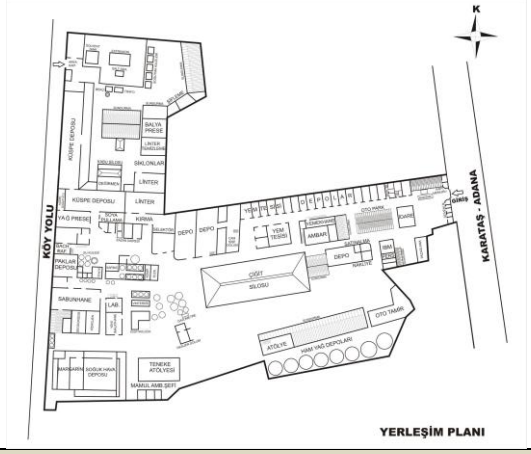
Field Study Notes: The factory continues its production with a lower capacity and seasonally.	**Field Study dates** April 2018, June 2019

No: **13**	Name/ Other Names **Paksoy Yağ**	Lot / Block Number: -	District **Yüreğir**	Date: **1951**

Registration Status: not Registered

General Layout (Google Earth Image)

Visual Data 1 (1: Tülücü, 2007)



Analyses Classifications:

Current Condition: **C-1**	Type of Production: **T-2**	Period of Emergence: **P-3**
Area Type: **A-2**	Zone: **Z-4**	Current Use: **U-3**

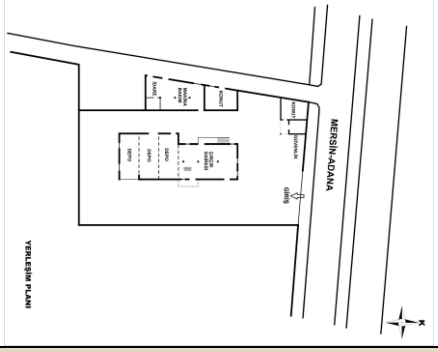
Field Study Notes:	**Field Study dates** -

No: **14**	Name/ Other Names Polat Çırçır	Lot / Block Number: 944/44	District **Seyhan**	Date: **1940's**

Demolition Time/Period: After 2007

Current Condition of the Site (Google Earth Image)

Visual Data 1,2 (1: Field Study 2018, 2: Tülücü, 2007:172)



Analyses Classifications:

Current Condition: **C-4**	Type of Production: **T-1**	Period of Emergence: **P-2**
Area Type: **A-1**	Zone: **Z-2**	

Field Study Notes: The site is empty

Field Study dates
April 2018

No: **15**	Name/ Other Names **Özbucak Tekstil**	Lot / Block Number: 1237/86	District: **Seyhan**	Date: **1950's**

Demolition Time/Period: Between 2010-2011

Current Condition of the Site (Google Earth Image)

Visual Data 1,2,3 (1& 2: Administrative building Field Study 2018, 3: Tülücü, 2007:147)

Analyses Classifications:

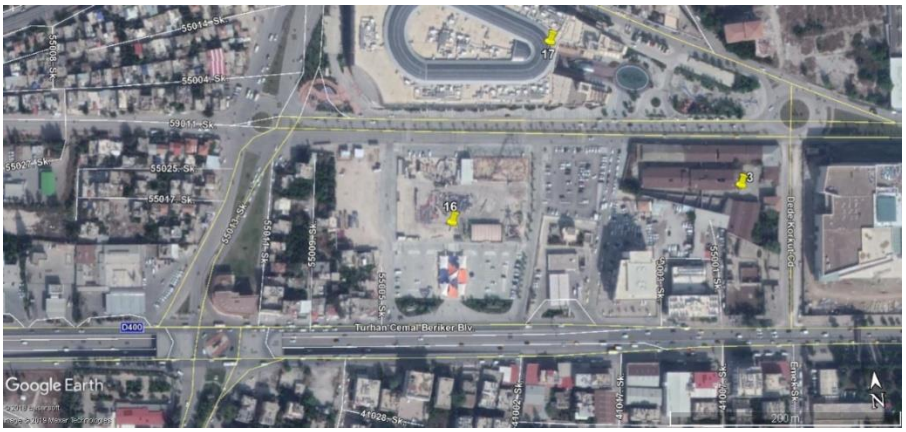
Current Condition: **C-2**	Type of Production: **T-3**	Period of Emergence: **P-3**
Area Type: **A-2**	Zone: **Z-2**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

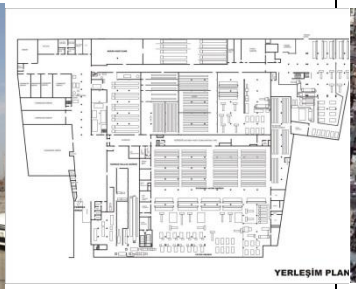
No: **16**	Name/ Other Names **Güney Trafik İplik** Güney Polgat Trafik İplik	Lot / Block Number: 11157/2	District **Seyhan**	Date: **1950's**

Demolition Time/Period: Between 2007-2010

Current Condition of the Site (Google Earth Image)



Visual Data 1,2,3 (1: Field Study 2018, 2&3: Tülücü, 2007: 142,143)



Analyses Classifications:

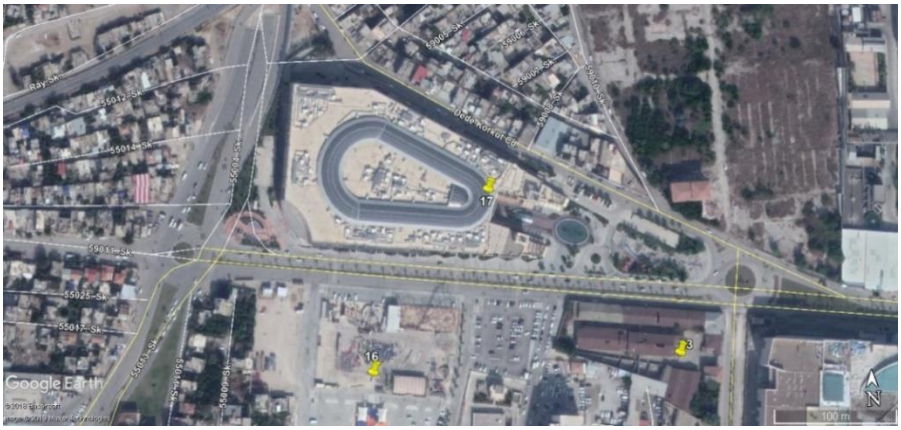
Current Condition: **C-4**	Type of Production: **T-3**	Period of Emergence: **P-3**
Area Type: **A-2**	Zone: **Z-2**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **17**	Name/ Other Names Eski Çukobirlik Fabrikası, Belçika Fabrikası	Lot / Block Number: 11151/4	District: **Seyhan**	Date: **Between 1920-1940**

Demolition Time/Period: Between 2007-2010

Current Condition of the Site (Google Earth Image)



Visual Data 1,2 (1: Field Study 2018, 2: The north of the photo includes some parts of the industrial site, at east there is Şengül Çırçır, Tülücü, 2007:143)

Analyses Classifications:

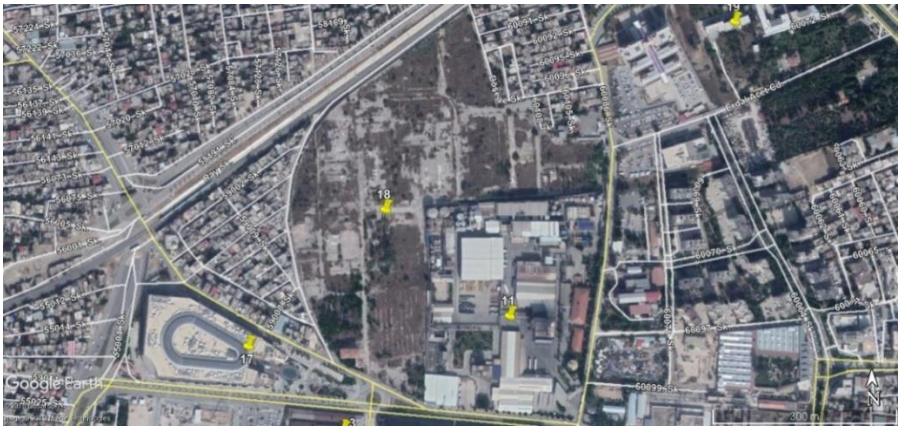
Current Condition: **C-4**	Type of Production: **T-1**	Period of Emergence: **P-2**
Area Type: **A-1**	Zone: **Z-2**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **18**	Name/ Other Names **Güney Sanayi,**	Lot / Block Number: 12991/1, 12992/1, 12989/1-2	District: **Seyhan**	Date: **1953**

Demolition Time/Period: Between 2010-2011

Current Condition of the Site (Google Earth Image)



Visual Data 1,2,3 (1: Administrative Building F. S, 2018, 2: The place of Administrative Building F. S, 2019, 3: The photo involves Güney Trafik İplik and Parts of Şengül Çırçır and Eski Çukobirlik, Anonymous, 2014:45)

Analyses Classifications:

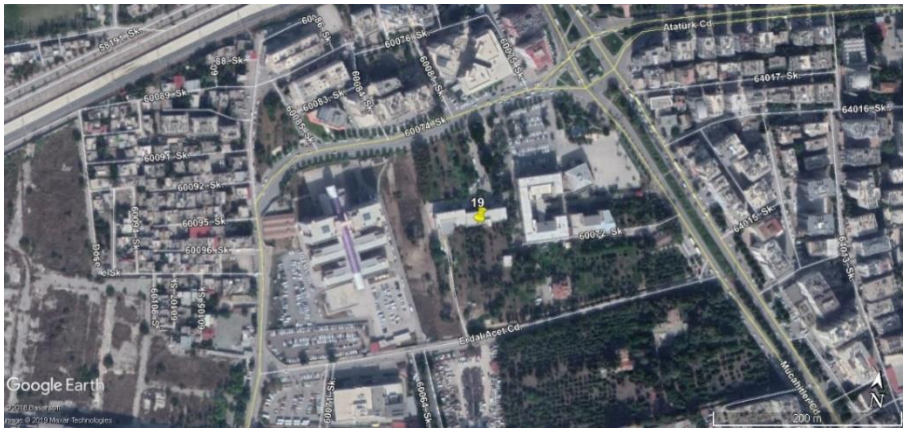
Current Condition: **C-2**	Type of Production: **T-3**	Period of Emergence: **P-3**
Area Type: **A-3**	Zone: **Z-2**	

Field Study Notes: The administrative building was standing on Field Study 2018 however it was demolished on June 2019	**Field Study dates** April 2018, June 2019

No: **19**	Name/ Other Names **Eski Sümerbank,** Şinasi Fabrikası	Lot / Block Number: 5520/9	District: **Seyhan**	Date: **1924**

Demolition Time/Period: 1980's

Current Condition of the Site (Google Earth Image)



Visual Data 1 (1: Current Governor's Office Building F. S, 2019)

Analyses Classifications:

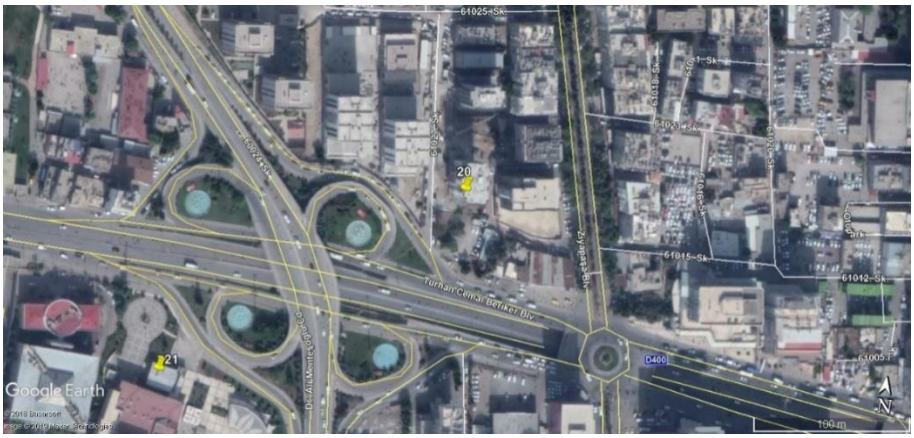
CurrentCondition: **C-4**	Type of Production: **T-1, T-3**	Period of Emergence: **P-2**
Area Type: **A-2**	Zone: **Z-2**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **20**	Name/ Other Names Hacı Mehmet Ağa Fabrikası	Lot / Block Number: The original block/plot is unable to detect due to alterations such as: former land excreting and amalgamation, road constructions	District **Seyhan**	Date: **Before 1918**

Demolition Time/Period: Before 2007

Current Condition of the Site (Google Earth Image)



Visual Data 1,2 (1& 2: Current Buildings on site, Field Study 2019)

Analyses Classifications:

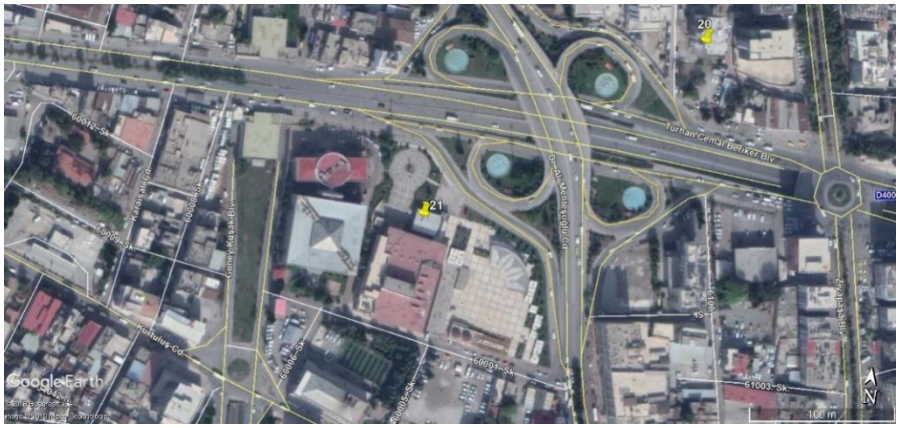
Current Condition: **C-4**	Type of Production: **T-1, T-5**	Period of Emergence: **P-1**
Area Type: **A-1**	Zone: **Z-1**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **21**	Name/ Other Names **Tirpani Fabrikası,** Trıpani, Sümerbank	Lot / Block Number: The original block/plot is unable to detect due to alterations such as: former land excreting and amalgamation, road constructions	District: **Seyhan**	Date: **1885**

Demolition Time/Period: Before 2007

Current Condition of the Site (Google Earth Image)



Visual Data 1,2 (1&2: Current buildings of Seyhan Municipality on site Field Study 2019)

Analyses Classifications:

Current Condition: **C-4**	Type of Production: **T-1, T-3, T-4**	Period of Emergence: **P-1**
Area Type: **A-1**	Zone: **Z-1**	

Field Study Notes:

Field Study dates
April 2018, June 2019

No: **22**	Name/ Other Names **Pabuçcuoğlu Fabrikası**	Lot / Block Number: 1365/152	District **Seyhan**	Date: **Before1918**

Demolition Time/Period: Before 2007

Current Condition of the Site (Google Earth Image)

Visual Data 1 (1: Field Study 2019)

Analyses Classifications:

Current Condition: **C-4**	Type of Production: **T-1, T-4**	Period of Emergence: **P-1**
Area Type: **A-1**	Zone: **Z-1**	

Field Study Notes:

Field Study dates
April 2018, June 2019

No: **23**	Name/ Other Names **Katlı Çırçır,** Katlı Çırçır İplik Fabrikası	Lot / Block Number: 1515/707-708	District **Seyhan**	Date: **Between 1940-1950**

Demolition Time/Period: After 2007

Current Condition of the Site (Google Earth Image)

Visual Data 1,2 (1: Field Study 2018, 2: Varlık et al.,2008:130)

Analyses Classifications:

Current Condition: **C-4**	Type of Production: **T-1, T-3**	Period of Emergence: **P-2**
Area Type: **A-1**	Zone: **Z-1**	

Field Study Notes:

Field Study dates
April 2018, June 2019

No: **24**	Name/ Other Names **Sapmazlar Çırçır,** PolSa İplik, Gülbenkian Fabrikası	Lot / Block Number: 1287/2, 323/36	District **Seyhan**	Date: **Before 1918**

Demolition Time/Period: After 2007

Current Condition of the Site (Google Earth Image)

Visual Data 1,2 (1&2: Field Study 2018)

Analyses Classifications:

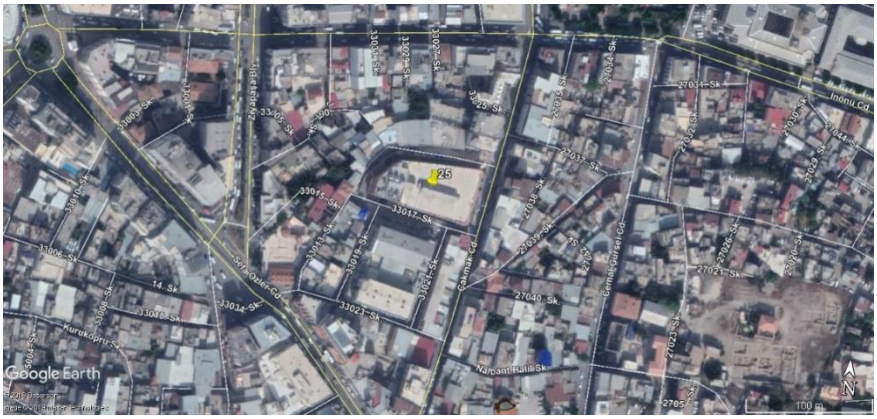
Current Condition: **C-4**	Type of Production: **T-1**	Period of Emergence: **P-1**
Area Type: **A-1**	Zone: **Z-1**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **25**	Name/ Other Names **Boduroğlu Fabrikası,** Burduroğlu Fabrikası,Asım Bey ve Muhtar Bey Fabrikası	Lot / Block Number: 2548/1	District: **Seyhan**	Date: **Before 1918**

Demolition Time/Period: 1990's

Current Condition of the Site (Google Earth Image)



Visual Data 1, 2, 3 (1: Field Study 2019, 2&3: photos from 1953 and 1960's Uygur & Baltacı, n.d.: 200,207)

Analyses Classifications:

Current Condition: **C-4**	Type of Production: **T-1, T-4, T-5**	Period of Emergence: **P-1**
Area Type: **A-1**	Zone: **Z-1**	

Field Study Notes:

Field Study dates
June 2019

No: **26**	Name/ Other Names **Cokinaki Fabrikası,** Kokonaki Fabrikası, Habib Efendi Fabrikası, Toros Fabrikası	Lot / Block Number: 52/ the original plot number is unable to detect due to alterations such as: former land excreting and amalgamation, road constructions…	District **Seyhan**	Date: **Before 1918**

Demolition Time/Period: Before 2007

Current Condition of the Site (Google Earth Image)

Visual Data 1 (1: Current Commercial Buildings on site Field Study 2019)

Analyses Classifications:

Current Condition: **C-4**	Type of Production: **T-1, T-4, T-5**	Period of Emergence: **P-1**
Area Type: **A-1**	Zone: **Z-1**	

Field Study Notes:	**Field Study dates** June 2019

No: **27**	Name/ Other Names **Acikyan Bakalyan Fabrikası,** Aşkiyan Fabrikası	Lot / Block Number: 98/ the original plot number is unable to detect due to alterations such as: former land excreting and amalgamation, road constructions	District **Seyhan**	Date: **Before 1918**

Demolition Time/Period: Before 2007

Current Condition of the Site (Google Earth Image)

Visual Data 1 (1: Current Commercial buildings on site Field Study 2019)

Analyses Classifications:

Current Condition: **C-4**	Type of Production: **T-1, T-4, T-5**	Period of Emergence**: P-1**
Area Type: **A-1**	Zone: **Z-1**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **28**	Name/ Other Names Eski BosSa, Salih Efendi Factory	Lot / Block Number: 9517/2-3	District **Yüreğir**	Date: **1902**

Demolition Time/Period: Before 2007

Current Condition of the Site (Google Earth Image)

Visual Data 1,2,3 (1: F.S:2019, 2&3: Old Photos from 1940's and 1900's Uygur & Baltacı:161,97)

Analyses Classifications:

Current Condition: **C-3**	Type of Production: **T-1, T-4, T-5**	Period of Emergence: **P-1**
Area Type: **A-1**	Zone: **Z-4**	

Field Study Notes:

Field Study dates
April 2018, June 2019

No: **29**	Name/ Other Names BosSa TAŞ, BosSa 1	Lot / Block Number: 1160/1560-1941, 792/62	District: **Yüreğir**	Date: **1951**

Demolition Time/Period: Between 2010-2011

Current Condition of the Site (Google Earth Image)

Visual Data 1,2,3 (1: Field Study 2018, 2: Old construction photo Anonymous, 2014:42, 3: Tülücü, 2007:151)

Analyses Classifications:

Current Condition: **C-4**	Type of Production: **T-3**	Period of Emergence: **P-3**
Area Type: **A-3**	Zone: **Z-3**	

Field Study Notes:

Field Study dates
April 2018, June 2019

No: **30**	Name/ Other Names **Başer Tekstil**	Lot / Block Number: 9660/20-21-22-24-27	District **Yüreğir**	Date: **1950's**

Demolition Time/Period: Between 2007-2010

Current Condition of the Site (Google Earth Image)

Visual Data 1,2,3 (1: Remaining parts on site F.S, 2019, 2: Remaining parts of the site F. S, 2018, 3: A view from entrance F. S, 2019)

Analyses Classifications:

Current Condition: **C-3**	Type of Production: **T-3**	Period of Emergence: **P-3**
Area Type: **A-1**	Zone: **Z-3**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **31**	Name/ Other Names Akdeniz Nebati Yağ	Lot / Block Number: -	District: **Yüreğir**	Date: **1953**

Demolition Time/Period: Between 2010-2011

Current Condition of the Site (Google Earth Image)

Visual Data 1,2 (1: Field Study 2018, 2: Tülücü, 2007:183)

Analyses Classifications:

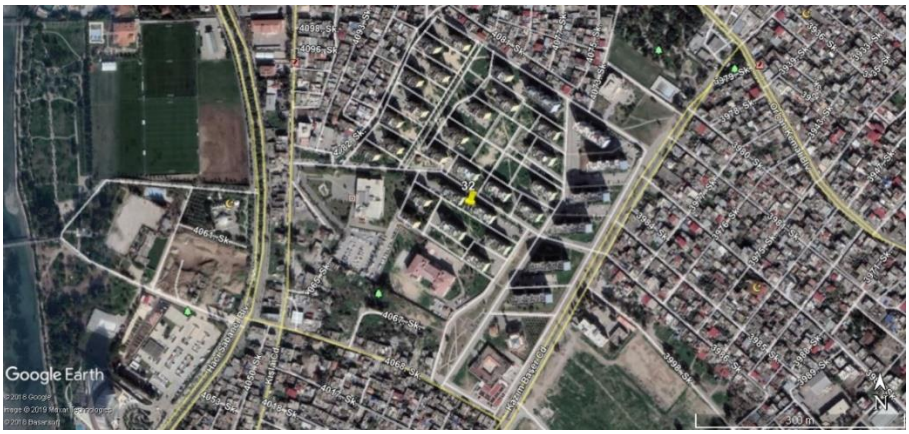
Current Condition: **C-4**	Type of Production: **T-2, T-3**	Period of Emergence: **P-3**
Area Type: **A-3**	Zone: **Z-3**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **32**	Name/ Other Names **Aksantaş,** Paktaş	Lot / Block Number: -	District **Yüreğir**	Date: **1951**

Demolition Time/Period: After 2007

Current Condition of the Site (Google Earth Image)



Visual Data 1 (1: Current Residential buildings on site Field Study 2018)

Analyses Classifications:

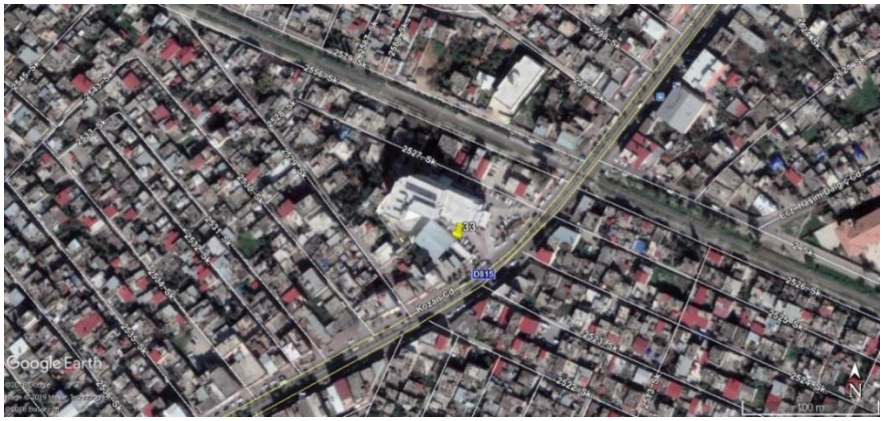
Current Condition: **C-4**	Type of Production: **T-1, T-3**	Period of Emergence: **P-3**
Area Type: **A-3**	Zone: **Z-3**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **33**	Name/ Other Names Seyhan Çırçır	Lot / Block Number: 9860/34	District: **Yüreğir**	Date: **1950's**

Demolition Time/Period: After 2007

Current Condition of the Site (Google Earth Image)



Visual Data 1 (1: Current Hospital Building on site named Altın Koza (Golden Boll) Field Study 2018)

Analyses Classifications:

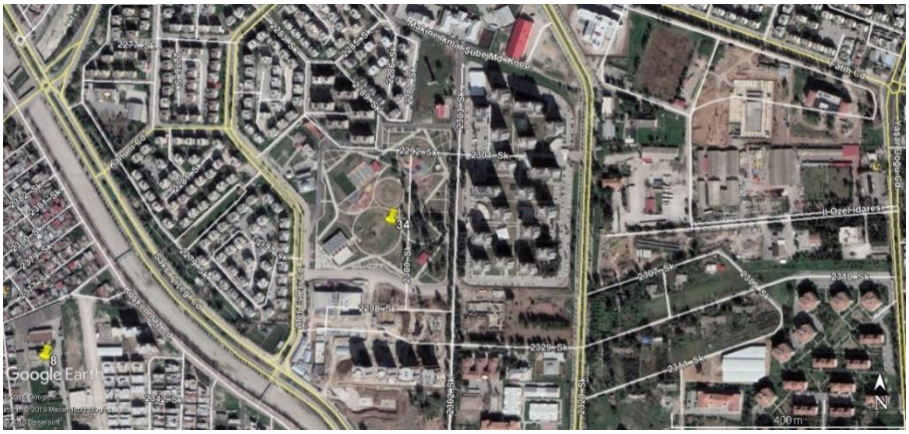
Current Condition: **C-4**	Type of Production: **T-1**	Period of Emergence: **P-3**
Area Type: **A-1**	Zone: **Z-3**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

No: **34**	Name/ Other Names Eski Sümerbank	Lot / Block Number: The original block/plot is unable to detect due to alterations such as: former land excreting and amalgamation, road constructions…	District: **Yüreğir**	Date: **1950's**

Demolition Time/Period: After 2006

Current Condition of the Site (Google Earth Image)



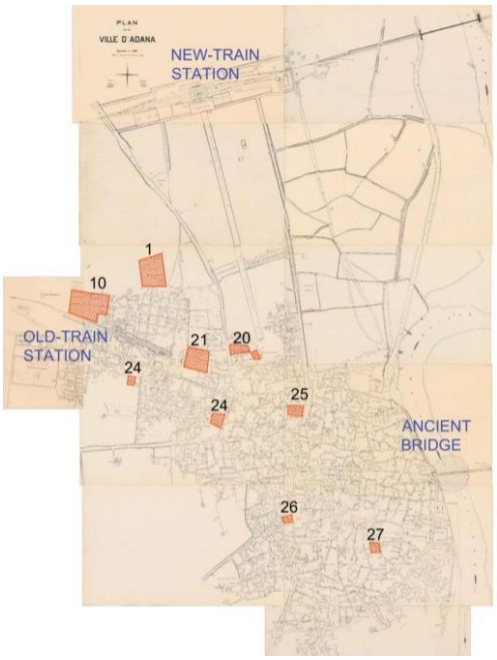
Visual Data 1,2 (1&2: Current Park on site, Field Study 2019,)

Feature Classifications:

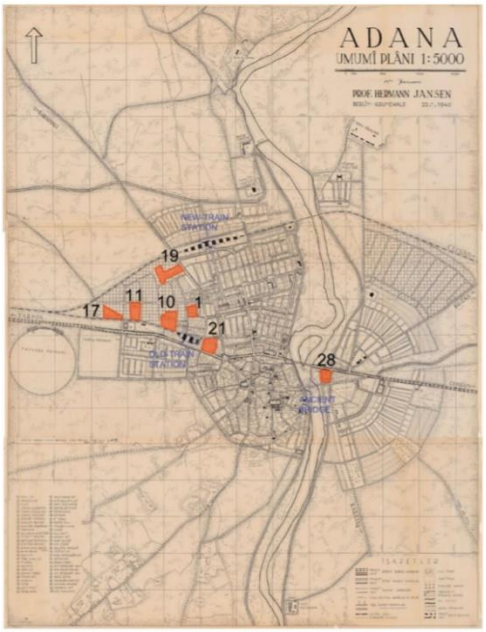
Existence Condition: **E-4**	Type of Production: **T-3**	Period of Emergence: **P-3**
Area Type: **A-3**	Zone: **Z-3**	

Field Study Notes:	**Field Study dates** April 2018, June 2019

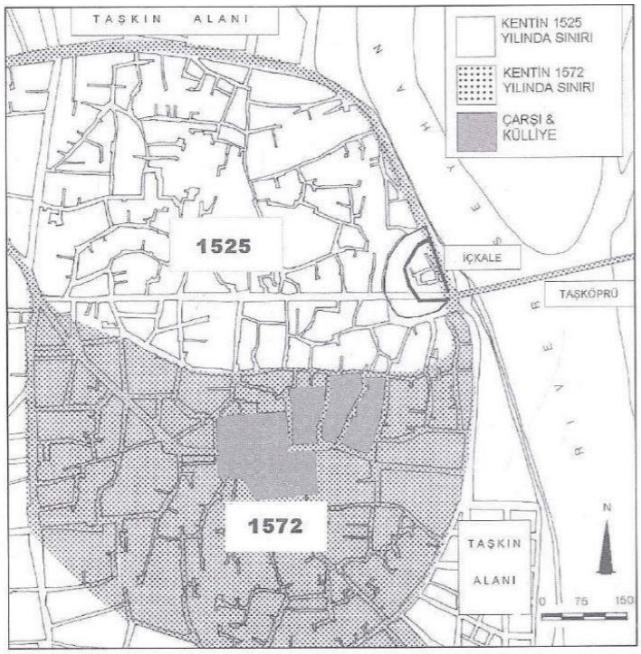
B. VISUAL SOURCES



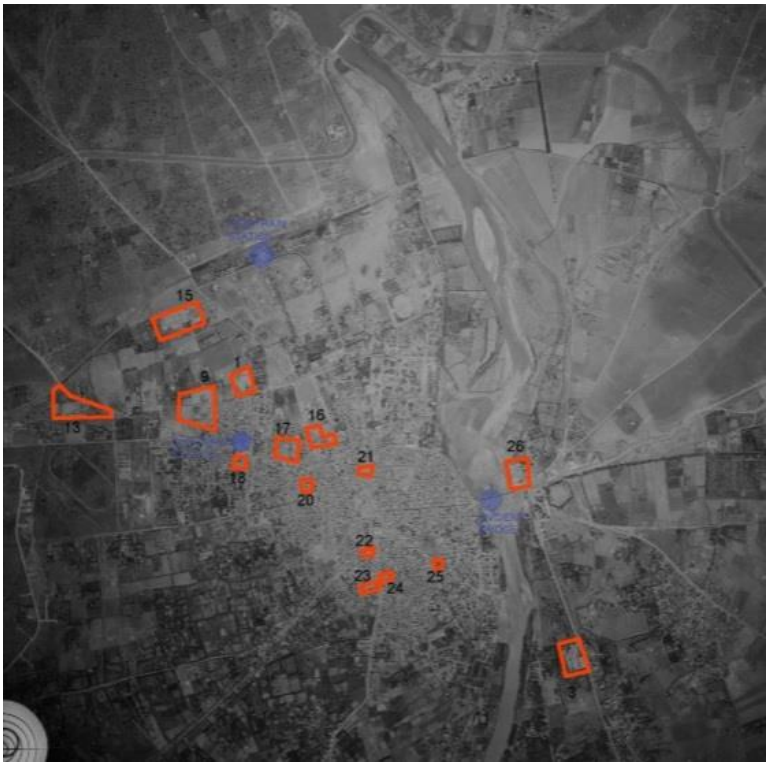
1. 1918 Base Map of Adana- https://architekturmuseum.ub.tu-berlin.de/index.php?p=51&SID=15757511977752



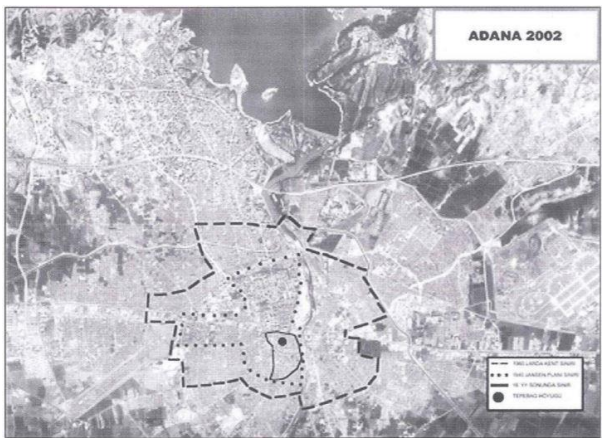
2. 1940 Adana Jansen Plan https://architekturmuseum.ub.tu-berlin.de/index.php?p=51&SID=15757511977752



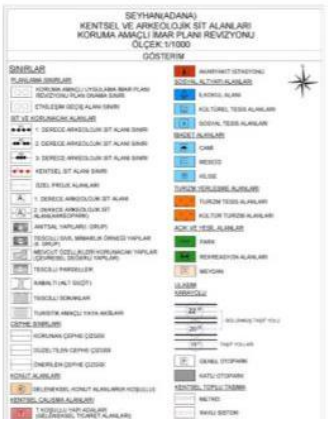
3. Physical Development of Adana in 16th century (Saban, 2012:20)



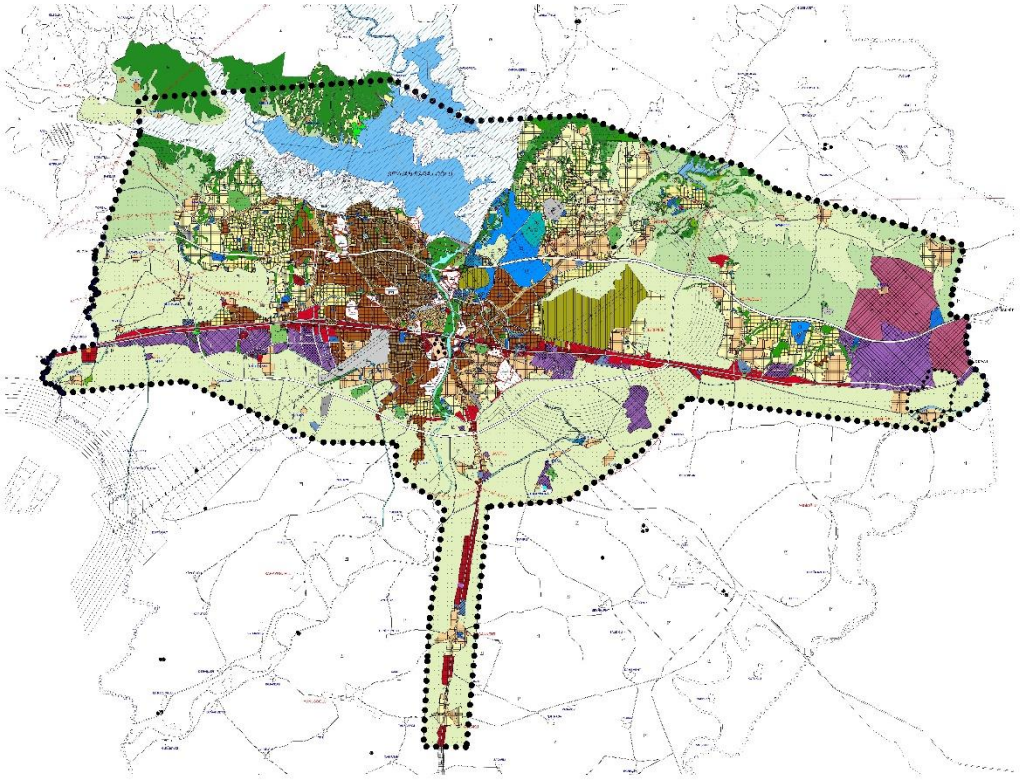
4. 1950 Aerial Photo of Adana – obtained from Adana Metropolitan Municipality

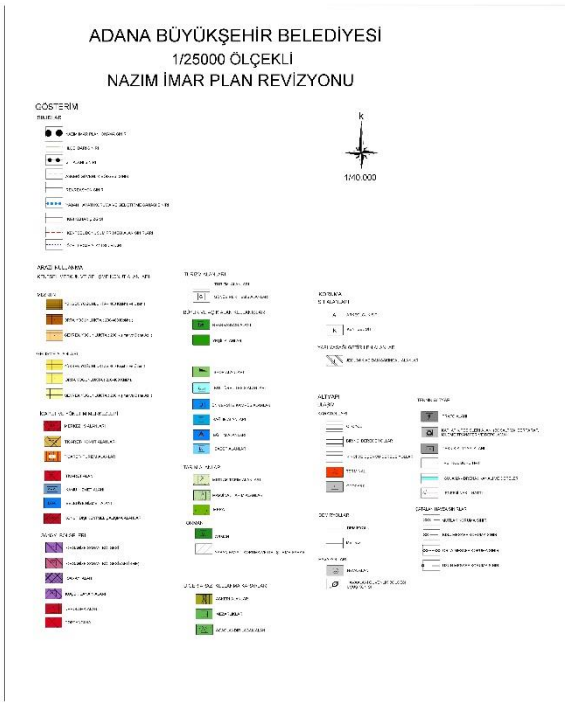


5. Stages of Physical Development of Adana (Saban, 2012:23)

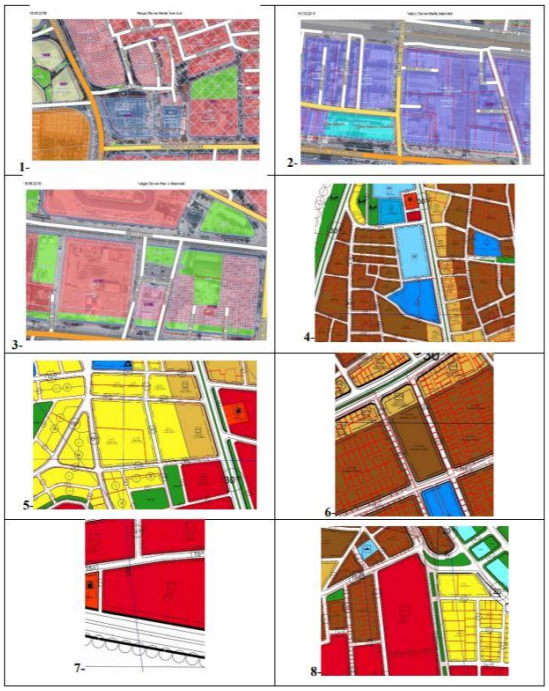


6. 2016 Conservation Development Plan -obtained from KUDEB Seyhan Municipality

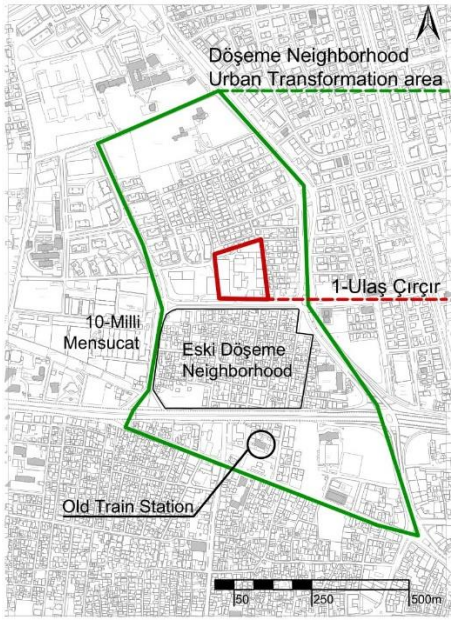




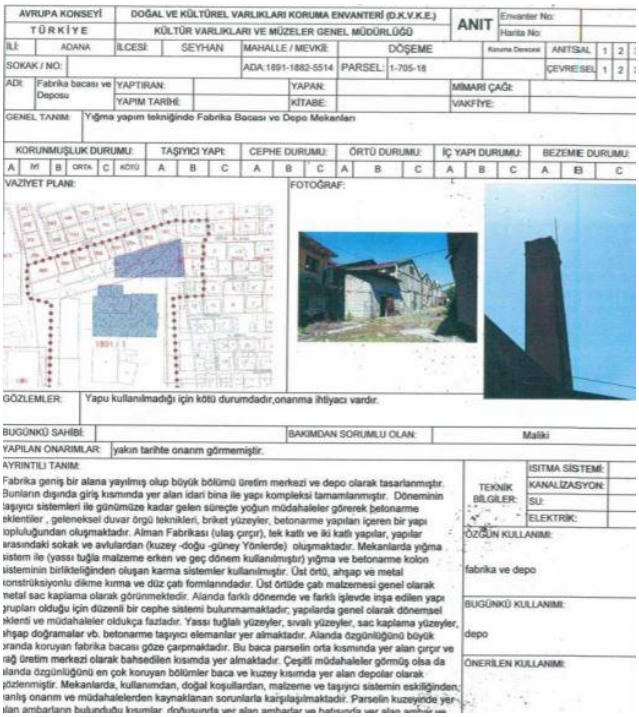
7. 1/25.000 Master Development Plan of Adana 2017 acquired from Seyhan Municipality, KUDEB



8-a. Land uses assigned for the cotton-based industry sites *1. Ulaş Çırçır, 2. Eski Çırçır, 3. Şengül Çırçır, 4. Cumhuriyet Un, 5. Çukobirlik Mihmandar, 6. Sadakat Çırçır, 7. Pati Çırçır, 8. Taş Mağaza Çırçır* (Seyhan Kent Rehberi', (n.d.); 'Yüreğir Uygulama İmar Planı')



8-b. Döşeme Neighbourhood Urban Transformation area, produced by the Author according to map obtained from KUDEB Seyhan Municipality



AVRUPA KONSEYİ | DOĞAL VE KÜLTÜREL VARLIKLARI KORUMA ENVANTERİ (D.K.V.K.E.) | ANIT | Envanter No: | Harita No:
TÜRKİYE | KÜLTÜR VARLIKLARI VE MÜZELER GENEL MÜDÜRLÜĞÜ

İLİ: ADANA | İLÇESİ: SEYHAN | MAHALLE / MEVKİİ: DÖŞEME | Koruma Derecesi: ANIT/SAİL 1 2 | ÇEVRESEL 1 2
SOKAK / NO: | ADA:1891-1882-5514 | PARSEL: 1-705-18

ADI: Fabrika bacası ve Deposu | YAPTIRAN: | YAPAN: | MİMARİ ÇAĞI:
YAPIM TARİHİ: | KİTABE: | VAKFİYE:

GENEL TANIM: Yığma yapım tekniğinde Fabrika Bacası ve Depo Mekanları

KORUNMUŞLUK DURUMU: A İYİ B ORTA C KÖTÜ | TAŞIYICI YAPI: A B C | CEPHE DURUMU: A B C | ÖRTÜ DURUMU: A B C | İÇ YAPI DURUMU: A B C | BEZEME DURUMU: A B C

VAZİYET PLANI:

FOTOĞRAF:

GÖZLEMLER: Yapu kullanılmadığı için kötü durumdadır,onarıma ihtiyacı vardır.

BUGÜNKÜ SAHİBİ: | BAKIMDAN SORUMLU OLAN: Maliki

YAPILAN ONARIMLAR: yakın tarihte onarım görmemiştir.

AYRINTILI TANIM:

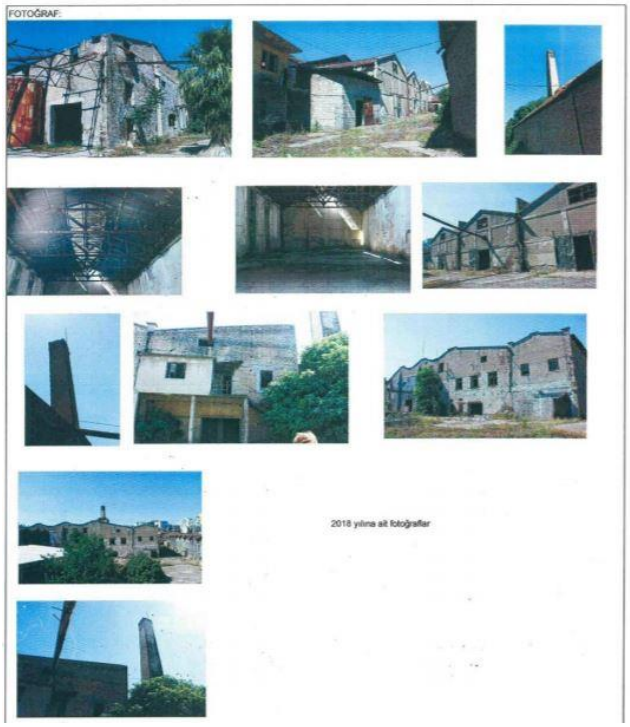
Fabrika geniş bir alana yayılmış olup büyük bölümü üretim merkezi ve depo olarak tasarlanmıştır. Bunların dışında giriş kısmında yer alan idari bina ile yapı kompleksi tamamlanmıştır. Döneminin aşıyıcı sistemleri ile günümüze kadar gelen süreçte yoğun müdahaleler görerek betonarme eklentiler , geleneksel duvar örgü teknikleri, briket yüzeyler, betonarme yapıları içeren bir yapı opluluğundan oluşmaktadır. Alman Fabrikası (ulaş çırçır), tek katlı ve iki katlı yapılar, yapılar arasındaki sokak ve avlulardan (kuzey -doğu -güney Yönlerde) oluşmaktadır. Mekanlarda yığma sistem ile (yassı tuğla malzeme erken ve geç dönem kullanılmıştır) yığma ve betonarme kolon sisteminin birlikteliğinden oluşan karma sistemler kullanılmıştır. Üst örtü, ahşap ve metal onstrüksiyonlu dikme kırma ve düz çatı formlarındadır. Üst örtüde çatı malzemesi genel olarak metal sac kaplama olarak görünmektedir. Alanda farklı dönemde ve farklı işlevde inşa edilen yapı grupları olduğu için düzenli bir cephe sistemi bulunmamaktadır; yapılarda genel olarak dönemsel eklenti ve müdahaleler oldukça fazladır. Yassı tuğlalı yüzeyler, sıvalı yüzeyler, sac kaplama yüzeyler, ahşap doğramalar vb. betonarme taşıyıcı elemanlar yer almaktadır. Alanda özgünlüğünü büyük oranda koruyan fabrika bacası göze çarpmaktadır. Bu baca parselin orta kısmında yer alan çırçır ve ağ üretim merkezi olarak bahsedilen kısımda yer almaktadır. Çeşitli müdahaleler görmüş olsa da alanda özgünlüğünü en çok koruyan bölümler baca ve kuzey kısımda yer alan depolar olarak gözlenmiştir. Mekanlarda, kullanımdan, doğal koşullardan, malzeme ve taşıyıcı sistemin eskiliğinden, anlış onarım ve müdahalelerden kaynaklanan sorunlarla karşılaşılmaktadır. Parselin kuzeyinde yer alan ambarların bulunduğu kısımlar, doğusunda yer alan ambarlar ve batısında yer alan ambar ve

TEKNİK BİLGİLER: ISITMA SİSTEMİ: | KANALİZASYON: | SU: | ELEKTRİK:

ÖZGÜN KULLANIM: fabrika ve depo

BUGÜNKÜ KULLANIM: depo

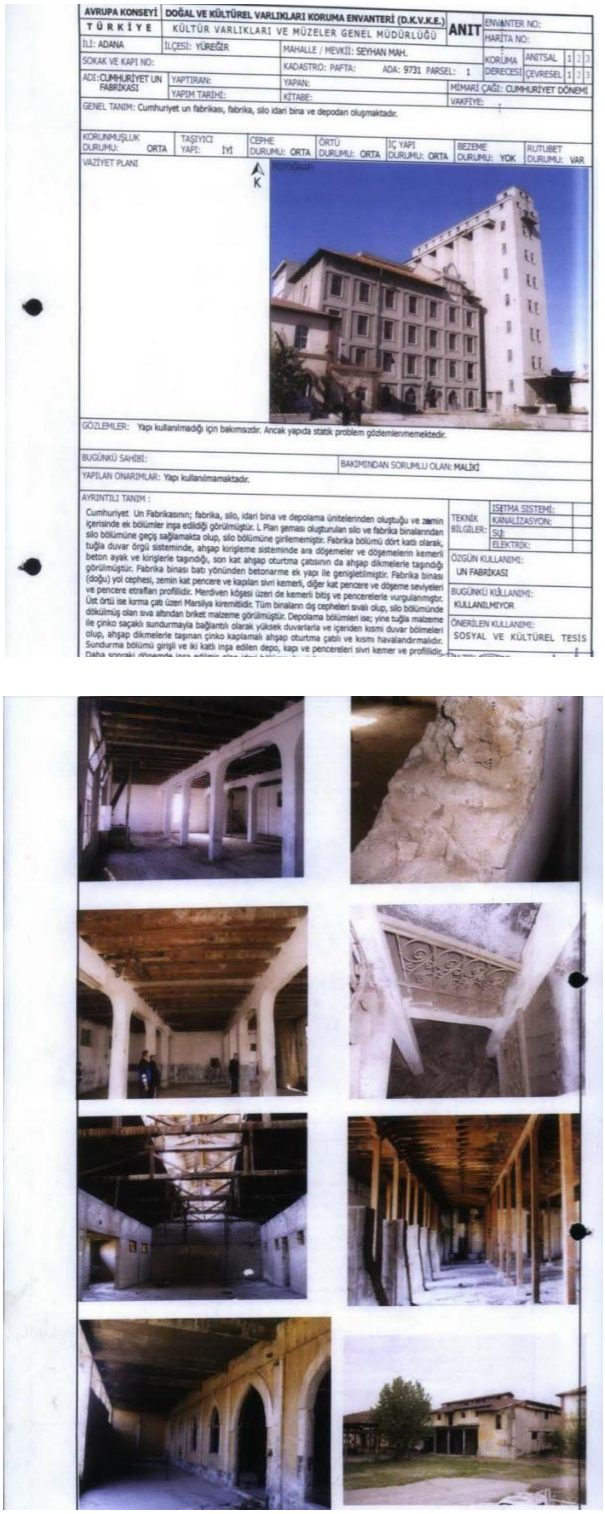
ÖNERİLEN KULLANIM:



FOTOĞRAF:

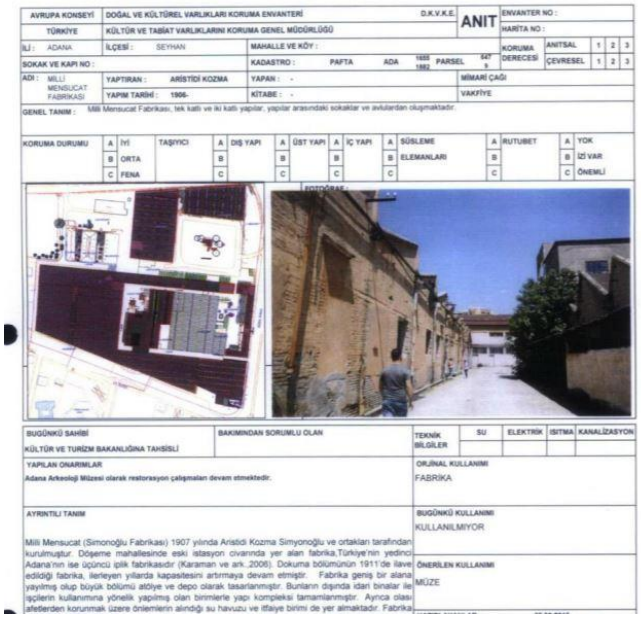
2018 yılına ait fotoğraflar

9. Registration Sheet of Ulaş Çırçır (Alman Fabrikası) from Adana Regional Council (No:1 at the building sheets and mappings in this study)



AVRUPA KONSEYİ | DOĞAL VE KÜLTÜREL VARLIKLARI KORUMA ENVANTERİ (D.K.V.K.E.) | ANIT
TÜRKİYE | KÜLTÜR VARLIKLARI VE MÜZELER GENEL MÜDÜRLÜĞÜ
ENVANTER NO:
HARİTA NO:
İLİ: ADANA | İLÇESİ: YÜREĞİR | MAHALLE / MEVKİİ: SEYHAN MAH.
SOKAK VE KAPI NO: | KADASTRO: PAFTA: ADA: 9731 PARSEL: 1
KORUMA DERECESİ: ANITSAL 1 2 3 | ÇEVRESEL 1 2 3
ADI: CUMHURİYET UN FABRİKASI | YAPTIRAN: | YAPAN: | MİMARİ ÇAĞI: CUMHURİYET DÖNEMİ
YAPIM TARİHİ: | KİTABE: | VAKFİYE:
GENEL TANIM: Cumhuriyet un fabrikası, fabrika, silo idari bina ve depodan oluşmaktadır.
KORUNMUŞLUK DURUMU: ORTA | TAŞIYICI YAPI: İYİ | CEPHE DURUMU: ORTA | ÖRTÜ DURUMU: ORTA | İÇ YAPI DURUMU: ORTA | BEZEME DURUMU: YOK | RUTUBET DURUMU: VAR
VAZİYET PLANI
K
FOTOĞRAF:
GÖZLEMLER: Yapı kullanılmadığı için bakımsızdır. Ancak yapıda statik problem gözlemlenmemektedir.
BUGÜNKÜ SAHİBİ: | BAKIMINDAN SORUMLU OLAN: MALİKİ
YAPILAN ONARIMLAR: Yapı kullanılmamaktadır.
AYRINTILI TANIM :
Cumhuriyet Un Fabrikasının; fabrika, silo, idari bina ve depolama ünitelerinden oluştuğu ve zamin içerisinde ek bölümler inşa edildiği görülmüştür. I. Plan şeması oluşturulan silo ve fabrika binalarından silo bölümüne geçiş sağlanmakta olup, silo bölümüne girilememiştir. Fabrika bölümü dört katlı olarak, tuğla duvar örgü sisteminde, ahşap kirişleme sisteminde ara döşemeler ve döşemelerin kemerli beton ayak ve kirişlerle taşındığı, son kat ahşap oturtma çatısının da ahşap dikmelerle taşındığı görülmüştür. Fabrika binası batı yönünden betonarme ek yapı ile genişletilmiştir. Fabrika binası (doğu) yol cephesi, zemin kat pencere ve kapıları sivri kemerli, diğer kat pencere ve döşeme seviyeleri ve pencere etrafları profilidir. Merdiven köşesi üzeri de kemerli bitiş ve pencerelerle vurgulanmıştır. Üst örtü ise kırma çatı üzeri Marsilya kiremitlidir. Tüm binaların dış cepheleri sıvalı olup, silo bölümünde dökülmüş olan sıva altından briket malzeme görülmüştür. Depolama bölümleri ise; yine tuğla malzeme ile çinko saçaklı sundurmayla bağlantılı olarak yüksek duvarlarla ve içeriden kısmi duvar bölmeleri olup, ahşap dikmelerle taşınan çinko kaplamalı ahşap oturtma çatılı ve kısmı havalandırmalıdır. Sundurma bölümü girişi ve iki katlı inşa edilen depo, kapı ve pencereleri sivri kemer ve profilidir.
TEKNİK BİLGİLER: ISITMA SİSTEMİ: | KANALİZASYON: | SU: | ELEKTRİK:
ÖZGÜN KULLANIMI: UN FABRİKASI
BUGÜNKÜ KULLANIMI: KULLANILMIYOR
ÖNERİLEN KULLANIMI: SOSYAL VE KÜLTÜREL TESİS

10. Registration Sheet of Cumhuriyet Un from Adana Regional Council (No:4 at the building sheets and mappings in this study)



AVRUPA KONSEYİ | DOĞAL VE KÜLTÜREL VARLIKLARI KORUMA ENVANTERİ — D.K.V.K.E. — ANIT — ENVANTER NO :
TÜRKİYE | KÜLTÜR VE TABİAT VARLIKLARINI KORUMA GENEL MÜDÜRLÜĞÜ — HARİTA NO :
İLİ : ADANA | İLÇESİ : SEYHAN | MAHALLE VE KÖY : | KORUMA DERECESİ | ANITSAL 1 2 3 | ÇEVRESEL 1 2 3
SOKAK VE KAPI NO : | KADASTRO : PAFTA ADA 1655 1662 PARSEL 647 1
ADI : MİLLİ MENSUCAT FABRİKASI | YAPTIRAN : ARİSTİDİ KOZMA | YAPAN : - | MİMARİ ÇAĞI
YAPIM TARİHİ : 1906- | KİTABE : - | VAKFİYE
GENEL TANIM : Milli Mensucat Fabrikası, tek katlı ve iki katlı yapılar, yapılar arasındaki sokaklar ve avlulardan oluşmaktadır.

KORUMA DURUMU: A İYİ / B ORTA / C FENA — TAŞIYICI — DIŞ YAPI — ÜST YAPI — İÇ YAPI — SÜSLEME ELEMANLARI — RUTUBET — A YOK / B İZİ VAR / C ÖNEMLİ

FOTOĞRAF

BUGÜNKÜ SAHİBİ: KÜLTÜR VE TURİZM BAKANLIĞINA TAHSİSLİ — BAKIMINDAN SORUMLU OLAN
TEKNİK BİLGİLER: SU | ELEKTRİK | ISITMA | KANALİZASYON

YAPILAN ONARIMLAR
Adana Arkeoloji Müzesi olarak restorasyon çalışmaları devam etmektedir.

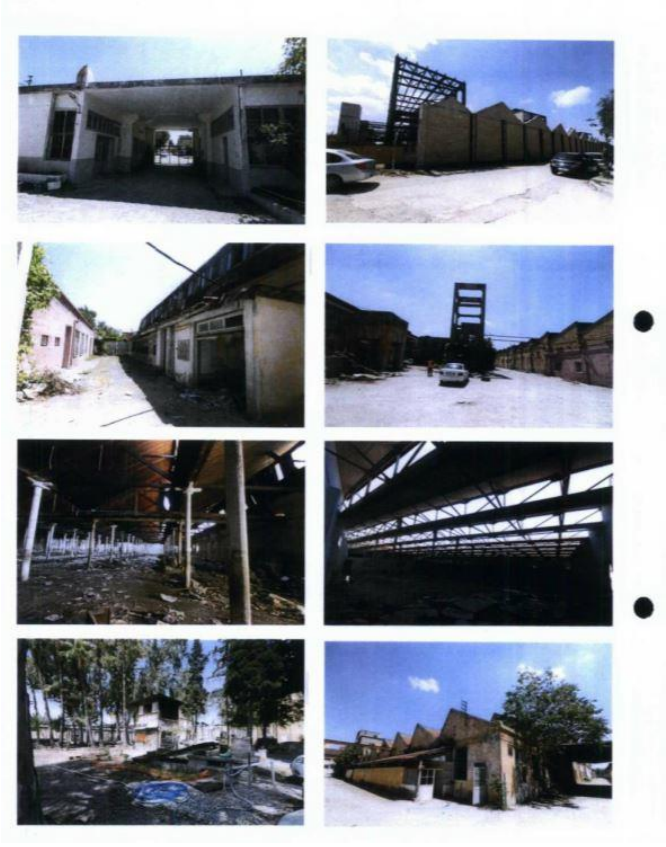
ORJİNAL KULLANIMI: FABRİKA

AYRINTILI TANIM

Milli Mensucat (Simonoğlu Fabrikası) 1907 yılında Aristidi Kozma Simyonoğlu ve ortakları tarafından kurulmuştur. Döşeme mahallesinde eski istasyon civarında yer alan fabrika,Türkiye'nin yedinci Adana'nın ise üçüncü iplik fabrikasıdır (Karaman ve ark.,2006). Dokuma bölümünün 1911'de ilave edildiği fabrika, ilerleyen yıllarda kapasitesini artırmaya devam etmiştir. Fabrika geniş bir alana yayılmış olup büyük bölümü atölye ve depo olarak tasarlanmıştır. Bunların dışında idari binalar ile işçilerin kullanımına yönelik yapılmış olan birimlerle yapı kompleksi tamamlanmıştır. Ayrıca olası afetlerden korunmak üzere önlemlerin alındığı su havuzu ve itfaiye birimi de yer almaktadır. Fabrika

BUGÜNKÜ KULLANIMI: KULLANILMIYOR

ÖNERİLEN KULLANIMI: MÜZE



11. Registration Sheet of Milli Mensucat from Adana Regional Council (No:10 at the building sheets and mappings in this study)

1- 	2- 
3- 	4- 
5- 	6- 
7- 	8- 

12- Certain logos of governmental, municipal and NGOs that include cotton image in Adana

1- Governorate of Adana, retrieved from http://www.adana.gov.tr/ last accessed on 20.08.2019
2- Metropolitan Municipality of Adana, retrieved from http://www.adana.bel.tr/ last accessed on 20.08.2019
3- Yüreğir Municipality, retrieved from http://www.yuregir.bel.tr/ last accessed on 20.08.2019
4- Ceyhan Municipality, retrieved from https://www.ceyhan.bel.tr/kurumsal-logo/ last accessed on 20.08.2019
5- Adana Chamber of Commerce, retrieved from https://www.adanato.org.tr/#!/sayfa/logolar last accessed on 20.08.2019
6- Adana Commodity Exchange, retrieved from https://www.adanatb.org.tr/index.html#openModal last accessed on 20.08.2019
7- Law Society of Adana, retrieved from https://www.adanabarosu.org.tr/ last accessed on 20.08.2019
8- Adana Medical Association, retrieved from http://www.adanatabip.org.tr/ last accessed on 20.08.2019

0. EXTRACTIVE INDUSTRIES (EXTRAC)
01. Iron Mining (IRON)
02. Anthracite & Bituminous Mining (COAL)
03. Crude Petroleum & Natural Gas (OIL)
04. Non-Metalic Minerals (UNEL)
0 Dimension stone, 1 Crushed and broken stone, 3 Sand & Gravel, 4 Chemical and fertilizer minerals, 5 Gemstones, 6 Salt, 9 Other
05. Non-Ferrous Ores (NON-FER)
0 Copper,1 Lead and Zinc, 2 Gold and Silver, 3 Bauxite and Aluminum, 4-8 (BLANK), 9 Other
06.0 Surface
07.0 Subsurface
08.0 (BLANK)
09.0 Other
1. BULK PRODUCTS INDUSTRIES (BULK)
10. Agriculture and Rural Industries (AGRI)
0 Agriculture engineering, 1 Farm buildings and machinery, 2-3 (BLANK), 4 Ginning,5 Tobacco products, 6-9 (BLANK)
11. Thermally produced products (THERM)
0 Brick & structural clay works, 1 Pottery, 2 Glass works, 3 Cement plants, 4 Charcoal Kilns, 5 Lime Kilns, 6 Coke ovens, 9 Other
12. Chemical Industry (CHEM)
0 Industrial organic and inorganic chemicals, 1 Plastics & synthetics, 2 Pharmaceuticals, 3 Soaps, detergents, and animal products, 5 Paints and varnishes, 7 Agricultural chemicals
, 8 Petroleum products, 9 other
13. Food Processing (FOOD)
0 Meat, fish, and poultry products, 1 Dairy and bakery products, 2 Grains and cereals, 3 Sugar (beet and cane), 4 Beverages (breweries, distilleries, and bottling plants), 5 Food preservation (refrigeration and canning), 6-8 (BLANK), 9 Other
14. Primary Metal Industries (METAL)
0 Stone-based iron furnaces, 1 All other iron furnaces, 2 Steel works and rolling mills, 3 Iron and steel foundries (cast ferrous products), 4 Iron and steel forges, 5 Non-ferrous metal smelters & refineries, 6 Rolling, drawing, and extruding works (non-ferrous metals), 7 Non-ferrous foundries, 8 Non-ferrous forges, 9 Other
15. Textiles (TEXT)
0 Cotton spinning and/or weaving, 1 Wool spinning and/or weaving, 3 Silk spinning and/or weaving; man-made fibers, 4 Knitting, 4-5 (BLANK), 6 Handloom weaving, 7 Textile finishing (printing, dyeing, etc.), 8 Twine, cordage, netting, and bagging, 9 Other
16. Lumber, Timber, and Paper Industries (WOOD)
0 Logging, 1 Millwork, veneer, plywood and other wood products, 2-3 (BLANK), 4 Paper making, 5 (BLANK), 6 Sawmills and/or planing mills, 7-8 (BLANK), 9 Other
17. (BLANK)
18. (BLANK)
19. (BLANK)
20. (BLANK)
2. MANUFACTURING -INDUSTRIES (MFG)
21. Machine Manufacture (MACH)
0 Engines, turbines, pumps, and compressor manufacturers, 1 (BLANK), 2 Agricultural implements and machinery manufacturers, 3 Construction, mining, and materials handling equipment manufacturers, 4 Metal and woodworking machinery manufacturers, 5 Paper making machinery, manufacturers, 6 Textile machinery manufacturers, 7 Printing trades machinery manufacturers, 8 Electrical generating manufacturers, 9 Other machinery manufacturers,
22. Fabricated Metal Products Manufacturers (FABR),
0 Cutlery and hand tools, 1 (BLANK), 2 Metal containers, 3 Plumbing fixtures and equipment, 4 Fabricated structural metal products, 5 Metal Stampings, 6 Wire and screw machine products, 7-8 (BLANK), 9 Other
23. Transportation Equipment Manufacturers (TEQUIP)
0 Automobiles and trucks, 1 Air and space equipment, 2 Ships and boats (including repairs), 3 Railroad locomotives and rolling stock, 4 Motorcycles and bicycles, 5 Carriages, wagons, and accessories, 6 Fire engines and equipment, 7 Auxiliary and control equipment, 8 (BLANK), 9 Other
24. Professional,-Scientific, and Precision Instrument Manufacturers (INST)- 0 All
25. General Manufacturing (GENHFG)

HAER INDUSTRIAL STRUCTURES CLASSIFICATION SYSTEM-1

13a- Produced by the Author, 2019 according to Falser, 2001: Appendices

0 (BLANK), 1 Publishing and allied industries, 2 Rubber products manufacturers, 3 Leather and other animal skin products manu acturers, 4 Cooking and heating equipment manufacturers, 5 Toys, games, and novelties, 6 Paper and plastic consumer products manufacturers, 7 Craft industries, 8 (BLANK), 9 Other

26.0 Ordnance, Munitions, and Explosives (ORDAN)

27.0 Finished Wooden Product Manufacturers (furniture, spools, barrels, baskets, etc.) (FNWOD)

28. (BLANK)

29. (BLANK)

30. (BLANK)

3. UTILITIES (UTIL)

31. Municipal Water Supply (WATER)

0 Collection storage, 1 Treatment, 2 Distribution and transportation, 3 Pumping, 4-8 (BLANK), 9 Other

32. Sanitation (SANI)

0 Sewage collection, 1 Sewage treatment, 2 Sewage disposal, 3 Storm drainage systems, 4 Pumping, 5-8 (BLANK), 9 Other

33. Gas (GAS)

0 Manufacture, 1 Storage, 2 Distribution, 3-8 (BLANK), 9 Other

34. Electricity (ELEC)

0 Generation, 1 Municipal distribution, 2 (BLANK), 3 High-voltage transmission, 4-8 (BLANK), 9 Other

35. (BLANK)

4. POWER SOURCES AND PRIME MOVERS (PS&PM)

36. Human and Animal Power (MUSL)-0 All. types

37. Water Wheels (WW)

0 Horizontal (tub flutter), 1 (BLANK), 2 Undershot-, 3 Overshot, 4 Breast, 5 Pitch back, 6-8 (BLANK), 9 Other

38. Water Turbines (WTURB) 0 All types

39. Wind (WIND)

0 (BLANK), 1. Smock, 2-8 (BLANK), 9 All other

40. Steam Reciprocating (STEAM RECIP)

0-5 (BLANK), 6 Industrial/mill, 7 Agricultural/portable 8 Marine/pumping, 9 Other

41. Steam Turbine (STEAM TURB)

0-2 (BLANK), 3 All types – vertical, 4 All types – horizontal, 5-8 (BLANK), 9 Other

42. Internal Combustion (INT COMB)-0 All types

43. (BLANK)

44. Electric Motors. (ELEC)-0 All types

45. (BLANK)

46. (BLANK)

5. TRANSPORTATION (TRANS)

47. Railroads (RR)

0 Construction & engineering: non-sheltering such as cuts, fills, revetments, bridges, and tunnels, 1 Structures: sheltering (for maintenance of route & rolling stock), 2 Passenger stations & sheds, 3 Freight facilities, 4 Objects (such as locomotives, rolling stock, and other mechanical artifacts), 5 Street railways, subways, and elevateds, 6 Incline- planes, 7-8 (BLANK), 9 Other

48. Roads (ROADS)

0 Systems, 1 construction, 2 Structures, 3 Objects: milestones, signposts, etc., 4-8 (BLANK), 9 Other

49. Canals and Inland Navigation (CANAL)

0 Systems, 1 Construction, 2 Structures, 3 Objects: canal and river boats, 4 Navigational aids, 5-8 (BLANK), 9 Other

50. Marine and Harbor Works (MARINE)

0 Docking facilities and structures, 1 Navigational aids, 2 Coast protection works, 3 Objects: ships and other marine related artifacts, 4-8 (BLANK), 9 Other

51. Air (AIR)

0 Airport facilities & structures, 1 Aircraft, 2-8 (BLANK), 9 Other

52. Pipelines (PIPE)- 0 All

53. (BLANK)

54. (BLANK)

6. COMMUNICATIONS (COMM)

55. Telephone and Telegraph (T&T) - 0 All types.

56. Radio and Television (R&TV) - 0 All types

57. (BLANK)

13b- Produced by the Author, 2019 according to Falser, 2001: Appendices

7. BRIDGES, TRESTLES, AND AQUEDUCRS (BT&A)

58. Beam or Girder (BEAM)
0 Wood, 1 Stone, 2 Cast iron, 3 Wrought iron, 4 Steel., 5 Mass and reinforced concrete, 6 Cast & wrought iron, 7-8 (BLANK), 9 Other

59. Arched (ARCH)
0 Wood, 1 Cast iron, 2 Wrought iron, 3 Stone, 4 (BLANK), 5 Mass and reinforced concrete, 6 Steel, 7 Brick, 8 (BLANK), 9 Other

60. Trussed (TRUSS)
0 Wood, 1 Cast iron, 2 Wrought iron, 3 Steel, 4 Covered, 5 Cast & wrought iron, 6-8 (BLANK), 9 Other

61.0 Suspension

62.0 Aqueducts

63. Viaducts and Trestles (VIAD or TRES)-0 All types

64. Cantilever (CANT)-0 All types

65. Movable Bridges (MOVE)
0 Bascule, 1 (BLANK), 2 Swing, 3 Vertical lift, 4-8 (BLANK), 9 Other

66. (BLANK)

67. (BLANK)

68. Miscellaneous (MSC)- 0 Pontoon

8. BUILDING TECHNOLOGY (BLD TECH)

69. Foundations (FOUND)-0 All

70. Framed Superstructures (FRAME)
0 Wood, 1 Cast iron, 2 Wrought iron and steel, 3 Stone and brick, 4 Mass and reinforced concrete, 5 Ferro-vitreous

71. Floor Systems (FLOOR) - 0 All

72. Roof Systems (ROOF) -0 All

73. Fenestration (FENES) - 0 Cast-iron facades

74. Mechanical and Electrical Systems (IECH) -0 All

75. Ancillary Components (ANCIL) - 0 All

76. (BLANK)

77. (BLANK)

78. (BLANK)

9. SPECIALIZED STRUCTURES AND OBJECTS (SPEC STRUC)

79. Dams (DAM)
0 Masonry 1 Earthfill, 2 Rockfill, 3 Arch, 4 Flat slab or Anberson, 5 Multiple-arch, 6 Tainter (movable), 7 Rolling (movable) 8 Gravity, 9 Other

80. Tunnels (TUNLS)
0 Cut & cover, 1 Rock-cut, 2 Earth-cut, 3 Subaqueous, 4-9 (BLANK)

81. Hydraulic Works (HYDRA) See also 31: Water Supply, and 49: Canals
0 Flood-control works, 1 Drainage works, 2 Power canals, 3 Irrigation works, 4-8 (BLANK), 9 Other

82. Specialized Construction (CONST)
0 Underground structures, 1 Rocket launch facilities, 2 Facilities for reactors and particle accelerators, 3 Fortifications, 4 Towers, 5 Observatories

83. Thermal Structures (HEAT)
0 Chimneys and smokestacks, 1 Ovens, 2 Kilns, 3 Furnaces (see also 14.0), 4 Glass cones, 5 Refrigeration plants, 6-8 (BLANK), 9 Other

84. Materials Handling and Equipment (MMH)
0. Excavating and dredging machinery, 1 Lifting and hoisting, 2 (BLANK), 3 Conveyor systems, 4 Combined systems, 5 Processing, screening, and separating equipment, 6 Aerial tramways, 7-8 (BLANK), 9 Other

85. Materials Storage (MATS)
0 Elevators & Silos, 1 Tanks & towers, 2 Gas holders, 3 Warehouses, 4 Reservoirs, 5-8 (BLANK), 9 Other

86. Power and Energy Transmission (P&ET)
0 Mechanical, 1 Electrical, 2 Hydraulic, 3 Pneumatic, 4 Steam

87. Workers Housing, Communities, and Other Related Artifacts (HOUS)

88.. Adaptively Used Industrial and Engineering Works (ADAPT)

89. Museums of Technology (MUSEUM)

90. Land Surveying Landmarks (LAND)

91. Amusements

92. (BLANK)

93. (BLANK)

HAER INDUSTRIAL STRUCTURES CLASSIFICATION SYSTEM-3

13c- Produced by the Author, 2019 according to Falser, 2001: Appendices