THE CHANGING MORPHOLOGY OF URBAN GREENWAYS, ANKARA, 1923-1960

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

BY

SİNAN BURAT

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
IN
CITY AND REGIONAL PLANNING

AUGUST 2008

Approval of the thesis:

THE CHANGING MORPHOLOGY OF URBAN GREENWAYS, ANKARA, 1923-1960

submitted by **SİNAN BURAT** in partial fulfillment of the requirements for the degree of **Doctor of Philosophy in City and Regional Planning Department, Middle East Technical University** by,

Prof. Dr. Canan Özgen _____
Dean, Graduate School of **Natural and Applied Sciences**

Prof. Dr. Melih Ersoy _____
Head of Department, **City and Regional Planning**

Prof. Dr. Sevgi Aktüre _____
Supervisor, **City and Regional Planning Dept., METU**

Assoc. Prof. Dr. Cânâ Bilsel _____
Co-Supervisor, **Department of Architecture**

Examining Committee Members:

Assoc. Dr. Baykan Günay _____
City and Regional Planning Dept., METU

Prof. Dr. Sevgi Aktüre _____
City and Regional Planning Dept., METU

Assist. Prof. Dr. Tolga Ünlü _____
City and Regional Planning Dept., MeU

Assoc. Prof. Dr. Güven Arif Sargın _____
Architecture Department, METU

Assoc. Prof. Dr. Adnan Barlas _____
City and Regional Planning Dept., METU

Date: 18.08.2008

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, Last Name : Sinan Burat

Signature :

ABSTRACT

THE CHANGING MORPHOLOGY OF URBAN GREENWAYS,
ANKARA, 1923-1960

Burat, Sinan
Ph.D., Department of City and Regional Planning
Supervisor: Prof. Dr. Sevgi Aktüre
Co-Supervisor: Assoc. Prof. Dr. Cânâ Bilsel

August 2008, 182 pages

Despite the abundance of descriptive studies on the urban development plans of Ankara, analytical studies on specific features of these plans, especially on implementation and modification processes are scarce. This study examines the green space structure brought in Jansen's 1932 development plan of Ankara, the way it was implemented and the modifications that a component of this structure was subject to. The 1932 Jansen plan is a holistic and comprehensive plan that contained a conceptual green space structure, integrated with other public uses and social facilities. An in depth evaluation of Jansen's 1928 and 1932 plans is made and a typology of the components of the green space structure is formed. It is found that the plan principles and the components of the green space structure of Jansen's plan for Ankara are perfectly congruent with German planning approach and principles of the time.

From the analysis of the plan modifications of the Güven Park-Tandoğan Greenway a typology of modifications is developed. It is argued that the 1933 and 1957 development laws and regulations lacked definitions for realizing and sustaining the green space types proposed by Jansen, which consequently lead to their modifications. In reality the land ownership status, "hâlî arazi", under which the greenways of Jansen plan were placed, illustrates the difficulty of translating these spatial categories into the Turkish legislative framework. In this respect, this study is an attempt to provide a contribution to the study of green spaces in relation with the implementation of development plans.

Keywords: green space structure, *grünstreifen*, *freiflächen*, Hermann Jansen, plan modifications

ÖZ

KENTSEL YEŞİLYOLLARIN DEĞİŞEN MORFOLOJİSİ,
ANKARA, 1923-1960

Burat, Sinan
Doktora, Şehir ve Bölge Planlama Bölümü
Tez Yöneticisi: Prof. Dr. Sevgi Aktüre
Ortak Tez Yöneticisi: Doç. Dr. Cânâ Bilsel

Ağustos 2008, 182 sayfa

Ankara'nın imar planları üzerine çok sayıda betimleyici çalışma olduğu halde bu planların belirli özellikleri ve özellikle de uygulama ve değişiklik süreçleri üzerine çözümleyici araşırmalar azdır. Bu çalışma Jansen'in 1932 Ankara imar planının önerdiği yeşil alan strüktürünün uygulanması ve bir parçasının değişiklik sürecini incelemektedir. 1932 Jansen planı diğer kamusal kullanımlarla ve sosyal tesislerle bütünleşmiş kavramsal bir yeşil alan strüktürü içeren bütüncül bir plandır. Jansen'in 1928 ve 1932 planlarının kapsamlı bir değerlendirilmesi yapılmış ve yeşil alan strüktürünün parçalarının tipolojisi çıkartılmıştır. Jansen'in Ankara planının ilkelerinin ve yeşil alan strüktürünün parçalarının zamanın Alman planlama yaklaşımı ve ilkeleri ile çok benzer olduğu görülmüştür. Güven Park-Tandoğan Yeşil

Yolu'na yapılan plan değişikliklerinin analizinden bir değişiklik tipolojisi çıkarılmıştır. 1933 ve 1957 tarihli imar kanunlarının ve yönetmeliklerinin Jansen'in önerdiği yeşil alan tiplerini uygulamak ve sürdürmek için gerekli tanımları içermedikleri, bunun da yeşil alanların değişikliğe uğramasına yol açan faktörlerden biri olduğu görülmüştür. Jansen planındaki yeşil yolların arazi mülkiyet tipinin "hâlî arazi" olarak belirlenmesi, bu mekansal kategorilerin Türk yasal çerçevesine tercüme edilmesindeki güçlüğü göstermektedir. Bu çalışma bu bağlamda yeşil alanlarla ilgili araştırmalara imar planlarının uygulanması ile ilişkili olarak katkı sağlamayı hedeflemektedir.

Anahtar Kelimeler: yeşil alan strüktürü, yeşil yol, serbest sahalar, Hermann Jansen, plan değişiklikleri

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my advisor, Prof. Dr. Sevgi Aktüre for her understanding and kind efforts through all my turbulent and chaotic states of mind. Without her everlasting patience this study would not have been complete.

I would like to thank Assoc. Prof. Cânâ Bilsel for her invaluable comments and encouragements at the direst of all situations a doctorate candidate is likely to face. Working with her was an extremely pleasant experience and I am extremely lucky for that.

Assoc. Dr. Baykan Günay's continuous confidence and sophisticated answers to my senseless questions even when my timing was bad has been the most comforting support since 1996 when I started my master studies. I stepped into the interdisciplinary field of urban design in his studio and got acquainted with planning and interdisciplinary work there. I am grateful to Baykan Günay for his efforts

My doctorate steering committee, composed of Prof. Dr. Sevgi Aktüre, Assoc. Dr. Baykan Günay and Assoc. Dr. Güven Arif Sargın, has been very understanding and supportive and has provided very valuable feedback when I needed.

The members of my examining committee, Assoc. Dr. Adnan Barlas and Assist. Dr. Tolga Ünlü, have always been friendly and professional at the same time, providing the most clear, and sometimes the most *in front of my eyes* solutions in dire situations.

Determined efforts of my colleague, Yener Baş, has availed us with the archive material at the Plan Archive of Greater Municipality of Ankara. Working with him for weeks at the dusty Archive, digging through binders was a delight and the textual and graphical data we collected have provided the answers to the questions of the study.

Though they were engaged with their own studies, Olgu Çalışkan in Delft and Burak Büyükcivelek in London, were open for discussions and small talks online. I owe them many thanks for their online presence through long sleepless nights of studying.

The recent and past residents of R305 have tried to ease each other's burdens and to put up with each others' ups and downs. Thanks to them for being there.

Figen and Mete have been supportive in many ways, not only related with this study, but as friends, who I know I will have for life.

I would like to express my gratitude to my parents for their encouragement and self sacrifice throughout all my life, and for their endurance during the study; and to my parents-in-law for their support and patience.

My wife Sinem's never ending patience and encouraging smile has been with me through all my studies. Knowing that she believed in me is what kept me going on. I am glad to have her encouragement at all times.

TABLE OF CONTENTS

LIST OF FIGURES

FIGURES

LIST OF TABLES

TABLES

CHAPTER 1

INTRODUCTION

In the last decade, Ankara city has been subject to the development of large-scale urban green areas. Though these parks are presented as "urban parks", they are located at the periphery of the city where undeveloped public land is abundant[1]. Even though these parks have increased the amount of green spaces in Ankara, the green spaces available at the city core are still below the needs, a situation which limits the access of the urban populace to green areas. The lack of green spaces at the core of the city has also resulted in the loss of daily practices related with the open green spaces. Yet, there have been repeated attempts, to alter and even destroy the existing green spaces in the city centre.

From the planning point of view, criticizing the present condition of the public green spaces and the structure they form necessitates the understanding of the development history of the city. The development plans define the development and change of the physical structure of cities, and set the rules of the character of the development. They determine the road network, the land use, the sizes and forms of urban blocks and plots, the development type/character and the distribution of public uses. In theory, formation and transformation of the urban green space structure of a city is among these plan decisions. The

[1] Göksu Park (508.000 m²) and Harikalar Diyarı (1.300.000 m²) are opened in 2003, and Mogan Park (601.879 m²) is opened in 2005.

distribution, location and sizes of the components of green space structure are determined by development plans and still there is not any other instrument serving for this purpose.

The development laws and regulations set the rules of plan making and development. The amount, types and distribution of land uses and services, and the conditions of plan modifications are also defined by development laws and regulations. The types, amount and the standards of the green spaces are determined by these laws and regulations as well.

1.1. The Aim of the Study

This study deals with the production and transformation of the open space structure in the city of Ankara in 1927-1960 period, when the first three development plans of the city were successively in use. Considering the lack of green spaces and a green space structure in the urban structure of Ankara city as a whole, this study aims to answer the questions “Did the plans brought any structure of green spaces?”, “What types of green spaces have been proposed by these development plans?” and “How and why these green spaces were lost in the implementation process?”

The main concern of this thesis is the urban greenways as a specific component of the green space structure which is an integrated morphological element of Hermann Jansen’s 1932 Ankara development plan, which link natural reserves, parks, cultural and historic sites, sport areas with each other. These greenways range in size and function as large landscape linkages as well as smaller pedestrian corridors. Greenways are the connections that enable the urban green space structure to extend to residential and working areas.

The hypothesis of the study is that the green space structure proposed by Hermann Jansen in the 1932 Ankara development plan was appropriated as it had to be by the planning authorities, the Development Executive Committee and the Development Directorate. In the study, the implementation of individual green spaces proposed in the development plan and the enactment of development laws having detailed articles on green spaces are considered as positive actions of responsible planning authorities. However, the fact that the green structure, brought forward by Hermann Jansen in his plan approved in 1932, could not be realized in its integrity, and the problem of translating the concept of *freiflächen* (free space) into the Turkish legislation points out the existence of certain problems in the transfer of the planning model. The development laws and regulations, dated from 1933, 1956 and 1957, and the plan modifications made to the Güven Park-Tandoğan Greenway, are analyzed in this study to test the relevance of this hypothesis.

1.2. The Research Material

To evaluate the development plans and plan modifications of Ankara, both archive documents and visual materials will be used during the analysis. This section will introduce the type of material used, and how they were processed in order to be available for analysis. It is possible to classify those under four headings, in terms of their sources, types and availability for the purposes of the study.

1.2.1. The Archive Material from the Plan Archive of Greater Municipality of Ankara

There are two groups of archival documents used in the research. The letters exchanged between Hermann Jansen and the Development

Directorate of Ankara "Şehremaneti", and the reports and briefs sent by Jansen form the first set of these documents. As attachments, the plans and sketches of Jansen or of the Development Directorate were supposed to accompany these letters, unfortunately these plans and sketches are missing in the Plans Archive of the Greater Municipality of Ankara. These letters cover the period between 1932 and 1939.

The Jansen letters were stacked in 17 binders, in a not so orderly way in a steel cabinet. Borrowing the material and having them scanned outside the Archive were not permitted and the Archive lacked the means to scan the necessary documents. So the binders were schemed and scanned and the photographs of the documents deemed to be important were taken by digital cameras. These photographs were edited[2] in Adobe Photoshop and were assorted according to the binders they belonged to. Later, a second selection was made this by time reading each photograph/document. The resulting set of photographs/documents were indexed according to the sender, the letter number (given by Jansen to the letters he wrote), the document number (given by the Municipality to the incoming and outgoing letters), the photograph file name, the date, the subject, reply to (if the letter was a reply to another letter), and the attachments.

1.2.2. Jansen's Ankara Plans and Drawings at the Architecture Museum of Berlin Technical University

The archive of the Architecture Museum of Berlin Technical University has a large collection of Jansen's drawings, sketches and plans in its inventory. These scanned materials are being available online at the institute's internet site in downloadable pdf format. Materials related with Ankara were browsed, and the ones related with the study were downloaded, converted into tiff files, cropped and merged when needed.

[2] The photographs were mostly rotated and seldom cropped.

1.2.3. The Development Plans of Ankara

The importance of the first three development plans of Ankara in the morphological development of the city and its green structure and in the modifications made to its components, have already been emphasized. To trace the route leading to the present condition of green spaces in the core of Ankara, the 1927 Lörcher Plan, the 1932 Jansen Plan and the 1957 Uybadin-Yücel Plan which had been prepared in different mapping techniques and in different scales, were transferred into digital medium by the use of a similar graphic representation. As the original Lörcher Plan was not in a "healthy" state to be scanned, the photos taken by Ali Cengizkan were traced in Autocad 2004. The 1/4000 development plan of Ankara drawn by Hermann Jansen was scanned in an A0 scanner and were traced in the same way in Autocad 2004. The 1967 plan was traced in Autocad 2004 also. The raster image used for this purpose was composed of 1/1000 scale sheets of 1957 development plan, scanned, assembled and combined in Adobe Photoshop. Later, these traced plans were saved in Autocad File Exchange Format (dxf) and imported into MapInfo, GIS software, where they were superimposed over an aerial SID format photo of Ankara city.

Also, Adobe Photoshop was used in order to prepare conceptual maps to emphasize the green space structures proposed by the mentioned development plans.

1.2.4. The Aerial Photograph of Ankara

The coordinated aerial photograph of Ankara used in the study is a SID photograph dated to the late 1990s and covers the whole metropolitan Ankara. The SID format is an acronym for *multiresolution seamless image database,* which means that the appropriate software adjust the resolution according to the zoom level.

The aerial photo, on which the successive development plans were superimposed, dates to the late 1997s and is suitable for our purpose of finding out the existing pattern of green areas in the core of Ankara city, since it has not faced important transformations since then.

1.3. The Plan Analysis Technique Used in the Study

In this section, Conzen's plan analysis technique will be briefly summarized and the adaptation of this technique for this study is explained.

1.3.1. Conzen's Plan Analysis Technique

The plan analysis technique used in this study was first developed by the German originated British geographer Michael Robert Gunter Conzen and published in 1960. Conzen studied the morphological evolution of a small medieval service centre, Alnwick, in four stages (Conzen, 1960).

1. A base town plan was prepared. Conzen used the 1/2500 Ordnance Survey Plans for this purpose.
2. Units that have similar formal properties such as size, shape, orientation, were defined as plan units and numbered.
3. Historical material was integrated by mapping it onto the town plan, forming the morphological history of individual plan units.
4. All the plan units and their historical records were accumulated on a map to create the map of the morphological change through time and this final map was used to interpret the process.

In Europe, the notion of and the need for public green spaces and green space structure entered the agenda of the professions related with the cities by the middle of the 19th century, however Conzen's analysis of Alnwick does not include urban green spaces. The plan analysis technique is still useful for our purpose and will be adapted and modified to fit the analysis of urban green spaces in Ankara case. This may be considered as a contribution to the technique developed by Conzen.

1.3.2. The Plan Analysis Method Adapted to Green Spaces

Preparation of a base plan as the first step of plan analysis is not considered as necessary, due to the following reasons:

i. The only green space in Ankara at 1920s was the Millet Garden, located right across the First Grand National Assembly Building at Ulus Square. The development plans expanded the development area and the city developed over a previously not inhabited area, mostly on the vacant lands, but also on vineyards and orchards to a certain extent. Therefore there was not any green space structure in the urban sense, prior to the preparation of the development plans and prior to development. As the 1932 Jansen Plan was the plan that proposed a comprehensive green space structure, this plan constitutes the base plan of the analysis and the case study area is defined according to this plan.

ii. Conzen's plan analysis deals with the form of the elements of the urban form, building, building lots and streets, and the transformation process of their form and through the accumulation of these changes, the total transformation of urban form. The case study elucidates the implementation and

modification process of the green space structure that is used as an integral element of urban form in 1928 and 1932 Jansen Plans. Conzen defined his plan units through an examination of the formal characteristics/properties of the buildings, plots and streets, such as size, shape and orientation. In the present analysis, a green space typology from 1928 and 1932 Jansen Plans, the plan reports and Jansen letters will be developed.

iii. As the main concern of the analysis is with what was planned and what was realized and changed later, the primary objects of analysis are the development plans and the archive documents.

1.3.3. The Stages of the Analysis

1.3.3.1. The evaluation of plans and plan proposals

In the first stage of the analysis the development plans and their proposals regarding the green space structure is made. The development plans, their reports and the archive documents are used for this purpose. What planners have proposed regarding the green spaces, their approaches to green spaces, whether their plans contained the setting up of a green space structure and the elements forming those green space structures is displayed. The first three development plans of Ankara are analysed in this stage, but the detailed analysis of 1928 and 1932 Jansen Plans are the main focus.

1.3.3.2. Defining plan units

Conzen defined his plan units through an examination of the plots' and streets' form characteristics/properties such as size, shape and

orientation. Though not exactly plan units in the Conzen's sense, but a typology of the green spaces proposed by Jansen is searched here, as the green space structure in Jansen's plan, is formed of green spaces having different form, size and use.

1.3.3.3. Integrating historical material

In this stage of the analysis, the data from the archive documents and the data from the Greater Municipality of Ankara are related with the elements of the green space structure, by mapping the data onto the development plans. This way, tracing the morphological changes of the individual green space elements and the decisions of the Municipality, and making up individual morphological chronologies is possible.

1.3.3.4. The overall interpretation and mapping of the morphological changes

The cumulative morphological histories of the green space elements is mapped and interpreted. By doing this, an overall morphological chronology of the green space structure is formed and the distribution of the changes in time is revealed and evaluated. In this stage, this data is used to relate the changes with the economic, social and political contexts at the research period. Also the dynamics at the background of the changes that the elements of the green space structure have gone through is put forth.

While dealing with a continuously changing and evolving phenomenon as the city, the morphological analysis will provide three important possibilities:

1. Dealing with the urban form in its completeness and uniqueness, the basic characteristics of the space structure, especially the green space structure, at a specific time will be established.
2. Comparative analysis will help us resolve the changes of space structure in time.
3. The basis of continuities and discontinuities in the urban green space structure caused by plan modifications, in the case of Ankara, will be unravelled.

Considering the contemporary piecemeal development practice, monitoring and recording the constant transformation of the urban morphology appears as an important issue. This study will be the record of the changes in the urban green space structure of the Demirtepe and Maltepe districts and would provide a framework for the future land use decisions and interventions.

1.4. The Plan of the Study

The period when the awareness about the need for urban green spaces arose in Europe also witnessed the birth of the idea of planned urban development by the mid-19th century. Green spaces are first introduced in a set of various solutions proposed as remedies to the ills of the industrial city. The emergence of green spaces as elements of urban form and the types of green spaces that are produced in time according to different socio-spatial contexts are discussed in Chapter 2. Regarding the importance of two German planners', Carl Lörcher's and Hermann Jansen's, development plans in shaping the morphology of Ankara and their proposals for the green spaces, German planning approaches during the first 30 years of the 20th century and the development plan history of Ankara is also covered in Chapter 2. Ankara is the first city which developed according to a comprehensive development plan in

Turkey. The archive of the Greater Municipality of Ankara contains documents about the development and planning of Ankara, dating back to 1920s. The availability of the visual material such as development plans, plan modification documents and the archive material, such as the letters of Jansen and the Development Executive Committee decisions, constitutes one of the reasons why Ankara is chosen to make the case study in.

The plan analysis of the first three development plans of Ankara constitutes the content of Chapter 3. The proposals of the plans, general and specific to green spaces are discussed and compared to each other. The proposals of Jansen plan for a green space structure and its components, which were effective in laying the foundations of the development in Yenişehir, Maltepe and Cebeci districts, constitute the major focus of our analysis in this chapter. Jansen's 1928 and 1932 plans will be thoroughly examined, making use of the documents from the Plan Archive of the Greater Municipality of Ankara and the plans from the Architecture Museum in Berlin Technical University. Also the dominant approaches and principles of German urban planning and the role of green spaces will be discussed in relation with Jansen's green space structure proposal.

The case study of the dissertation will be conducted in the Demirtepe and Maltepe districts of Ankara, on the Güven Park-Tandoğan Greenway, proposed by Hermann Jansen in 1932 plan. These districts were developed from the scratch according to the development plans. One of the reasons why this part of the city, and the green structure in this district is chosen, is to eliminate the set of problems that the Old Ankara has. Another reason is that the selected composition avails us with a set of different types of public green spaces, with different types of modifications. In addition to that, concentrating on this section of the green space structure is expected to give us the advantage of observing the transformations of green spaces created from the scratch as these

three districts were developed on previously uninhabited lands, thus giving us the opportunity to observe the plan making and development processes. The importance of this greenway for today is that a segment of it has not been modified and is still in use as parks and sport fields.

The present green spaces in the Yenişehir district were mainly introduced by Lörcher and Jansen plans and their implementation or modification are completed mostly in the Uybadin plan period. The research area largely gained its form in that period and the following plans had different issues to deal with and the 1/1000 implementation plans of the 1957 development plan were not replaced by a new development plan, but were rather changed with plan modifications. Because of this reason, only the first three plans will be subject to analysis in this present study.

The fourth chapter focuses on the plan modifications made on the Güven Park-Tandoğan greenway of Jansen's plan. The analysis will portray the modification process of the greenway which resulted in the transformation and finally the breaking up of the greenway both functionally and physically. The modifications made will be classified, and the results of these modifications will be scrutinized in this chapter.

CHAPTER 2

THE THEORETICAL FRAMEWORK OF THE STUDY

There have been many theories to explain the emergence of urban settlements. In this chapter, after a brief introduction into theories of urban form, the urban morphogenesis school and its aim is scrutinized and the theoretical framework of the study is set in the light of this approach. Speaking of the emergence of urban form, the third subsection focuses on the green spaces and greenways, their emergence, their relation with the planned development of cities and their relation with the urban form. As the first two development plans of Ankara were prepared by German planners, the German planning approaches and the use of urban green spaces at the beginning of the century is scrutinized in this chapter. This identification of the principles related with green spaces is important in order to establish the relation of Jansen's Ankara development plans and their green space proposals which will be scrutinized in detail in Chapter 3. German planning approach is followed by a brief review of Ankara's planning history at the closing of this chapter.

2.1. Theories on Urban Form and Structure

Authors from different fields and professions (sociology, economy, demography, geography, planning, and architecture to brief up) have proposed different theories to explain the development and the form the

cities. Some of these endeavors have been conducted in order to explain the reasons for location, growth dynamics, social structure and segregation, central business districts (CBDs) and mostly population dynamics of the cities.

Among these theories the central-place theory, market potential, population potential and rank-size rule, all focus on the spatial location of cities and other social and economic phenomena as the location of CBDs within the city. The basic assumption behind these approaches and theories was that a natural order existed behind the urban phenomena that awaited discovery. These approaches were causal in character and they paid attention to one or two forces at play and "leave the others to secondary consideration" (Vance, 1990, p.12).

Meanwhile, other approaches have concentrated on the development of the form of cities, from the building scale to the region scale. The authors with architecture, city planning or urban design background have put forth theories to analyze the physical form and the structure of cities. The majority of these studies do not cover the development of urban form as a process of various decisions and actions in space-time perspective, though they all have their methods of analysis of specific problems. In this present research the Urban Morphogenesis approach is referred to, which deals with planning as a process of changing decisions and implementation, is referred to, since this study is firmly related with the produced development plans and what is implemented, the differences between the plans and the produced urban form, the dynamics causing the difference and the modification process.

2.2. Urban Morphogenesis

The urban morphogenesis approach is mainly concerned with explaining the evolution of the form and structure of cities, approaching

to the problem from the field of geography and not with the purpose of designing the city or urban form.

The urban morphogenesis approach, initiated by M. R. G. Conzen in the 1950s, considered cities as the physical outcomes of "many individual and small group actions, themselves governed by cultural traditions and shaped by social and economic forces over time" (Moudon, 1997, p.3). The term "urban morphogenesis" is defined simply as "historical plan development" by Lilley (2000, p.8) and is used by many urban morphologists as it also refers to "the dynamic state of the city, and the pervasive relations between its elements" (Moudon, 1997, p.3).

There are three different approaches of the geographical urban morphology (Moudon, 1997, Whitehand, 1992):

1. The English school (Conzenian)
2. The Italian school
3. Versailles Architecture School (The French school)

The French and the Italian morphogenesis approaches were born out of the reaction against the destructive effects of the modernist architecture and its ahistorical stance (Moudon, 1997, p. 5).

The common point of the studies conducted by many researchers coming from different countries is that "the city or town can be 'read' and analyzed via the medium of its physical form" (Moudon, 1997, p.7). The "palimpsest" analogy for the urban landscape is used by many writers. Lilley (2000, p.7) quotes from Hoskins[3] that "the landscape was a 'palimpsest', an unwritten record of environmental and cultural change which could be interpreted and read using a combination of field work and map analysis". Carmona, *et al* (2003, p.64) explain the same analogy as a process in which the new uses replace but do not

[3] Hoskins, W. G. (1955). *The Making of the English Landscape.* London: Hodder & Stoughton Ltd.

completely eradicate signs of the previous activities. Also among these researchers, there is a general recognition that "at its most elemental level, morphological analysis is based on three principles:

1. Urban form is defined by three fundamental physical elements: buildings and their related open spaces, plots or lots, and streets.
2. Urban form can be understood at different levels of resolution. Commonly, four are recognized, corresponding to the building/lot, the street/block, the city, and the region.
3. Urban form can only be understood historically since the elements of which it is comprised, undergo continuous transformation and replacement" (Moudon, 1997, p.7).

Form, resolution and time are together the three fundamental components of morphological research (Moudon, 1997, p.7).

The main purpose of all morphological analysis is to build a theory, but there are differences among the approaches of the three schools.

1. The Birmingham School and the French researchers, conduct their studies on urban form "for descriptive and explanatory purposes, with the aim of developing a theory of city building. Such studies are concerned with how cities are built and why" (Moudon, 1997, p.8).
2. Italian School develops the scope of research "with the aim of developing a theory of city design. Such studies concentrate on how cities should be built" (Moudon, 1997, p.8).
3. Meanwhile, the French School aims "to assess the impact of past design theories on city building. This is in the realm of design criticism, which makes the sophisticated distinction between the theory of design 'as idea' and the theory of design 'as practiced' " (Moudon, 1997, p.8). According to Moudon, French School has concentrated on the difference between what was aimed to be built and what has actually been built.

While theory building is the main drive behind all the morphological analysis, researchers have varying interests that produce theories having different aims.

1. “Descriptive and explanatory purposes to build a theory of city building.
2. Prescriptive purpose to develop a theory of city design.
3. To assess the impact of past design theories on city building” and to put forth the differences between “theory of design as idea and theory of design as practiced” (Moudon, 1997, p.8).

Conzen's plan analysis technique relies on the conception that townscape of a city is the accumulation of the morphological changes and the development periods it has gone through. These morphological changes are visible in the pattern of land use, streets, plots and buildings (Conzen, 1960, p.6) and can be analyzed through the town plans. The plan elements, streets and the street system, plots and the street-blocks, and the buildings (or block-plans) that form a town plan are subject to change or adaptation in each period. The examination of the morphological changes that the plan elements have gone through are the results of the economic and social conditions of each period, thus they all together define the spatial context and change in time.

Conzen's work had been left unnoticed and was even criticized “as lacking the rigour and productive power” (Moudon, 1997, p.4) under the effect of the quantitative analytical approach in urban geography, seeking to establish scientific respectability during the 1960s and 1970s (Whitehand, 1992, p.1). Also in Italy, Saverio Muratori's studies were rejected and Muratori was academically isolated (Moudon, 1997, p.4). By the 1980s, Conzen's arguments gained due attention and respect and urban morphology was considered as a research subject in geography again (Whitehand, 1992, p.1-2).

Whitehand (1992, p.5) stresses the importance of agents' role and the relations between agents in time and space, in the development and changing process of the cities. The distinction between corporate and public activities may have importance, varying in time and acting in different ways for different parts of the same city. As another factor, the degree of concentration of decision making is also pointed out in order to achieve greater landscape uniformity. Also the classification of the functions, in which the agents constitute, is another important factor, as stressed by Whitehand (1992, p. 5).

Jeremy Whitehand (1992, p.7) proposes three topics concerning the research questions for future studies. One of the topics is about the "agents of change" effective during the development of the urban landscape. Second topic covers the questions about the "attitudes towards the identities of urban landscapes". The last topic is about "the relationship between planning and outcome, and the ways in which these matters vary both within and between urban areas on the one hand and over time on the other".

Green spaces have seldom been the subject of urban morphogenesis. This study aims to discuss the changing morphology of a part of green space structure, the greenways, which are the integral part of 1932 Jansen Plan of Ankara through a series of plan modifications. The case study area Güven Park-Tandoğan Greenway, is defined at the street/block level and the case is conducted at the building/lot level, since the greenway is disintegrated through plan modifications and is transformed piece by piece. In this way, it is aimed to shed light upon the modifications to the greenway and as a result to the breaking up of an integral part of the urban form.

The development of green space structure is not free from the relations and clashes embodied in the production process of plan making and the dynamics of the development and transformation of the built

environment. As the built environment is prone to change, so are the urban green spaces, but with a slight difference. The built environment is composed of man made structures and is mostly under private property. Redevelopment or modifications of these structures/buildings are controlled and directed by urban development plans and development laws, regulations and codes. On the other hand, open green spaces are under public ownership, and their provision and management is the responsibility of the municipalities. Conditions of change and redevelopment of a park or a part of it is also controlled by the development law and regulations. When an element of green space structure changes, there is the risk of losing its integrity and openness, as well as the features which make us call it "green".

2.3. Greenways as a Component of a Green Space Structure

The discoveries made in the 18th and the 19th centuries initiated the development of the industrial city in the Western Europe. The urbanization, which attained unprecedented dimensions, raised many unforeseen social and spatial problems which were highly difficult for the governments and the local administrations to cope with. Provision of green spaces appeared as one of the measures to solve the social, hygienic and ecological problems beginning from the second half of the 19th century. At the turn of the century, the first Town Planning Congress was held, the planned development of cities was started and at the same time, the green spaces were accepted as a part of the urban structure. It was also during the same period that several forms of green spaces were introduced to fulfill the function of remedy to urban problems, and also take part in the macroform development of the cities as a tool of directing and controlling the urban development.

Considering the pattern created by the distribution of the open space, there are two approaches. One view proposes a pattern of continuous

open spaces giving form to the city, while the opposing view expresses the need for dispersal of open spaces throughout the city for easier access. The first approach conceptualizes the open space as having contrasting properties to the city, to provide the citizens with diverse experiences other than the practices of the daily life and routine. The second approach aims to integrate the open spaces with the daily practices, and increase the accessibility and usability of the provided open spaces in the city (Lynch, 1981, p.436-437).

Kevin Lynch distinguishes 3 types of continuous open space structures that determine the macroform of cities: Greenbelts, green wedges and green networks (Figure 2.1). The greenbelt is a growth control tool, surrounding the city with a continuous open green space free from urban development and is operational with satellite cities. The green wedges, on the other hand, are green spaces penetrating the city, providing easier access and directing the growth of the city through corridors. The last type, the green network, is composed of an interconnected network of green spaces, allowing free development of the city and providing easily accessible green spaces (Lynch, 1981, p.436-438).

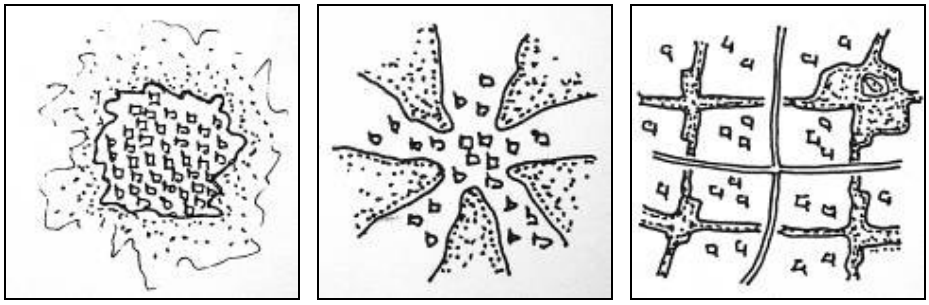


Figure 2.1. Greenbelt, green wedge and green network.
(Lynch, 1981, p.437, 441)

Table 2.1. Freestone's typology of greenbelt city forms.
(Freestone, 2002, p.68-69)

TYPE	SETTLEMENT CONTEXT	URBAN POLICY AND ENVIRONMENTAL QUALITY OBJECTIVES	PROPONENTS AND THEORETICIANS	PRACTICAL EXAMPLES
Parkland Towns	Planned colonization	Recreation and utilitarian public uses	T. Maslen; W. Light; G. Goyder	Adelaide; South Australia towns
Garden City	New town	Agriculture; Town-country	E. Howard	Letchworth
Parkbelts	Town extension	Definition of urban form	R. Unwin	Perth Endowment Lands (1920s)
Green Girdles	Metropolis	Recreation; Breathing space	R. Unwin	London Green Belt (1938)
Parkways and Greenwebs	Built-up areas	Urban "lungs"	F. L. Olmsted	Boston's "emerald necklace" (1880s); Schumacher's *Generalsiedlungs* plan (1923)
Green Backcloth	Satellite	Delineation of town and country	C. Purdom	Satellite town; metropolitan plans
Greenbelt Cities	Metropolis	Urban containment	F. J. Osborn	Abercrombie's *Greater London Plan* (1944)
Green Wedges and Corridors	Built-up areas and metropolitan extension	Open space and antisprawl	C. Reade; T. Adams	Copenhagen
Regional Cities	Self-contained compact communities	Restructuring agglomeration	P. Abercrombie; P. Geddes; C. Stein; B. MacKaye	Doncaster (1924); Canberra (1970)
Greenways	Built-up areas and city periphery	Nature conservation and biodiversity	W. H. Whyte; P. Lewis; B. Flournoy	Harrisburg; Raleigh; Frankfurt; Vancouver
Green Zones	Metropolis	Urban growth boundaries, resource conservation, and recreation; "Smart growth"	I. McHarg	
Ecological Cities	Metropolis and region	Responding to mixed uses; Active and passive green	P. Calthorpe; M. Breheny and R. Rookwood	Portland

Freestone (2002, p.67-98) classifies the different types and forms of green spaces that have been produced by context specific situations and been devised for various purposes (Table 2.1). The size, form, scale, location of these green spaces change with the purposes they are used for, their functions and with the urban context they are formed in.

Lynch (1981, p.442-445) classifies the elements of the green space structure types under the following six groups:

1. The regional park
2. The urban park
3. The square or plaza
4. Linear parks
5. Playgrounds and playfields
6. Wastelands and adventure playgrounds

These elements, considered in relation with the green space structures, may be dispersed or be interconnected, and may be located in the city or at the periphery of cities. This kind of typologies are devised and used by planning authorities, local governments and municipalities as planning and design guides. Moreover, the micro-macro scale relation or the relation between levels of resolution, as stated by Moudon (1997, p.7), are established by these elements.

In the landscape literature after 1960s, the term 'greenway' gained prominence and was used more often. Little (1990, p.4) describes greenways as "linear parks, open spaces and protected natural areas in cities, suburbs or the countryside" (used for recreational, ecological, aesthetic and environmental management purposes). According to Little, the predecessor of the contemporary greenways were the parkways and the pleasure drives designed by designers like Calvert Vaux and Frederick Law Olmsted in Boston and New York, with the aim of establishing connections between parks and the surrounding neighborhoods to increase the benefits of the parks (Little, 1990, p.11).

In theory, greenways differ from the mentioned types of green spaces. While the greenbelts, green wedges and green networks are closely related with the urban development and planning, greenways appear as a solution against the urban depreciation by the redevelopment of unoccupied land. Even the term is used to include nearly all the linear green spaces, the most striking and "new" function is the use of publicly owned but underused or derelict linear spaces – such as right of way along railroad lines or streams - as urban green spaces. The other genuine function of the greenway concept is the important role it plays in establishing linkage as mentioned before. Though, establishing connections between parks and green spaces within the city and the rural lands around the city is not a new idea, the greenway concept brings forth and establishes the link this time with the use of those derelict public lands where new land-uses were to be developed. Increasing the amount and accessibility of the urban green spaces located in the inner city or urban core is a gruesome and even an impossible task. The lands suitable for greenways have the potential to do so as they do not possess the formal and legal properties to be developed to occupy built structures upon. Their two important attributes are to be the *edge* and *linkage*. They provide more edge to be accessed to and longer activity route/path. Also as they provide linkage to and from other green spaces, greenways increase the ecological, recreational and aesthetic utility of the green spaces (Little, 1990, p.33-38).

A well-known scholar, Fumihiko Maki explains "3 different types of urban form" (Figures 2.2, 2.3 and 2.4), each of them forming different structures of space (Trancik, 1986, p.107).

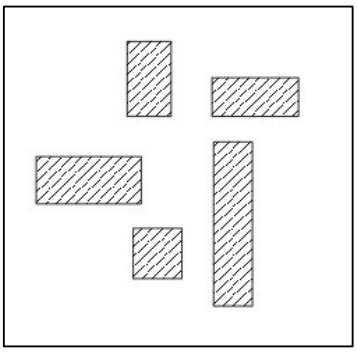


Figure 2.2. Compositional Form: "…Individually tailored buildings in abstract patterns"… edges are less important than the buildings. "Linkage is implied rather than overt…" (Trancik, 1986, p.107)

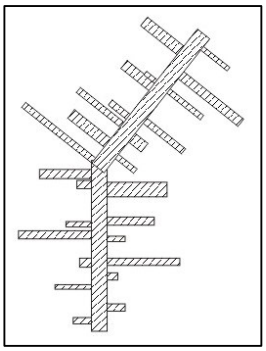


Figure 2.3. Megaform: "…individual components are integrated into a larger framework in a hierarchical, open-ended and interconnected system… linkage is physically imposed to make a structure…" (Trancik, 1986, p.107)

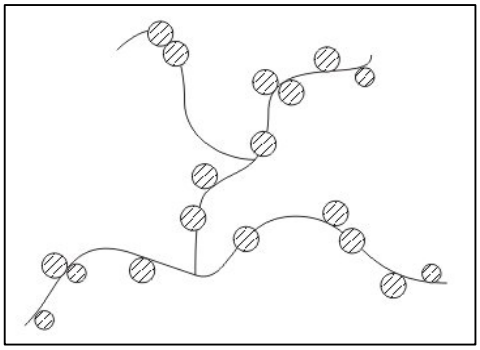


Figure 2.4. Group Form: "This is the result of incremental accumulation of elements in space along an armature… linkage is neither implied nor imposed but is naturally evolved as an integral part of the organic generative structure". (Trancik, 1986, p.107)

The above classification of Maki can also be used to analyze the forms of green structures created by the grouping of various types of green spaces. They also correspond to the form giving green space structure types categorized by Kevin Lynch and the hybrids of these green space structures.

A green space structure of a city can be formed by any of the above green space types, or can be a composition of several types. For the purpose of the study, all of the above categories and types for the analysis will be used.

One point about the terminology used in the present study must be stressed here. The term "greenway" is employed all through this study as the term "yeşil yol" was used in the Turkish translations of the Jansen letters. The originals of these letters, written in German by Herman Jansen, are not available at the Plan Archive of Greater Municipality of Ankara. The German terms used by Jansen are deemed to be important. Esra Akcan (personal communication, April 15, 2008), who has previously studied the original Jansen plans and letters at the Architecture Museum for her Ph.D. dissertation, kindly helped me at this point by providing the several terms that Hermann Jansen used for green spaces in his letters in German. According to Akcan, Jansen used several terms, some of which were used interchangeably. *Freiflächen* (free areas, the green corridors separating the functional zones having various widths), *Grünfläche* (green area) and *Grünerweiterung* (green extension, green corridors that penetrate the neighbourhoods) are the terms Jansen has used. Also at the title of typical section plans of the "greenways", the term *Grünstreifen* (green strip, grass strip) is used. Akcan comments that deriving words by prefixes and suffixes is considered as a richness of German, and not as a confusion of terms or concepts. Bearing this in mind, the term "greenway" will be used throughout the text. Though Jansen's use of the green strips, which will be discussed in the third chapter, resemble the contemporary use of the

term, it must be kept in mind that Jansen proposed these greenways nearly 30 years before the term greenway was first coined in English.

2.4. Use of Green Spaces in the German Urban Planning Theory and Practice at the Beginning of the 20th Century

The German planning approaches were formed through an accumulation of ideas revolving around the reform concept. The reform and amelioration in every aspect of life, from kitchen utensils to child care, and significantly the living conditions in the densely populated industrial cities, was repeatedly expressed by a diverse group of people composed of artists, architects, planners, writers and intellectuals (Jenkins, 2007). This idea, that replacing the old with the new, hygienic, aesthetic and modern would uplift the spirit and morale of the weary and tired masses and reshape their behavior and culture is a reflection of the environmental determinism dominant in the period.

Solutions to the problems of big cities, and especially to those of Berlin with the highest population density in Germany, were proposed but mostly they were not implemented because the clashes between the Kaiser and the Parliament, the insufficient building codes and regulations and the absence of planning administration curtailed the implementation of ameliorative measures (Bollerey et al., 1980, p. 139-140; Sonne, 2004, p.197). The imperial dynasty was afraid of implementation of a solution that would unify the dispersed suburbs and form a stronger social democratic municipality. So, the option of tackling with the problems of the cities in a comprehensive manner was impeded and this in return was leaving the stage to the solutions proposed by small associations and organizations, and among them to the architects', landscape architects' and the planners' piece meal designs being implemented (Bollerey et al., 1980, p. 139-141; Sonne, 2004, p.197). The landscape architects, architects and the planners

have approached the problem from the point of view of their fields and proposed breaking up with values and traditions of the old and sought to ameliorate the miserable and insanitary living conditions in the cities (*Mietkasernen,* unsanitary rental barracks, lacking the light and air circulation), the high densities and the food shortages through design and proposals of new types of settlements and living environments (Steenson, 2003).

This search for the new city and the new house against the ills of the industrial city had been conducted in Britain for long and the Garden City movement of Ebenezer Howard caused a stir at the turn of the century. The *Deutsche Gartenstadtgesellschaft*, the German Garden City Association was founded in 1902 by Heinrich Krebs (Hall, 1988, p.115). The garden city idea was met with enthusiasm by the German industrialists, because it seemed to them that the garden city movement was the key to establishing good relations with the labor class as the British industrialists do (Hall, 1988, quoting from Kampffmeyer, 1908, p.599). The first garden city in Germany, Hellerau in Dresden, was developed in 1909 for Deutsche Werkstætten, a furniture manufacturing firm. Another garden city, Margarethenhöhe, was built by the Krupp family in Essen in 1912. Both of these garden cities were scenes of the "Life Reform Movement" (Hall, 1988, p.115). Bruno Taut became the consulting architect of the *Deutsche Gartenstadtgesellschaft* in 1912 and under Taut's advisory the Siedlung Reform in Magdeburg (1912-1913) and Gartenstadt Falkenberg in Berlin-Grünau (1913-1914) was built. Each house in Siedlung Reform in Magdeburg had a garden of 130-275 square meters. After the First World War, two important figures of the German modern architecture, Ernst May and Bruno Taut, occupied posts as members of the committee of the Deutsche Gartenstadtgesellschaft ("Deutsche Gartenstadtgesellschaft", *Grove Art Online*).

Another association, the *Deutsche Werkbund*, was founded in 1907, the German equivalent of the British Arts and Crafts movement, with the aim of saving the eroding German culture against the industrial production (Bollerey et al, 1980, p.148-149). After the First World War, the *Deutsche Werkbund* took a modernist stance and aimed to increase the interaction between the artists and the industry and to achieve mass production of designed goods, including development and improvement of prefabricated houses (Richards, 1962, p.74).

There were other actors as well, aiming to provide solutions to the problems of the industrial city. Certain industrialists provided their workers with housing next to the factories, and even allotment gardens were included in the designs, but only as "concession to the agrarian inclinations of the immigrant labor force from the eastern provinces". Progressive reformists on the other hand objected to the provision of housing by the industrialist as they argued that it was the duty of the public authority. Middle class, positioned in between these two camps, blamed the German industrialists for "undermining German national culture by devaluing the individual" and proposed returning to the pre-industrial "good old days when the German peasant tilled his German soil, the age of the fully rounded German personality" (Bollerey et al, 1980, p.147). The radical conservatives declared that the salvation from the ills of the industry and industrial urbanization lay on the path to Germanic-Christian faith (Bollerey et al, 1980, p.147-148). The approaches with hopes of renewing the Germanic race in accordance with *Völkisch* racism, anti-Semitism and *Lebensraum* politics all later became the core ideological ideas of the National Socialists (Hall, 1988, p.117-118, Schubert, 2004, p.24-25).

The end of World War I brought the end of the Imperial dynasty in Germany and the Weimar Republic was established in 1919. A democratic constitution was enacted and solving the housing and food shortage crisis was included in this constitution, demonstrating the

importance given to these problems by the Republic and making the solving of the problems into a constitutional responsibility of the state. The new constitution enabled the realization of the calls for reform as the State was to control the land use with the intention of providing everyone with housing (Curtis, 1987, p.166, quoted in Steenson, 2003). In this political environment, especially after the stabilization of the economy in 1923, the social reformers' solution proposals found implication under the administration of social democrat municipalities in Frankfurt and Berlin (Hall, 1988, p.117-122).

As mentioned earlier, stemming from the duality in the political and administrative structure, piecemeal solutions to the problems of the cities were proposed in the beginning of the 20th century. Still, Berlin's problems were recognized and a plan competition for Greater Berlin was held in 1909.

> "Especially in order to counteract the social and sanitary problems in housing, a citywide urban planning structure was demanded for Berlin, with functional zoning, structured construction zones, a citywide traffic plan, and a citywide open-space plan. In 1909, these demands led to a competition for the establishment of a land-use plan for Greater Berlin" (Berlin Senate Department of Urban Development, n.d., http://www.stadtentwicklung.berlin.de/umwelt/stadtgruen/geschichte/en/stadtgruen/index.shtml).

Hermann Jansen's plan was, which the first comprehensive plan of Greater Berlin, incorporated two rings of forests, meadows, parks and gardens and radial green corridors that established links between the inner and outer rings and the inner city. Many parks, allotment gardens and forests were created according to the plan (Figure 2.5 and 2.6) (Berlin Senate Department of Urban Development, n.d., http://www.stadtentwicklung.berlin.de/umwelt/landschaftsplanung/chronik/index_en.shtml), but the other proposals were implemented only

to the extent the Administrative Association of Greater Berlin[4] was able. The Association only had the power "to propose traffic routes, to purchase and preserve forests, and to define new building lines" (Sonne, 2004, p.198).

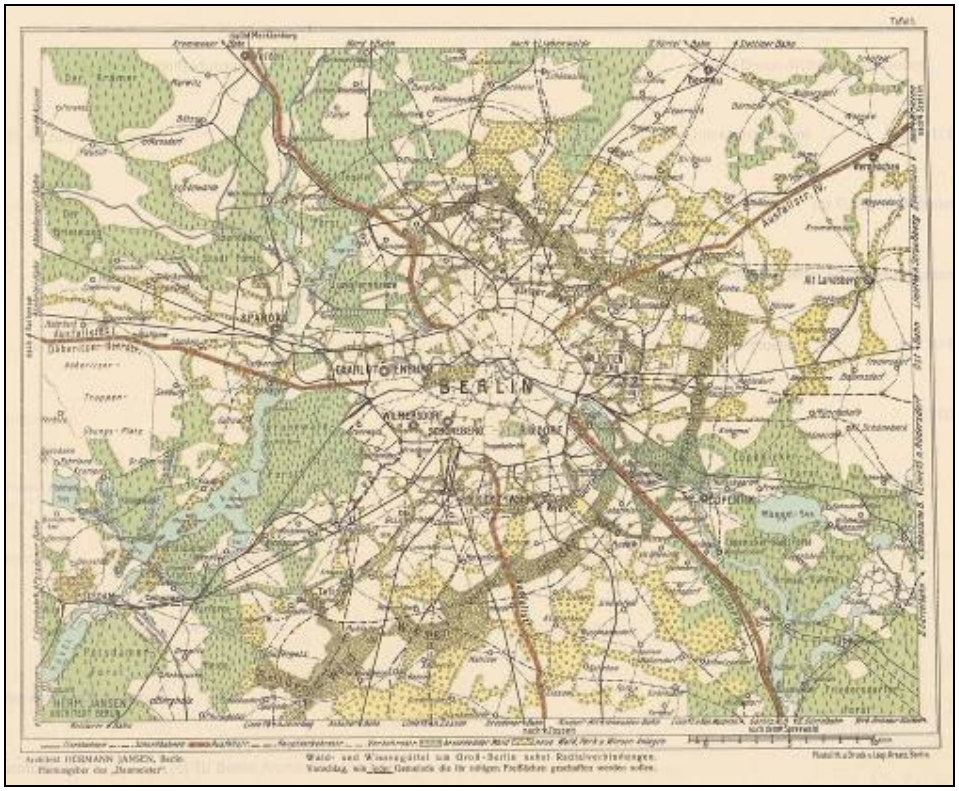


Figure 2.5. The 1910 Greater Berlin Plan Competition Forest and Meadow Belt Plan of Hermann Jansen (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=148047, accessed 21.10.2008)

[4] The Administrative Association of Greater Berlin was the first planning organization of Berlin established in 1911 (Berlin Senate Department for Urban Development, http://www.stadtentwicklung.berlin.de/umwelt/stadtgruen/geschichte/en/stadtgruen/1870_1920/teil_3.shtml, accessed 15.06.2008).

Figure 2.6. The structure of green spaces in Hermann Jansen's proposal for the 1910 Greater Berlin Planning Competition (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=148048, accessed 21.10.2008)

According to Chadwick (1966), there are contributions to the planning of green spaces which are German in origin. One of these contributions is the idea of an interconnected structure of green spaces. Fritz Schumacher, one of the co-founders of the Werkbund, in the paper "*Grünpolitik der Grossstadt-Umgebung"* (Green Policies of the City Environment) that he presented at the International Town Planning conference held in Amsterdam in 1924, brought forth the idea of networks composed of arterial green spaces, connected with each other reaching to the outskirts of the town and providing access to all public spaces and connecting all of the green spaces forming a large scale structure. He called it "the great breathing space of the town" (Chadwick, 1966, p.256).

The network of green arteries will soon be introduced in the German legislation: *Grünadern* (green arteries) were "registered and alterations to them required a special license; no building was permitted on the *freiflächen* (free spaces, open spaces) except in connection with the recreational use of the land" (Chadwick, 1966, p.256). The standards of open space provision were set up by Martin Wagner in his *Städische Freiflächen Politik* (Urban Open Space Policy) in 1910 (Chadwick, 1966, p.256-257).

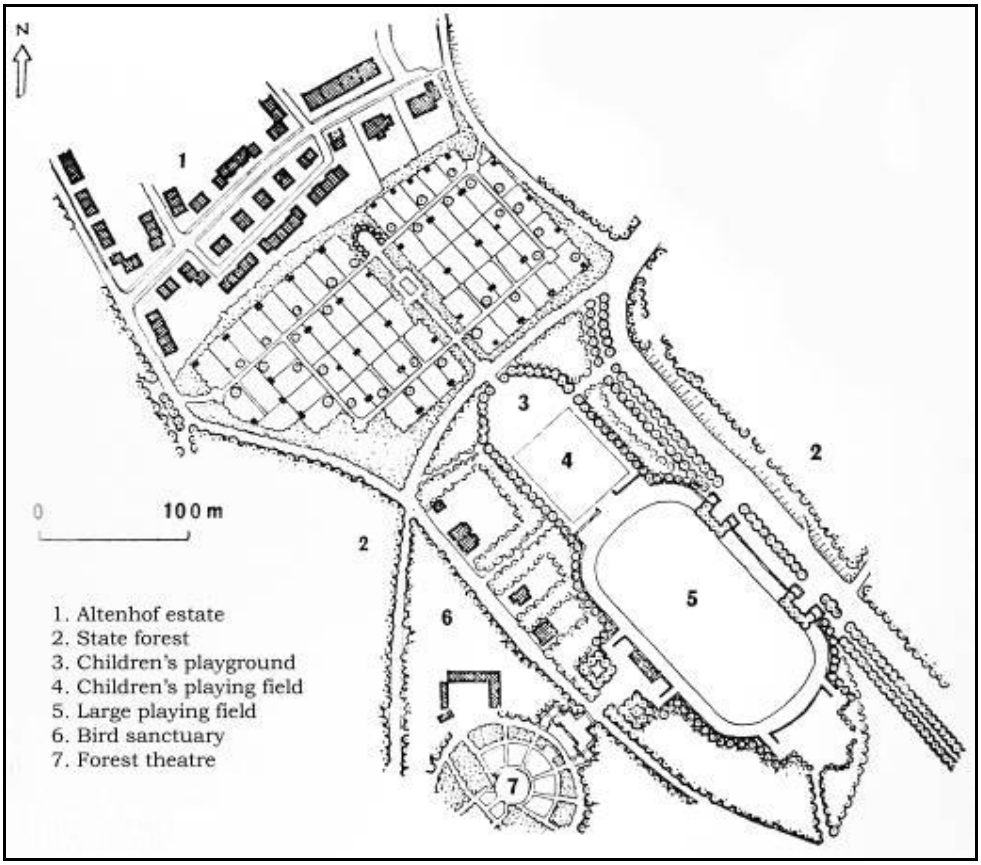


Figure 2.7. Plan of Altenhof Estate. An example of German tradition of linked green spaces (Chadwick, 1966, p.265)

The introduction of the allotment gardens in the legislation -200 square meters garden to be leased by the city administration for each worker's household- is another German contribution to the green space planning. Leberecht Migge's books, *Jedermann Selbstversorger* (Everybody Self-sufficient) (1918) and *Die Gartenkultur des 20. Jahrhunderts* (Garden Culture of the 20th Century) (1920) contained his solutions as response to the food shortages lived during and after the First World War and Migge supported the idea of providing everyone a gardens large enough to cultivate and to meet his/her own food. Also in the *Grüne Manifest* (1919) Migge determined the minimum area of these gardens as 80 square meters per person (Steenson, 2003). This idea was also accompanied with the intention of decreasing the degrading effects of the industrial city on the countryside by making the cities independent of the countryside and self sufficient as much as possible (Bölling, 2007). In time, this idea was further developed by the addition of sports fields and meeting-places by private societies (*Schreber Vereine*)[5]. "Playgrounds were placed in the middle of these *Schrebergärten*, connecting all together, so that both individual and communal recreation was catered for" (Chadwick, 1966, p.301). This approach found the possibility of implementation throughout Germany. The open and green spaces along River Nidda in Frankfurt-Römerstadt, composed of private gardens, allotment gardens and public spaces is an example to this (Chadwick, 1966, p.301). Römerstadt and Praunheim were two satellite towns developed during the period when Ernst May was the city-architect of Frankfurt, between 1925 and 1933. The valley was left as a natural green belt with recreational uses as allotment gardens, sport fields, "commercial garden plots", gardening school for children and the like inserted in it, with the schools and *Kindergarten* near this green belt (Hall, 1988, p.118).

[5] According to Chadwick (1966, p.301), a physician from Leipzig, Dr. Schreber, had introduced this idea and made money from it. The term *Schreber Vereine* was used by Chadwick. *Verein* means associations, clubs, societies, unions in German (Leo Online German-English Dictionary, http://dict.leo.org/ende?lp=ende&p=KO6ek.&search=Verein, accessed 08.08.2008)

After the 1914-1918 war was over many *Siedlungen* were designed and built under the socialist municipality movement. The green spaces were put under protection against all possible encroachments and modifications by the Law for the Conservation of Trees and the Opening of Riverside Pathways in the Interests of Public Health in 1922 (Berlin Senate Department of Urban Development , The History of Berlin's Urban Green Space). Martin Wagner became the architect of Berlin municipality and conducted development of Siedlungen around Berlin. With the collaboration of the members of Der Ring, Siemensstadt was developed between 1929 and 1931. Other two important Siedlungen are Onkel-Tom's Hütte, Zehlendorf (designed by Bruno Taut and Hugo Häring and developed between 1926 and 1931), and Hufeisensiedlung at Britz (designed by Martin Wagner and Bruno Taut and developed between 1925 and 1931) (Hall, 1988, p.119-122). At the same period in Frankfurt, Ernst May was occupied as the city architect-planner of Frankfurt and he, playing the role of an organizer, gathered professionals and with Leberecht Migge he formed Frankfurt's Grünpolitik (Uhlig, 1986, p.95, quoted in Steenson, 2003, p.42) and it reflected the effects of the interpretation of green spaces as external living rooms as in Taut's Hufeisensiedlung and Onkel Tom's Hütte (Steenson, 2003, p.43). There were gardens and subsistence gardens planted with fruit trees, berry vines and hedges at the Siedlungen Praunheim (1927-1929), Römerstadt (1926-1928) and Bruchfeldstrasse (1926-1927) (Steenson, 2003, p.43).

Not just partial solutions and developments were proposed but also plans to control the developments in and around the city were prepared in that period. Martin Wagner prepared the second open space plan of Berlin in 1929 as a part of a general development plan. The standards of green space provision were developed together with this plan. Wagner used Jansen's 1910 Berlin Land Use Plan as a model. He carried on Jansen's radial greens and united the allotment gardens, valleys,

streams, parks and other types of green spaces to each other (Berlin Senate Department of Urban Development, The History of Open space Development in Berlin).

It appears the landscape architect Leberecht Migge and architects Martin Wagner, Ernst May and Fritz Schumacher is the important figures whose ideas formed the green space approach of the reform movement effective after the WWI.

To summarize, the creation of green space structures composed of networks of green arteries –*Grünadern*- connecting gardens, parks, sport fields and social services, over which development of buildings is prohibited, and the provision of 200 square meters of gardens for each household -allotment gardens or lease gardens for agricultural production and recreation- are two major German contributions to the theory and practice of town planning. In the *Siedlungen*, realized around Berlin, Frankfurt am Main and in other cities in the period between the two world wars, these principles have been implemented by many architects and landscape architects.

2.5. A Brief History of the Planning of Ankara

The city of Ankara, which was proclaimed as the capital of the Republic of Turkey in 1923, was to be constructed as a planned city in the same period, i.e. after the First World War. Ankara is the first city in Turkey which has developed according to a comprehensive development plan in the early years of the Republican era. Since then, six development plans were made to guide and control the urban development of Ankara city. The most significant aspect of these plans is that they reflect the urban planning approaches of their times.

The first development plan of Ankara was prepared by Carl Lörcher in

1924 and 1925 and the second by Hermann Jansen in 1932. These two planners prepared their plans in concordance with the planning approaches developed in Germany in the early 1900s. Both of the plans prepared by these German planners were aimed to solve the development problems of Ankara, the new capital of the Turkish Republic which was facing the shortage of housing, government buildings and social services that a modern capital needed. Especially the production of housing was an urgent necessity due to the high rates of migration that Ankara received from other cities of the country. The organizational and legal aspects of urban planning and development were just being set up by Ankara Şehremaneti which was established in 1924 and by the Municipality of Ankara which was established in 1930. With the Expropriation Law (law no.583), 400 hectares of land was expropriated by the Government to provide the land for the development of both the governmental buildings and residential areas (Altaban, 1998, p.43-44). Ankara City Development Directorate (law no.1351) was established in 1928 (Ankara Şehri İmar Kılavuzu, 1946). The Development Directorate was established directly under the authority of the Ministry of Internal Affairs, not under Şehremaneti. The members of the Development Executive Committee (*İmar İdare Heyeti*) that consisted of 3 to 5 members and the Director of Development, was chosen directly by the Cabinet. The development plans and plan modifications were approved by the Development Executive Committee and were bound to be approved by the Cabinet of Ministers (Ankara Şehri İmar Kılavuzu, 1946).

The new part proposed in Lörcher Plan as the New Town (*Yenişehir*), composed of the *Regierungstadt* (administrative city) and a residential district around it, in 1924-1925, was put into implementation in the following years. However, the area planned for this purpose was not sufficient to house a population of 250.000-300.000 (Yavuz, 1980, p.5) and to obtain a new development plan through a competition was decided. A committee was sent to Berlin in 1927 and Ludwig Hoffman,

professor in Berlin Technical University, advised the committee that Hermann Jansen and Joseph Brix should attend the competition to prepare the new development plan. Three planners were invited to the competition: Léon Jausseley, the winner of the 1919 Paris planning competition (Tekeli, 1980, p.58) and the chief architect of the French government and responsible for the Barcelona extension plans; and the above two planners, J. Brix and Hermann Jansen (T.C. Ankara Şehremaneti, 1929, Tankut, 1993, p.66-67). The winner of the competition was Hermann Jansen and the development plan that he elaborated was approved in 1932.

The population of Ankara reached 226.000 in 1945 and 290.000 in 1950. The 300.000 population target of Jansen's plan was reached in nearly 25 years (Figure 2.8). The borders of the development area of Jansen plan was exceeded in the middle of the 1950s (Altaban, 1998, p.53). A new development plan was needed and an international competition was opened once again to obtain the new development plan. The winning entry was prepared by Nihat Yücel and Raşit Uybadin. The population projection this time was 750.000 for 20 years (Altaban, 1998, p.53; Çakan, Okçuoğlu, 1977, p.43).

The other three plans are the master plans for Ankara Metropolitan Area. The Ankara Metropolitan Planning Bureau was established in 1969 and after a period of through analysis, the development plan of Ankara for year 1990 was approved in 1982. The fifth plan was prepared by a group from City and Regional Planning Department of Middle East Technical University (METU), and it is essentially an urban transportation and macroform plan prepared for the year 2015. The last plan is prepared by the Development Directorate of Greater Municipality of Ankara and is approved in 2008.

Figure 2.8. The Lörcher (inner, red), Jansen (middle, light red) and Uybadin-Yücel (outer, orange) Development Plan limits.

All of these six plans have their own logic in forming the urban green space structure of Ankara considering the needs and outer impacts of that specific plan period. The present study is based on the observation that the first three development plans of Ankara city and their implementation process are particularly important from the point of establishing the character of urban landscape, and setting the properties of the green space structure of the city. Through an analysis of the first three development plans of Ankara, the dynamics effective during the plan making and plan implementation processes will be exposed in this research.

In 1920s, as a town of 20.000 population, Ankara had a city park, Millet Bahçesi in Ulus Square, and the Hacettepe as an excursion place. The stream banks and the gardens, vineyards and orchards surrounding the city were also used for excursions (Uludağ, 1998, p.66). Gençlik Parkı – the Youth Park, the Hippodrome and May 19 Sports Complex, Cebeci Stadium, the Golf Field (Altınpark today), Emniyet Park (Güven Park today), Castle Park and some other parks were realized according to the Jansen plan. Though each development plan had their own proposals for urban green spaces, the amount of green spaces decreased in years, from 5.1 m2 per person in 1950, to 2.8 m2 in 1965, to1.8 m2 in 1979 and to 1.4 in 1985 (Öztan, 1985, p.68). The uneven distribution of green spaces and the lack of different scales of green spaces was also another problem, decreasing the access of the people to the green spaces and opportunities of recreation (Altaban, 1985, p.73).

It can be conferred that, from the points of provision of various types of green spaces and equal distribution over the urban space, the situation today is not much different than it was in the 1960s in term of the daily needs of the urban population. However, the population of Ankara and hence the number of people using the central city has increased more than three times since then. Numerous parks of various sizes and types were provided in the last two decades. The area built according to the

development plans of Lörcher and Jansen still lack the sufficient amount and even distribution of green spaces for the provided parks are located at the periphery of Ankara metropolitan area and not in the densely built central area.

CHAPTER 3

ANALYSIS OF THE DEVELOPMENT PLANS OF ANKARA IN THE RESEARCH PERIOD: 1923-1960

Ankara is the first city in Turkey to have developed according to a comprehensive development plan. İstanbul and many cities in the late Ottoman period have been subject to partial planned developments, especially for reconstruction of the areas destroyed by fire. After being declared as the capital of the Republic in 1923, the urge for constructing the governmental buildings that a capital city should have and providing housing for the members of the Government of the new Republic raised the awareness for the need of a planned development in Ankara. To control and administer this development process, development plans were obtained, several new laws were enacted and public institutions were established.

In this chapter, the structure of green spaces as proposed in the first development plans of Ankara will be analyzed. The Lörcher plan which preceded Jansen plans, first introduced a number of green spaces in the city. Jansen's 1928 and 1932 plans will be evaluated next. The 1928 competition plan and plan report, the 1932 plan, the plan report published in 1937 and the letters and reports Jansen sent to the Development Directorate until the end of 1938, during his consultancy to the Municipality, will be used to clarify Jansen's intentions while preparing the plan and later during its implementation. The 1928 and 1932 Jansen plans constitute the main focus of this chapter, since the

urban development in the core of Ankara is mainly determined by Jansen's 1932 plan. Finally, Yücel-Uybadin plan will be studied briefly in order to see the existing and proposed green spaces in this plan, in comparison with the 1932 Jansen plan.

3.1. 1927 Lörcher Plan: General Planning Principles and Green Spaces

In this section, the general layout and the planning principles of Lörcher Plan and their relation with Jansen's 1928 and 1932 plans will be evaluated with regard to the green spaces proposed. The number of researches made on Lörcher plan is limited. Ali Vardar's (1989) article "Capital's First Plans" and Ali Cengizkan's (2004) detailed work on the pre-Jansen urban development in Ankara and Lörcher plan, *Ankara'nın İlk Planı 1924-25 Lörcher Planı,* are the two references used in this section.

3.1.1. The General Outline of the Lörcher Plan

In 1924 and 1925, in order to solve the urban development problems of Ankara, two plans, one for the Old City and one for the Yenişehir district (the new town), were prepared by Carl Lörcher (Figure 3.1). The plan for the Old City was not implemented since it was not found applicable, but the implementation of Yenişehir plan was initiated immediately to control and guide the needed housing developments in that area. The Lörcher plan was a response to the sheer necessity to set the rules for the housing developments in Yenişehir district and the growing needs of the government. The great expropriation of 400 hectares for the development of Yenişehir was completed in 1925. Meanwhile, Ankara was attracting people. The population of Ankara, which was approximately 20.000 in 1919, increased to 47.727 in 1926, to 74.533

in 1927 and to 107.641 in 1928 according to the “Devlet Salnamesi” (Cengizkan, 2004).

Figure 3.1. Lörcher’s 1924-1925 Ankara Development Plan (The green shades are added for emphasis by the author) (Ali Cengizkan’s personal archive)

The Lörcher plan for Yenişehir, which had been prepared for the development of the new governmental and residential districts of Ankara was put into implementation in the second half of 1920s while the Old City was left outside the scope of the development. The plan determined the layout and development “rules” for 150 hectares in Yenişehir. The plan has both Baroque and Garden City characteristics with its low

density housing with gardens, combination of axial and gridiron street system and symmetrical plan arrangement. The Ankara Castle constitutes the focal point of the perspective axis which is also the symmetry axis of the Yenişehir development.

The Lörcher plan located the House of Exhibitions (Sergievi) – the Park of Youth (Gençlik Parkı), the Industrial District, the Station District, the Hippodrome and the Administrative Quarter on the lands expropriated according to the law no. 583[6] (Cengizkan, 2004, p.48). May 19 Stadium and the Hippodrome, (on which there is the cultural centre called AKM today) are the decisions of Lörcher plan (Cengizkan, 2004, p.58). Though the initial idea of such uses may have been proposed by Lörcher, their exact location, size and form are determined by Jansen plan in 1932.

3.1.2. The Green Space Proposals of the Lörcher Plan

Related with the main concepts that guide the general plan layout, it is possible to see certain planning decisions which shaped the green spaces proposed in the Lörcher plan (Figure 3.1). These can be listed as follows:

1. Urban agriculture: Kazıkiçi Vegetable Gardens (Kazıkiçi Bostanları) are proposed as allotment gardens to keep the urban population associated with agricultural activity and cultivation (Cengizkan, 2004, p.47). Lörcher gave importance to the agricultural areas from the point of urban aesthetics in addition to their economic value (Cengizkan, 2004, p.42). The Bent Deresi valley is composed of ponds, allotment gardens and

[6] The name of the law is "Ankara'da inşası mukarrer Yeni mahalle için muktezi yerler ile bataklık ve merzagî arasinin Şehremanetince istimlâki hakkında kanun".

urban gardens forming the northwest limit of the city. The İncesu Stream forms the eastern boundary of Yenişehir. The stream flows through Sıhhiye, passing under the Atatürk Boulevard, it surfaces near the House of Exhibitions (Sergievi) (which is home to State Opera and Ballet today) and forms the southern border of CBD, connects to the pond in the square in front of the railroad station, bordering the building blocks surrounding the square and the City Park and the Exhibition Garden (Sergi Bahçesi). It joins the Ankara river, which flows through "Gazi Orman Numune Çiftliği" –Atatürk's experimental farm and afforested area.

2. Valleys and streams are reserved to form green strips composed of sports fields and recreation areas in the plan. It can be observed that the presence of streams within the general topography of Ankara is evaluated as an opportunity to create a garden city with continuous green spaces penetrating into the city; to establish a green space system (Cengizkan, 2004, p.44).
3. A sequential green space structure is proposed to be an important plan decision and as a necessity of the age. In this structure, recreation areas and sports fields for all ages are proposed, an idea built on the experiences of the Western cities (Cengizkan, 2004, p.44). It is important to note here that Lörcher's proposal for continuous green spaces is in concordance with the contemporaneous German planning approach scrutinized in Chapter 2.

Green is incorporated into the city as green strips in Lörcher's plan and Cengizkan considers this as a premise of the green strips of the Jansen plan which are used there "to separate the neighborhoods" (Cengizkan, 2004: 48 and 84).

According to Cengizkan (2004, p.48), the plan located the Park of Youth (Gençlik Parkı), Industrial District, Station District, the Hippodrome and

the Administrative Quarter (Vekaletler Mahallesi) on the lands expropriated according to the law no. 583. Hippodrome, May 19 Stadium and Atatürk Culture Center are the proposals of Lörcher Plan (Cengizkan, 2004, p.58). Though the initial idea of such uses may have been proposed by Lörcher, their final location, size and form are revised and determined by Jansen plan in 1932.

Lörcher located the CBD on the axis starting from the Station Square (İstasyon Meydanı) and ending in front of the Gazi and Latife Primary Schools. In Jansen's 1928 competition plan, the CBD block is visible with the same form as in Lörcher's plan, but only the narrow corner facing the railroad station was replaced with a green area and the Hippodrome is smaller. In addition to these, Jansen placed an urban block to the west of the CBD. In the Lörcher plan an axial green space is proposed in the middle of the CBD block; it leads towards east, to a new square where Hergelen Square is situated today. In his 1932 plan, Jansen placed the Park of Youth (Gençlik Parkı) and the House of Exhibitions (Sergi Evi) on this part and the Hippodrome to the west of this block, on the other side of the Railroad Station.

3.2. 1928 and 1932 Jansen Plans: The Use of Green Areas in the Organization of the Settlement Layout

The new part proposed in Lörcher Plan as the New Town (*Yenişehir*), composed of the *Regierungstadt* (administrative city) and a residential district around it, in 1924-1925, was put into implementation in the following years. However, the area planned for this purpose was not sufficient to house a population of 250.000-300.000 (Yavuz, 1980, p.5). Also, as Ali Cengizkan points out, the elite character of the urban development of the Yenişehir district is far from meeting the housing shortage of the city, and which necessitated the elaboration of a new

development plan (Cengizkan, 2004, p.97). A committee was sent to Berlin in 1927 and Ludwig Hoffman, professor in Berlin Technical University, advised Hermann Jansen and Joseph Brix to prepare the new development plan. With the aim to obtain the best planning scheme, a competition was held, in which Léon Jausseley, the winner of the 1919 Paris planning competition (Tekeli, 1980, p.58) chief architect of the French government and responsible for the Barcelona extension plans, and the above two planners, J. Brix and Hermann Jansen, were invited (T.C. Ankara Şehremaneti, 1929, Tankut, 1993, p.66-67).

Jansen won the planning competition in 1928 and the development plan that he elaborated was approved in 1932. He has also given consultancy to the Development Directorate for the supervision of the implementation of the development plan until the end of 1938. In that period many letters were exchanged between Jansen and the Directorate related with the preparation of the plan, implementation problems and details of the plan. These letters are now stored in the Greater Municipality of Ankara Plan Archive. Some of these letters, especially the ones Jansen had sent before the plan report was published, contain explanation of the plan, Jansen's solutions to the implementation problems and Jansen's answers to the questions sent to him from the Development Directorate and sometimes from other Ministries. There are also plans and sketches attached to most of the letters. The contents of some of these letters are repeated in the 1937 Plan Report, but some are not and both the letters and the plan report are used in the study to sketch Hermann Jansen's approach specifically to Ankara development plan and to planning in general. In this section, mainly the 1928 competition plan report, the Jansen letters from the Greater Municipality of Ankara Archive and the 1937 Plan Report will be used to summarize and evaluate both the general principles and features of the plan specific to the green spaces.

3.2.1. Hermann Jansen's 1928 Ankara Development Plan: The Competition Scheme

The plan report that Jansen sent with the competition plans in 1928 outlines Jansen's main concerns about the development of Ankara (Figure 3.2). In the introduction to the 1928 competition plan report, Jansen criticized the majority of the European cities saying that public sanitation had been forsaken for long by giving more importance to representation and by paying more attention to the design of boulevards on the facade, but creating insufficient courtyards and foul air in the backyards. He argues that the insufficient amount of open spaces and green areas caused the degeneration of the urban population. Jansen stresses also the importance of representational aspects in the plan by preserving the Castle and the historic monuments such as the Temple of Augustus and Hacı Bayram Mosque, and establishing visual relation with the Castle by orienting the streets and vistas to it. Yet, Jansen particularly pays attention to the public hygiene by developing ample amount of sports fields and green spaces for the urban population, especially for the youth, and preserving and integrating the natural features and agricultural activities in the vicinity of the city. According to the "General principles of the plan" in the planning report (Articles 1 and 2), the Castle is taken as the centre of the plan, thus the direction of roads and openings are designed to establish a visual contact with the Castle. Articles 3 to 6 and articles 9 and 11 put the emphasis on providing urban hygiene, placing the industry zone according to the dominant winds and keeping the air of the city clean and smokeless, providing ample amount of open spaces for the recreation needs of the urban population, orienting the houses according to sun, providing numerous lakes and pools for the refreshment of the urbanite and keeping the vista points such as the valleys and hilltops free from development and reserving them for parks. The 6 of the 12 articles in the report are related with urban hygiene, relation with sun/light, open green spaces and recreation (Jansen, 1929, p.137-140).

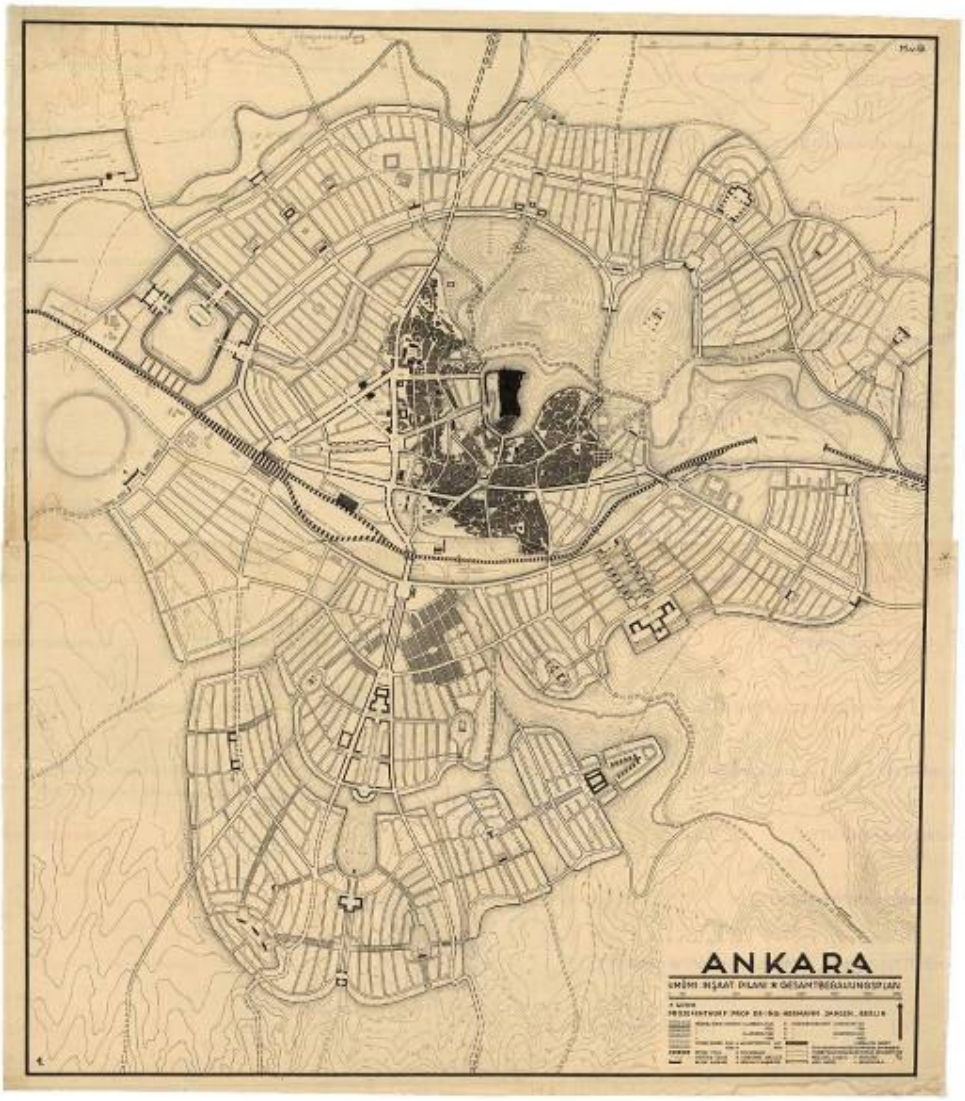


Figure 3.2. The 1928 Competition Plan of Hermann Jansen. (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153601 and http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153602, accessed 20.04.2008)

Jansen's planning approach is based on the principle of providing the three basic elements indispensable for the human health: light, air and green (*licht, luft und grün*)[7].

- Jansen emphasizes designing the settlement layout, streets and buildings according to sunlight.
- By proposing gardens for houses and locating the industry zone according to the dominant winds, Jansen aims for a proper settlement design to provide clean air.
- The 1928 plan sets up a green structure composed of natural and artificial water bodies, green strips and different sizes of sports fields and allotment gardens.

The "*licht, luft, grün*" and also hygiene, are what social reformers had strived to obtain in their utopias and model settlement designs. Also the lease gardens of the *Siedlung* movement were incorporated into the plan as allotment gardens and the fruit gardens along the streams.

Jansen, in the 1928 plan, made use of the existing green spaces and the stream banks (İncesu, Bentderesi and Çubuk stream banks) extensively. Wide strips of green are used to divide the city into quarters. The separation of the pedestrian circulation from the vehicular traffic and the creation of several pedestrian roads are devised in the plan.

According to the land use plan (*Flächenaufteilungsplan*) (Figure 3.3 and Figure 3.4), the city is composed of eight districts. The center of the Yenişehir district is reserved for the administration quarter (*Regierungs-viertel*) on the west of Yenişehir, the industry is located at the contemporary Maltepe district and between them a *Schutzstreifen*[8] (a buffer strip) of 100 meters width is introduced (Figure 3.5).

---

[7] Light, air and green spaces will also become the motto of the CIAM and the Athens Charter as *sun, space* and *greenery (licht, luft und grün)*.

[8] schutz: protection, cover, prevention; streifen: band, strip (Leo Online German-English Dictionary, http://dict.leo.org/ende?lang=en&lp=ende, accessed 24.07.2008). *Schutzsterifen* is considered to be a *buffer strip*, since especially it is placed between a housing area and the industrial zone.

Figure 3.3. The land use scheme of Jansen's 1928 plan (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153639, accessed 20.04.2008)

Figure 3.4. The land use scheme of Jansen's 1928 plan (Baykan Günay's personal archive, the land uses are colored by Günay)

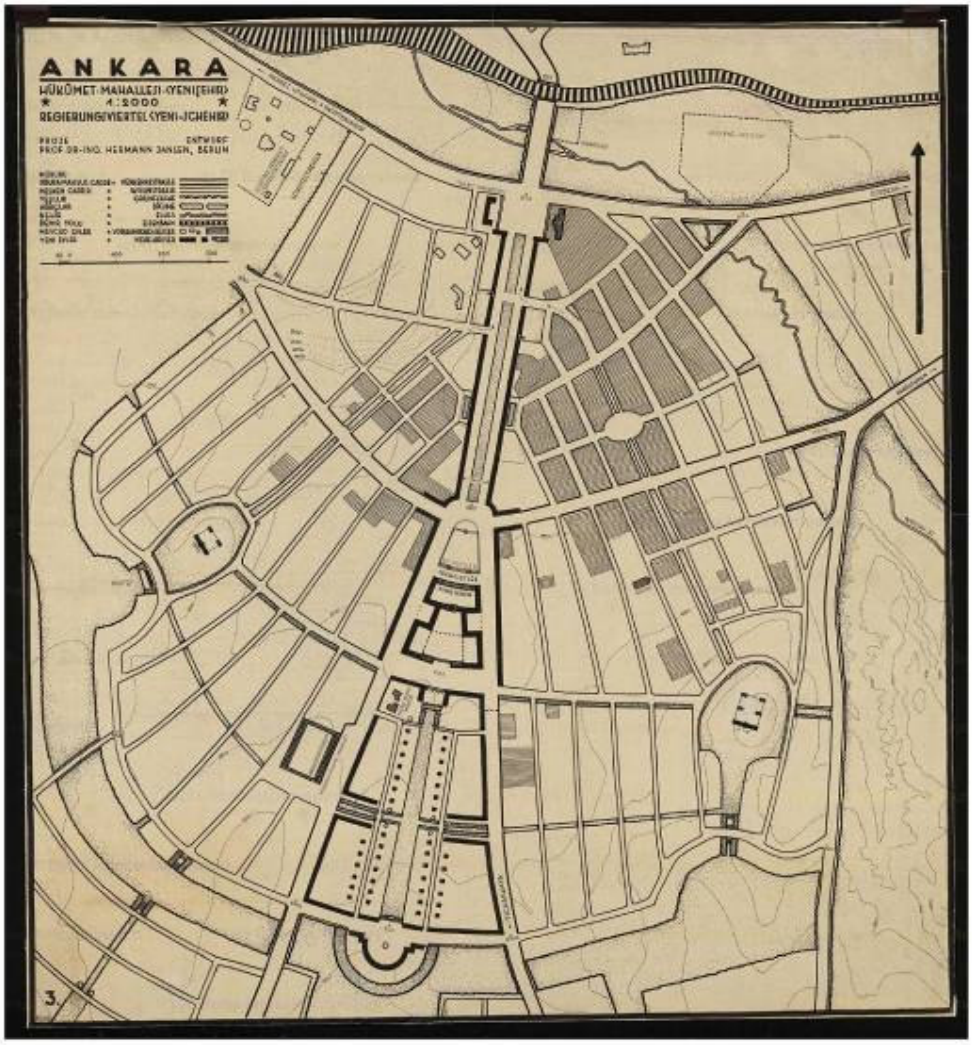


Figure 3.5. The Administrative Quarter and Yenişehir plan (Plan no.3) in Jansen's entry of 1928 (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153605, accessed 19.04.2008)

The airport is placed on the western end of the industry quarter. To the south of the administration quarter, separated by a green strip of width differing from 75 to 275 meters, the *Landhaus-viertel* (Country houses quarter, with single family houses in gardens) is located. The *Hochschul-viertel* (Universities quarter) is placed to the east of the *Regierungs-*

viertel and in between these two zones, another green strip with a width ranging from 175 to 225 meters is placed (Figure 3.5). The İncesu Stream flows along this strip to Sıhhiye and then flows through an underground canal before surfacing again in front of the central train station and joins the Bentderesi Stream across the entrance of the Hippodrome. A housing area is placed on the east of the Universities quarter. On the north of the railroad line, the Old City of Ankara is mostly kept intact (Figure 3.6). On the eastern skirts of the Old City, the central business district is located. A wide pedestrian alley called Bazarstrasse (Pazar Caddesi) in the middle of it is directed towards the Ankara Castle providing a visual relation with it. That pedestrian avenue is connected on one end to the square in front of the Central Station and ends on the Cumhuriyet Street (today the Atatürk Boulevard) ("Atatürk Uranı" as it was called at that time), on the other end. Right across the Boulevard, there is a green strip starting from the Theatre Square that runs up hill to the Castle.

On the north of the Old City, there is a wide green wedge that enfolds six hills and the Bentderesi Stream and an artificial lake. This green wedge starts from the eastern border of the city, at the intersection of Bentderesi and the railroad, and narrows into a strip at the Workers' housing quarter. The artificial lake on the Bentderesi Stream is probably the beach and swimming resort that the Directorate of Development had asked the contestants of the plan competition to place in their plans. The *Arbeiter-viertel* (Workers' housing quarter) is on the north of the CBD and the Stadium is located right on the southwest of this quarter. Bentderesi flows through a green strip of 150 meters wide. That strip separates the workers' housing quarter and the thin strip of housing that borders the Bentderesi green strip and the CBD.

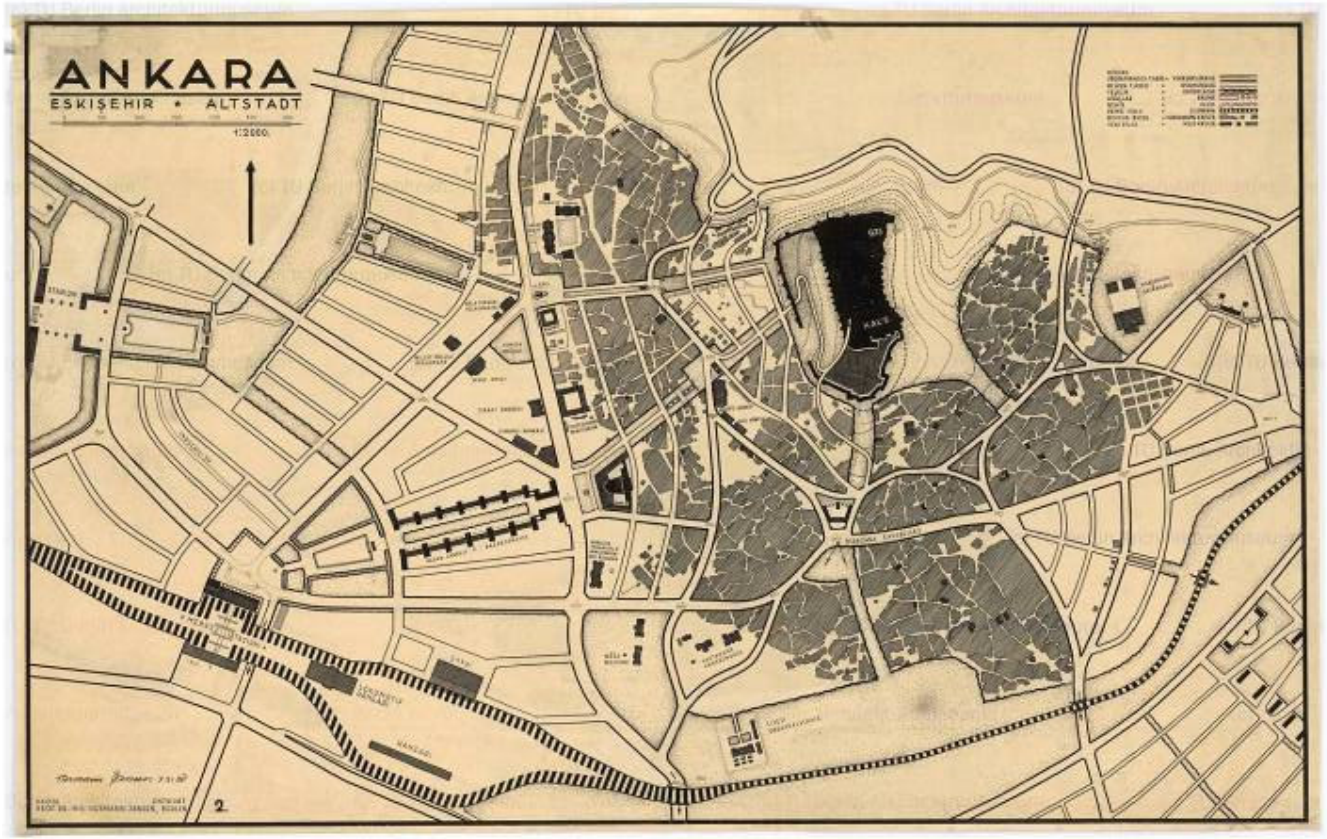


Figure 3.6. Herman Jansen's 1928 Old City (Altstadt) plan (Plan no.2) (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153604, accessed 19.04.2008)

Finally, another land use decision to point out is the *Wohn-reserve* (Housing reserve) area on the north east border of the city. To the north of the housing reserve and the workers' housing quarter, the Çubuk Stream flows into an artificial lake that is used for swimming and recreation just as the artificial lake on the Bentderesi Stream. This lake is connected to the workers' housing quarter with a green strip that connects to the Bentderesi Stream on the other end.

The important feature of Jansen's 1928 plan from the point of green spaces is its well defined green space structure functionally integrated to the city (Figure 3.7)[9]. The green spaces enhance the value of the urban environment with the aesthetic attributes and recreational uses with which they provide the city. In Jansen's Ankara plan the green spaces form a legible green structure composed of greenways in addition to central parks and sports areas. The greenways serve both as buffer zones for separating districts and enabling pedestrian movement within the city. As a design principle, sports areas, playgrounds and kindergartens[10] are placed in the open spaces and close to the housing areas. Jansen emphasizes that the areas, which is kept free from private buildings, may also be used as reserve areas for locating public institution buildings and not necessarily for parks only (Jansen, 1929, p.149).

[9] The archive had the 1928 plan scanned in two pieces and plans inventory number 22581 and 22582 are joined in Photoshop.
[10] The term "çocuk yurtları" has been used in the translation of Jansen's 1928 plan report. To translate the term into English, "kindergarten" is found appropriate.

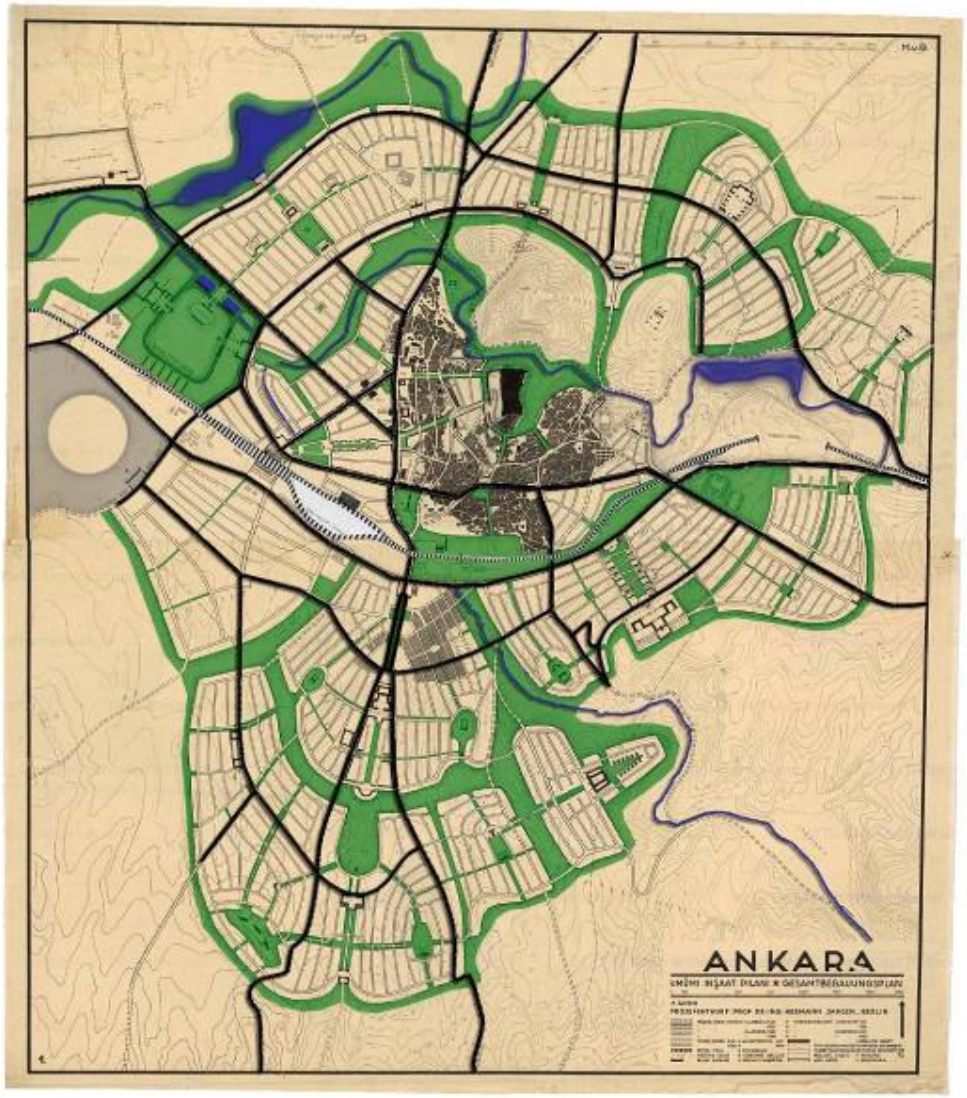


Figure 3.7. The green space structure proposal of Herman Jansen's 1928 Ankara Development Plan Competition project. The green, blue and grey shades are added by the author for emphasis. (The original plan is displayed in Figure 3.2)

3.2.2. The 1932 Approved Development Plan: The Organization of the Plan Layout

The 1932 plan basically relies on the land use decisions of the 1928 competition plan (Figures 3.8 and 3.9)[11]. A basic difference between the 1928 plan and the 1932 plan is that the use of green strips for separating districts is much more evident in the 1928 plan and the districts are not as defined in the 1932 plan as they are in the 1928 plan.

The Administrative Quarter is in Yenişehir as in the 1928 plan. The rest of Yenişehir is reserved for housing, from İncesu Stream on the east to the street reaching Dikmen Street (Necatibey Street today) and to the reservoir pool of Kavaklidere Stream and the water reservoir on the Kocatepe Hill on the south. Between the Ministries and the Necatibey Street there is a housing area for officers of the ministries. On the east of İncesu Stream greenway, Kurtuluş and Cebeci districts are reserved for housing. Between Kurtuluş and Cebeci, there is the universities quarter. The Faculty of Political Sciences and the Faculty of Communication is located on the high school quarter today.

[11] The 1/4000 scale Ankara Development Plan in Figure 3.8 is composed of 5 seperate archive documents on the web site of the Berlin Technical University Architecture Museum website (inventory numbers 22641, 22642, 22643, 22644 and 22645, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153927, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153931, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153936, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153941, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153948, accessed 20.04.2008). These 5 seperate documents are combined in this figure.

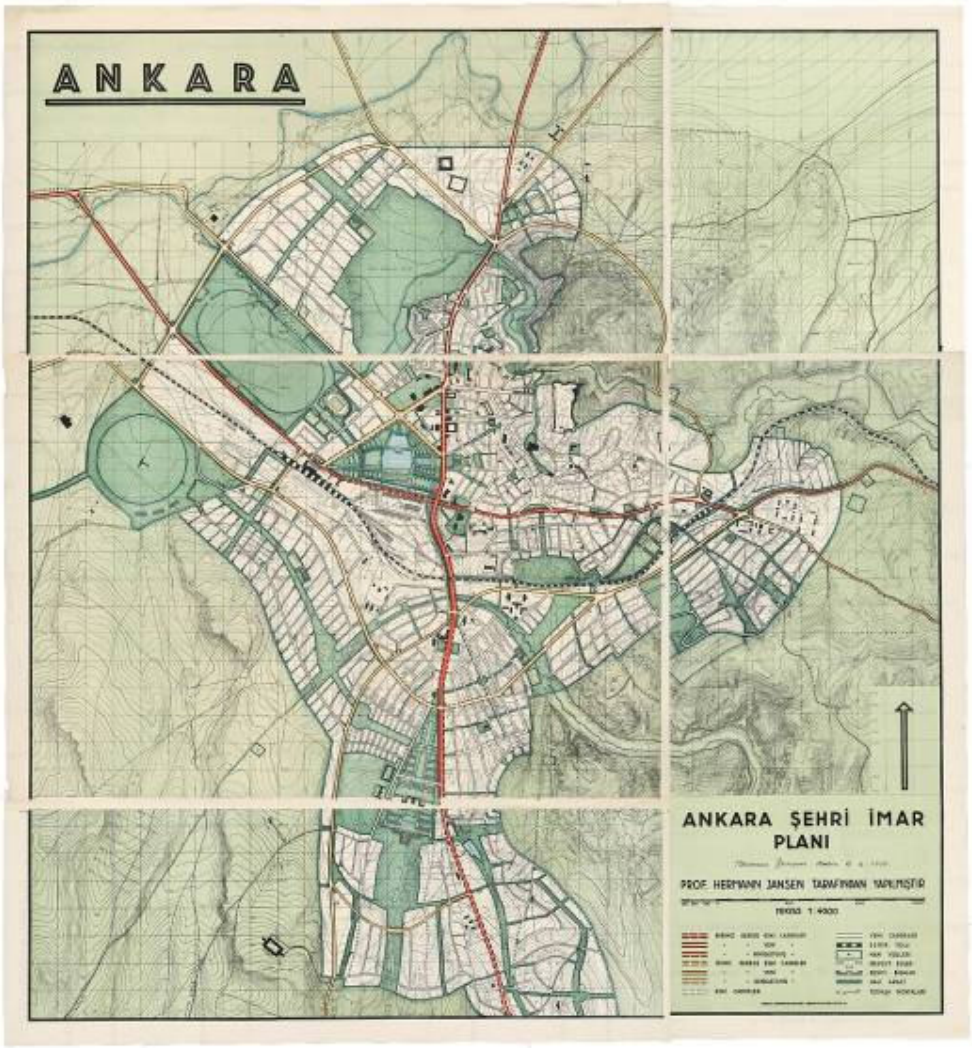


Figure 3.8. Hermann Jansen's 1932 approved development plan (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de, accessed 20.04.2008)

Figure 3.9. The land use scheme of 1932 development plan (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=155958, accessed 20.04.2008)

On the south of the Administrative Quarter and Yenişehir, there is a housing area. Jansen proposed the development here to be in the form of villas in gardens with parcels of 1000 m² at least (Appendix A, code 65). On the west of the Mithatpaşa Street, the loading bay of the railway and the area reserved for storage and warehouses in the 1928 plan are replaced with a strip of housing extending to the airport. This area comprises today's Demirtepe and Maltepe districts. There is a strip of green dividing this housing district into two from southeast to northwest and that green strip is parallel to the Gazi Mustafa Kemal Boulevard that was called the Mithatpaşa Street at the time when the plan was prepared. Between the Gazi Mustafa Kemal Boulevard and the street on the south of the Park of Youth (Gençlik Parkı) and the House of Exhibitions, the industrial area, through which the railway line passes, is located. On the north of the industrial zone, the Hippodrome and the Park of Youth and the House of Exhibitions are located. The trade and business district that was proposed in the 1928 plan, is replaced with the large Park of Youth. The Bazaar Street starting from the square in front of the Central Railway Station and opening to the Theatre Square is removed. Though the park has entrances from both of the squares, it is to note that no axial pedestrian road is proposed in it. To the north of the Hippodrome, the Workers' Housing Quarter is laid down and between the housing area and the First and the Second National Assembly buildings, allotment gardens are placed. At the east of the Workers' Housing Quarter, Sarıkışla, a military establishment, the Faculty of Agriculture and a small housing area are located. The Çubuk Stream flows at the north of the city drawing its northern limits. In the Old City, while most of the Citadel area and certain old districts were kept as they were, some parts were subject to certain interventions on both sides of the newly opened or widened avenues. On the east of the Cumhuriyet Street (today the Atatürk Boulevard) across the Exhibition House and the south of the Old City, schools and hospitals are placed. On the east of the schools on the Cumhuriyet Street and the hospitals, another housing area was proposed at the north of Hacettepe. Deeming

the habitual use of Hacettepe as an excursion spot by the urbanite important, Jansen left the hill untouched and as an informal park open to the daily excursions of people. To the east of the greenway along the İncesu Stream, there is a housing area, the universities quarter, another housing area in Cebeci, a military area and a hospital.

3.2.3. Comparative Analysis of 1928 and 1932 Jansen Plans with regard to the Use of Green Areas

Based on the fact that the 1928 plan is the competition plan and the 1932 plan is the final plan, there are differences between the two plans. Through a comparison of the plans the differences are as follows:

- The 1928 plan is a more porous plan where the settlement is less dense, it is composed of clearly defined districts that are separated by pedestrian green strips and connected to each other by vehicular roads.
- The green space structure in the 1928 plan is a component of the urban form composed of the Old City, the proposed neighborhoods, the road network and the railroad. The 1928 plan is a direct application of Jansen's intentions, planning principles and aims in preparing Ankara's development plan. It is interesting to note that the 1932 green space layout is not as clear as it was in the 1928 plan. However, it is important to stress that the main principles of the two plans are the same.

The differences of the 1932 plan from the initial plan of 1928 are as follows:

- The railroad loading and unloading bays placed at the south of the central station have been replaced with Demirtepe and Maltepe residential districts.
- The allotment gardens are located over some part of the Workers' Housing Quarter.

- The reserve housing area which was located at the north of the city does not exist anymore in the 1932 plan.
- The Hippodrome and Stadium areas are extended into a larger complex in the 1932 plan and the CBD and the Bazaar Street in 1928 plan have been replaced with the Park of Youth and the Exhibition House.
- The street layout was changed. Jansen preferred to use dead end streets systematically in relation with the green space structure in 1932 plan. The street layout and the green space structure of the Workers' Housing Quarter and the Demirtepe and Maltepe housing area depend on effective use of dead end streets. The dead end streets are used to provide quiet residential streets and they are connected to the greenways to provide access to the greenways. This organization of green spaces and streets form a continuous structure of green space composed of larger components divided less by streets.

The common decisions of the two plans are as follows:

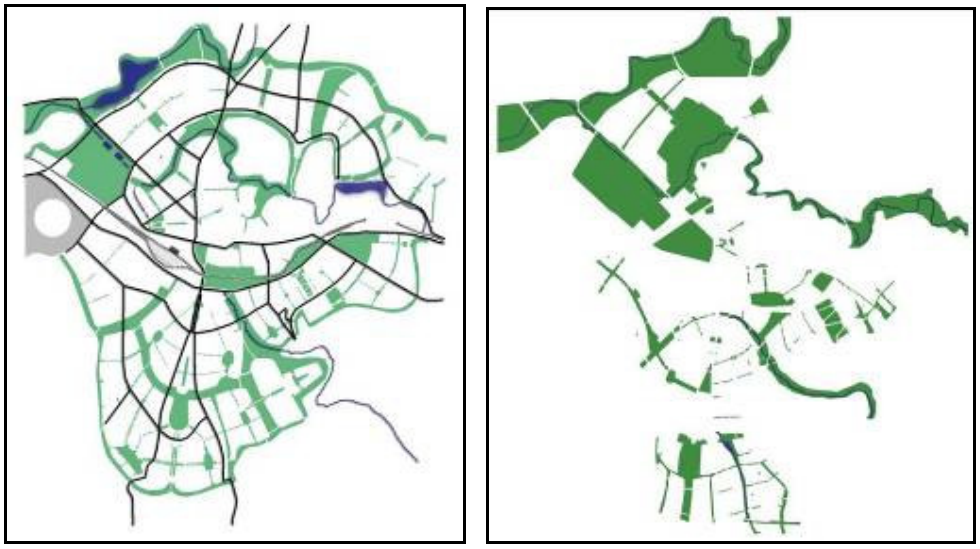
- Hacettepe Park is kept as an open space.
- Development is prohibited on the streams and their banks. The banks of the streams are proposed to be used for agriculture and recreation.
- Millet Bahçesi, across the first National Assembly Building) is kept as a park.
- The three green strips climbing uphill to the Castle are maintained.
- The hills are kept free from development.
- The park at the south of the National Assembly at Yenişehir is kept.

By inference from the above comparison of the 1928 and 1932 plans, Jansen's green space structure has to be considered in relation with the pedestrian and vehicular traffic, and in relation with the housing areas and services (social facilities), and the systemic natural features. In both plans, the proposed structure of green spaces,

1. is based on the principle of preserving the water bodies, such as rivers, streams and lakes, and other important natural features, such as forests, valleys and the such; and maintaining their recreational use by the public,
2. incorporates a network of strips of green, designated to provide on foot access in and across the city, and to the recreation areas out of the city as well, thus operating as an alternative to vehicular traffic,
3. increases accessibility to the parks and recreation and sports areas either by "placing" them close to housing or by providing sidewalks shaded by trees along the traffic roads and arteries,
4. forms a physical continuity, interrupted as least as possible by the roads,
5. is designated to function in relation with the dead-end streets, where possible, that is key to the least interruption of the physical continuity, of the green corridor in the Maltepe an Demirtepe districts and the Workers' Housing Quarter. The dead end streets establish car access to the houses on the streets and pedestrian access to and from the green corridors and green spaces and public car parks are located at the ends of the dead end streets.
6. uses the dry stream beds that flood during rain showers to construct rain water drainage systems.

3.3. The Green Network, Green Belt and Greenways as the Structuring Components of Jansen's Planning

The green space structure layouts of 1928 competition plan and the 1932 final development plan, though they are prepared according to the same principles, are different (Figure 10).



1928 Jansen Plan 1932 Jansen Plan

Figure 3.10. The green space networks of Hermann Jansen's 1928 and 1932 Ankara Development Plans (Personal archive).

In the 1928 competition plan report, Hermann Jansen (Jansen, 1929) had clearly stated that public hygiene was considered to be an indicator of a nation paying importance to its future. Especially to improve the health of the young generation, sports fields are located in residential districts. Also the kindergartens having large gardens had to be built. Ample amount of open spaces for games and sport were provided in the 1928 plan (Jansen, 1929, p.138). Artificial lakes and pools were proposed for recreation and sport (Jansen, 1929, p.139). The hilltops were reserved for parks. Jansen stresses in his report that these latter

should be kept free from buildings if parks are not to be realized (Article 11, Jansen, 1929, p.139). Especially the stream banks having natural vegetation and the lands not suitable for development were reserved for sports and recreational activities of the urban population (Jansen, 1929, p.139-140).

In his plan report of 1928, Hermann Jansen states that the pedestrian roads should be paid more attention and they should be separated from the vehicular roads in order to ease the vehicular traffic and to preserve the mental health of the pedestrians (Jansen, 1929, p.144). The profiles of thoroughfares and the residential streets which Jansen had sent to the 1928 competition clearly demonstrate the attention that he gives to the direction of the sun in designing the profiles of streets and the pedestrian ways (Figures 3.11 and 3.12).

To achieve an impressive effect, a green area is devised across the Central Train Station. This green area did not block the view of the Castle and as the Bazaar Street is a pedestrian road, the view of the Castle would be enjoyed toward the Opera Square. In addition to this, the Castle was to be surrounded by seven squares, having each a visual and physical relation with it (Jansen, 1929).

Jansen proposed placing monumental buildings, such as the buildings of the Universities Quarter, on the slopes of Cebeci, while the hills at the north of the Old City are kept free from development.

The green strip dividing the Workers' Housing Quarter in the center establishes a pedestrian promenade to the swimming pools and baths built along the Çubuk Stream.

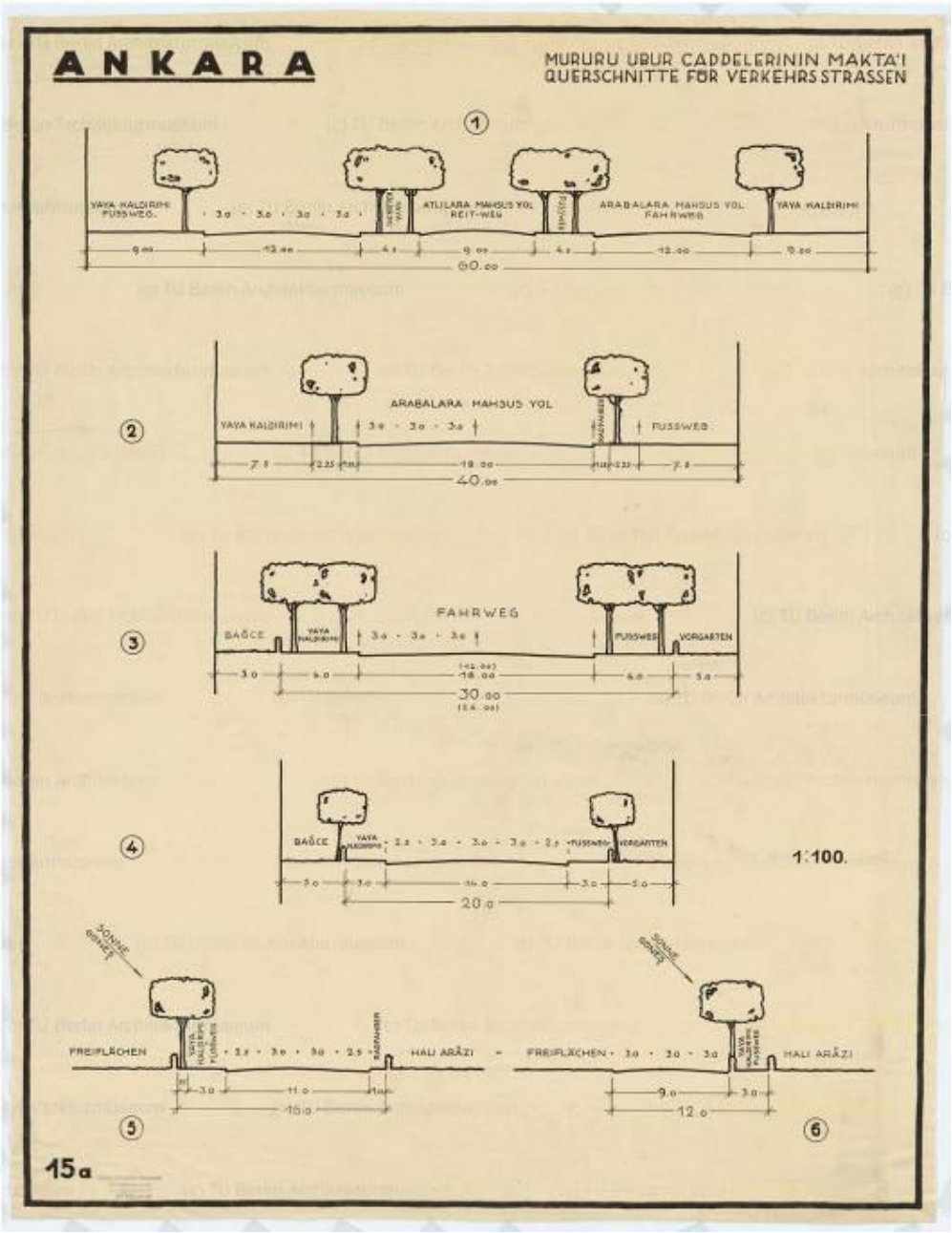


Figure 3.11. Profiles of Thoroughfares and Sidewalks in Hermann Jansen's 1928 Competition Plan Proposal (*Querschnitte für Verkehrsstrassen 15a*) (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153619, accessed 19.04.2008)

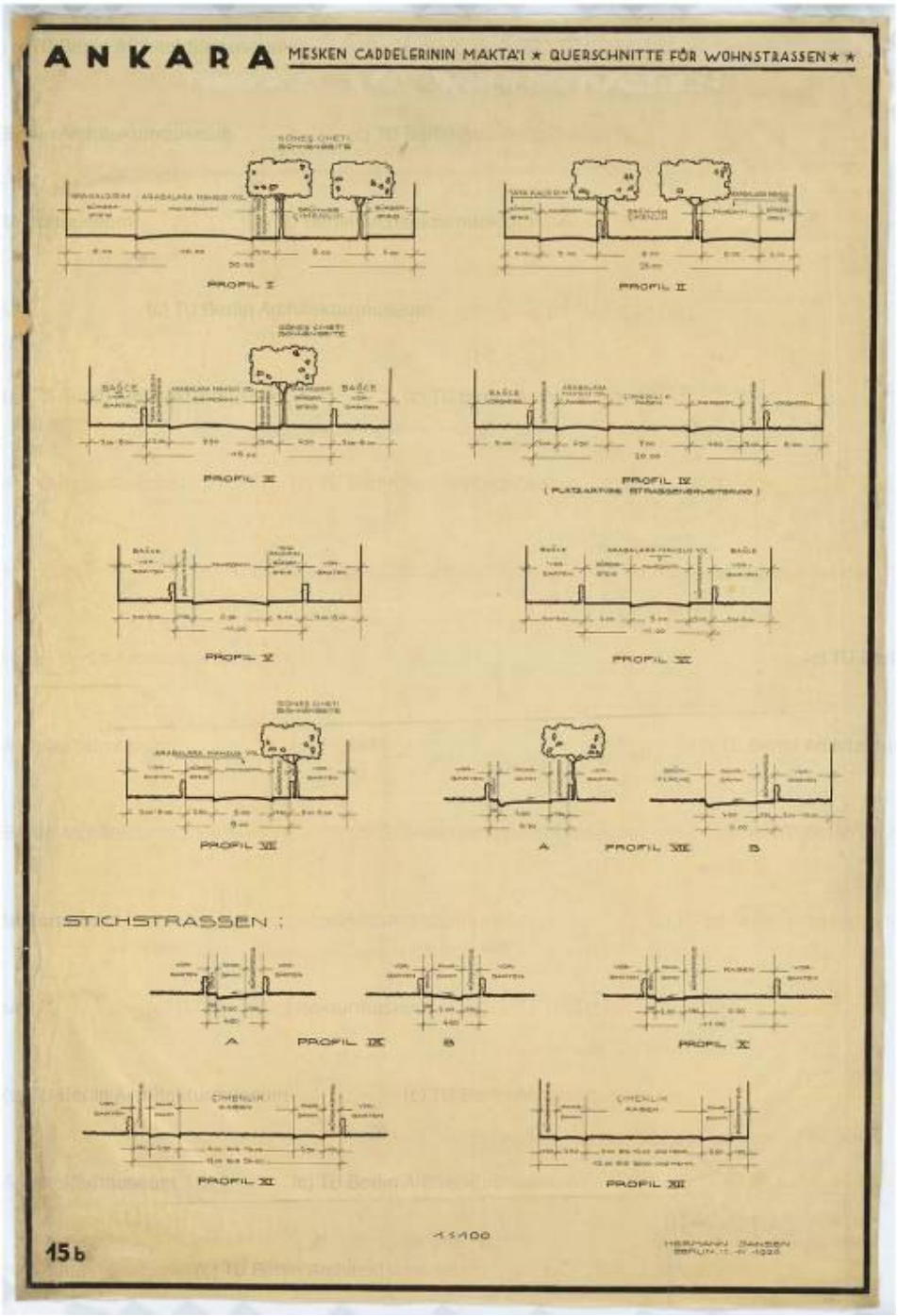


Figure 3.12. Profiles of Roads and Sidewalks in the Residential Districts in Hermann Jansen's 1928 Competition Plan Proposal (*Querschnitte für Wohnstrassen 15b*) (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153620, accessed 19.04.2008)

Open spaces are very important from the point of decreasing the building density. According to Jansen, these areas should not necessarily be designed as parks only but they may also include public buildings such as schools (Jansen, 1929).

Hermann Jansen proposed a Hippodrome and two stadiums in the 1928 plan. One of the stadiums is placed inside the Hippodrome area. Jansen states that the stadium in Berlin is placed in the Hippodrome also and that he took it as a model. The other stadium is proposed at the south east of Cebeci, along the stream banks of İncesu where the slope of the hill enables the building of spectator seats in situ (Jansen, 1929, p.155).

Two artificial lakes were proposed in the plan, one on the Bentderesi and one on the Çubuk Stream, to the northwest of the Workers' Housing Quarter (Jansen, 1929, p.156).

In the plan report of 1932 plan, (published in 1937), Jansen–stressed the importance of sports for recreational purpose (*hareketle istirahat*) and identified walking as the cheapest and most effective form of recreation for the majority of the population (Jansen, 1937). To enable the easy access of the citizens to the green space, just for walking or to walk to a nearby sports field or to a park to perform any other type of recreation, strips of green space (*yeşillik damarı*) close to houses must be developed.

According to Jansen, the most important type of green spaces are the green strips and corridors (*kutrani olan yeşillik şeritleri*), that provide access to and from one's house to a distant park or a sports field and even to the outskirts of the city. The planner's duty, according to Hermann Jansen (Jansen, 1937, p.11), is to establish a network of greens, composed of natural features linked to each other by green strips. The important "task" here is to protect these green strips as well as the traffic roads, from the development of any buildings upon them.

Other than that, a road should be delimited with gardens of houses on both sides, thus providing an unrestricted and free use for the pedestrians.

As a design formula, Jansen proposes equipping green strips with sports fields composed of several playgrounds, tennis fields and a swimming pool to be used at summer time. Furthermore, placing schools by these sports fields would increase the on foot access of children to school via the green strips and easily use these recreation and sports facilities as well.

Another function that Jansen attributes to the green strips is their use for stopping the spreading of fire from one neighborhood to another, both at peace time and war time. These areas can also be used for "emergency accommodation" after air raids during war times. To achieve this benefit, small gardens rather than parks (*park yeşillikleri*) may be used and in this way the maintenance expenses for the government would be less (Jansen, 1937, p.12).

Jansen also made use of green strips to prevent floods, by placing drainage infrastructure beneath them and also by placing green strips at dry stream beds that are known to flood during heavy rain showers.

The vineyards, the orchards and the vegetable gardens surrounding the city are considered as parts of a greenbelt to which the green strips and greenways open. This greenbelt is thought to stop the urban sprawl (Jansen, 1937).

At this point, it is worth to dwell on the appellation of the green spaces in the 1928 and 1932 plans, which shows a certain difficulty in translating certain planning terms in German into the Turkish context. The green structures of the 1928 and 1932 plans are both composed of sports fields, parks and green strips. The appellation for these open

spaces in the legends of the plans is "*Hâlî Arazî*" in Turkish, and "*Freiflächen*" in German. The agricultural lands and the steppe surrounding the city of Ankara were marked by Jansen as *Freiflächen* also and they were conceived as the natural areas towards which the green strips open. In conformity with this idea, the outer *Freiflächen* on the periphery of the urban development area were conceived as to form a greenbelt to be kept free from development, curtailing the urban sprawl. In the German planning terminology, *Freiflächen* is the plural of *Freifläche* and means "free open spaces"[12] under public ownership. Its translation in Turkish, *hâlî*, however, has a different meaning. *Hâlî* means "empty, desolate, uninhabited" (boş, ıssız, tenha. www.tdk.gov.tr, accessed 16.07.2008). In the Turkish legislation related to the status of the land, which goes back to the Ottoman Land Reform of 1858, *hâlî arazi* falls under the "*arazî-i mevat/mevat arazî*" category and they are desolate lands not used and possessed by anyone, and are not suitable for cultivation[13]. Moreover, in order to entitle the lands having the status of *mevat arazi*, they must be 30 minutes of walking distance (2.5 km) from the remotest house of villages and small towns (Sönmez, 1998, p.79, p.207). Another important term for the purpose of the research is *arazi-i metrûke/metrûk arazi. Metrûk arazi* is used for the lands that are owned by the state and used by the public and the use of the word *metrûk*[14] is due to the emphasis on the publicly shared benefit of this type of public lands (Sönmez, 1998, p.205). There are two types of *metrûk arazi*; one being reserved for the benefit of the largest public. Roads, squares, bazaars, promenades, excursion spots and the like are classified under this category, and they are freely accessible by every member of the public to be used according to their intended use. Any private possession over this type of *metrûk arazi* is strictly prohibited and they are the property of the state. The second type of *metrûk arazi* is

---

[12] Leo Online German-English Dictionary, http://www.leo.org/leo_home_en.html, accessed 16.07.2008

[13] The meaning of ***mevat*** is "ölü, çorak, hâlî" (dead, arid, desolate) (Sönmez, 1998, p.79, p.207).

[14] ***metruk*** *sıfat, eskimiş (k ince okunur) Arapça* 1. Bırakılmış, terk edilmiş, 2. Kullanılmayan (www.tdk.gov.tr, accessed 25.7.2008).

the lands like coppice (baltalık), summer pastures (yazlak), winter shelter/winter quarters (*kışlak*), pastures, and the like, that are assigned only for the use of a limited public, as a village or a group of villages (Sönmez, 1998, p.205-206). Though these terms have not been used in the Turkish Civil Code[15], Tuluî Sönmez interprets the article no. 641 as having a similar definition of *mevat arazi* and the second clause in the same article as having a similar definition of *metrûk arazi* (Sönmez, 1998, p.213). Though they were not included in the new Civil Code, they have remained in use until today.

Designating the green spaces as *hâlî arazi* seems to be an appropriate decision when the Turkish legislation is concerned. Jansen defined the types of green spaces/components of the space structure but not specifically designated the function of most of the green spaces which are part of the structure of green spaces that he laid out. This structure is a frame to be

- filled in with the defined components and public uses such as schools,
- to be kept free from development and
- to be kept free from building of roads upon them.

It may be contended that these lands would become the first type of *arazi-i metrûke* within a city, as the Municipality developed them according to Jansen's plan. However, it is important to stress that neither the Law of Municipalities (*Belediyeler Kanunu*), nor the Municipality Buildings and Roads Law (*Belediye Yapı ve Yollar Kanını*), which were enacted in 1930 and 1933 respectively, brought the necessary definitions for green spaces and the types of green spaces to be created in the development plans. It is to note that it is with these laws that the preparation of a development plan became an obligation for each municipality with more than 10000 inhabitants. The rules for

[15] The first civil code of the Turkish Republic, Law no. 743, that became valid on 4.9.1926.

plan modification in general and modifications of the green spaces in particular were not defined either in this legislative framework; therefore it was easy for the administration to modify green spaces and use them according to their benefit and sometimes against Jansen's plan decisions.

Another important reason for this inference is the appellation of green spaces as *hâlî arazi*. *Hâlî arazi* is an ambiguous yet legal category. Actually *hâlî arazi* is a status-less category unlike any other part of the city, since the desolate lands have the character of being no man's land. The landuse and property rights to these lands are not determined and they are not categorized. Being a no man's land and being a component of urban green space structure, i.e. being a greenway, a park, a sport field or a greenbelt are different things[16]. A park, a greenway or a greenbelt are types of green spaces with clear and specific urban functions and uses, in other words they are not unoccupied, undesired or stuck between two conditions. *Serbest sahalar*, which is another term used for the translation of *freifläche* in the reports or letters, is a more corresponding term than *hâlî arazi* and it is much more appropriate for Jansen's green space structure proposal. However, *hâlî arazi* designating the legal status of the land more than its meaning in the planning literature is the term used on the approved plans.

3.4. The Components of Green Space Structure

The green space structure in Jansen's 1932 plan is composed of formally and functionally differing components. There are four major groups under which eight sub-types are enumerated. One of these major groups is the green strips (*Grünstreifen*) and the other is central

[16] **no man's land** (n.d.). **1.** an unoccupied area between the front lines of opposing armies **2.** land that is unowned and uninhabited (and usually undesirable) **3.** the ambiguous region between two categories or states or conditions (usually containing some features of both). *WordNet® 3.0*. Retrieved March 25, 2008, from Dictionary.com website: http://dictionary.reference.com/browse/no man's land.

greens. The central greens category contains the common types of green spaces such as parks and sports grounds that, according to the size, serve either the whole urban population or a part of it, while the green strips flow crossing the city and connect the central greens with each other.

3.4.1. Greenways (*Grünstreifen*)

The greenways are basically landscaped or agricultural linear strips. Jansen called these greenways as Diagonal Green Strips, "*Kutrani Yeşillik Şeritleri*"[17] as translated in the Ankara Development Plan Report published in 1937. According to their size, functions and features there are two types of greenways.

3.4.1.1. Greenways along stream banks

These types of greenways are composed of the valleys and the stream banks. These stream banks are incorporated into the green space structure as vegetable gardens (Ankara Development Plan Report, 1937). Reserving the flood prone beds of the streams for agricultural and recreational purposes, Jansen aimed to decrease the possible losses caused by floods.

3.4.1.2. Pedestrian greenways

This type of greenways are designated to provide city-wide pedestrian circulation and they are put forth as important means to provide access to public services such as schools, parks and sports fields, and also as

[17] **kutur –tru** ***noun, old, mathematics Arabic*** **1.** Diameter of circle and globe. **2.** Diagonal (www.tdk.gov.tr, accessed 04.07.2008). As k*utrani* means diameter and diagonal, the term "Kutrani Yeşillik Şeritleri" are translated as "Diagonal Green Strips".

spaces of recreation in themselves. Jansen stressed the growing importance of walking as a form of recreation for all ages (Jansen, 1937).

Jansen sent several drawings showing the profiles of streets and greenways, during his consultancy to the Development Directorate. Figure 3.13, dated 1932, is an early and simple plan of the profiles of the streets in Yenişehir. In time the profiles diversified and their level of detailing increased. The Figure 3.14 is a sheet from 1936 for the profiles of the streets and of the greenways on *hâlî arazi*. It is interesting to note that on this drawing, the term *hâlî arazi* is used for "greenway" shortly.

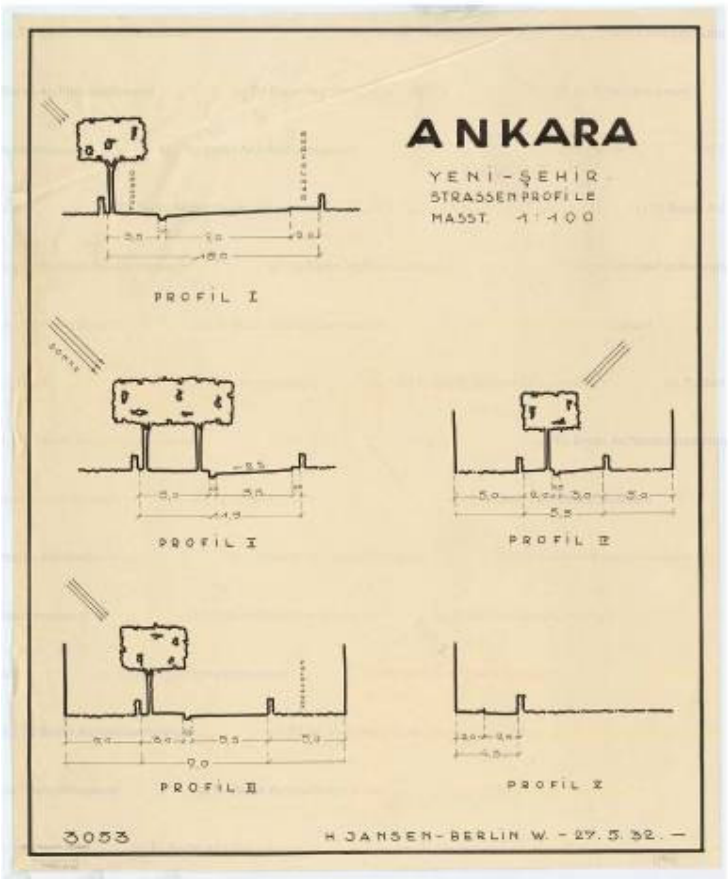


Figure 3.13. Yenişehir street profiles dated 27.5.1932 (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothe, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158409, accessed 20.04.2008).

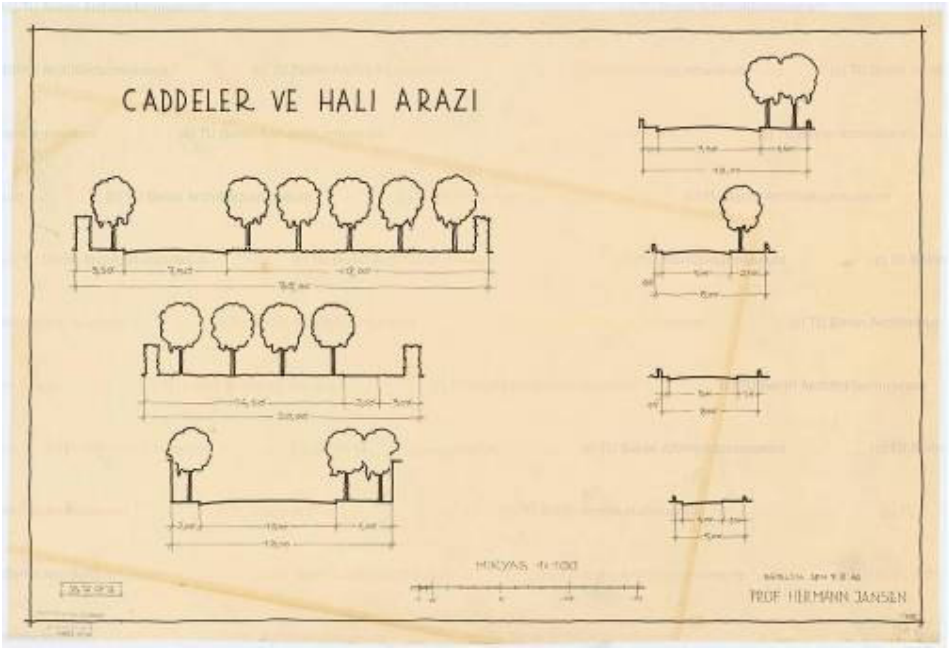


Figure 3.14. Sections of streets and "*hâlî arazî*" (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158417, accessed 20.04.2008)

Jansen has sent the profiles of greenways Jansen sent in 1938 (Figure 3.15). These drawings include details of the greenways having different widths and dimensions. Different types of greenways have varying widths ranging from 3 meters to 50 meters. According to the width, the greenways are equipped with one or two pedestrian pathways, one of which is shaded and the other is under sun, and a bicycle road. The section on the lower right hand side, titled Plantation of a Thoroughfare (*Abpflanzung einer Verkehrsstrasse*), is 32 meters wide and has a vehicular street, unlike the others. Since this is a profile for a thoroughfare, it is probable that some greenways were employed for vehicular traffic also.

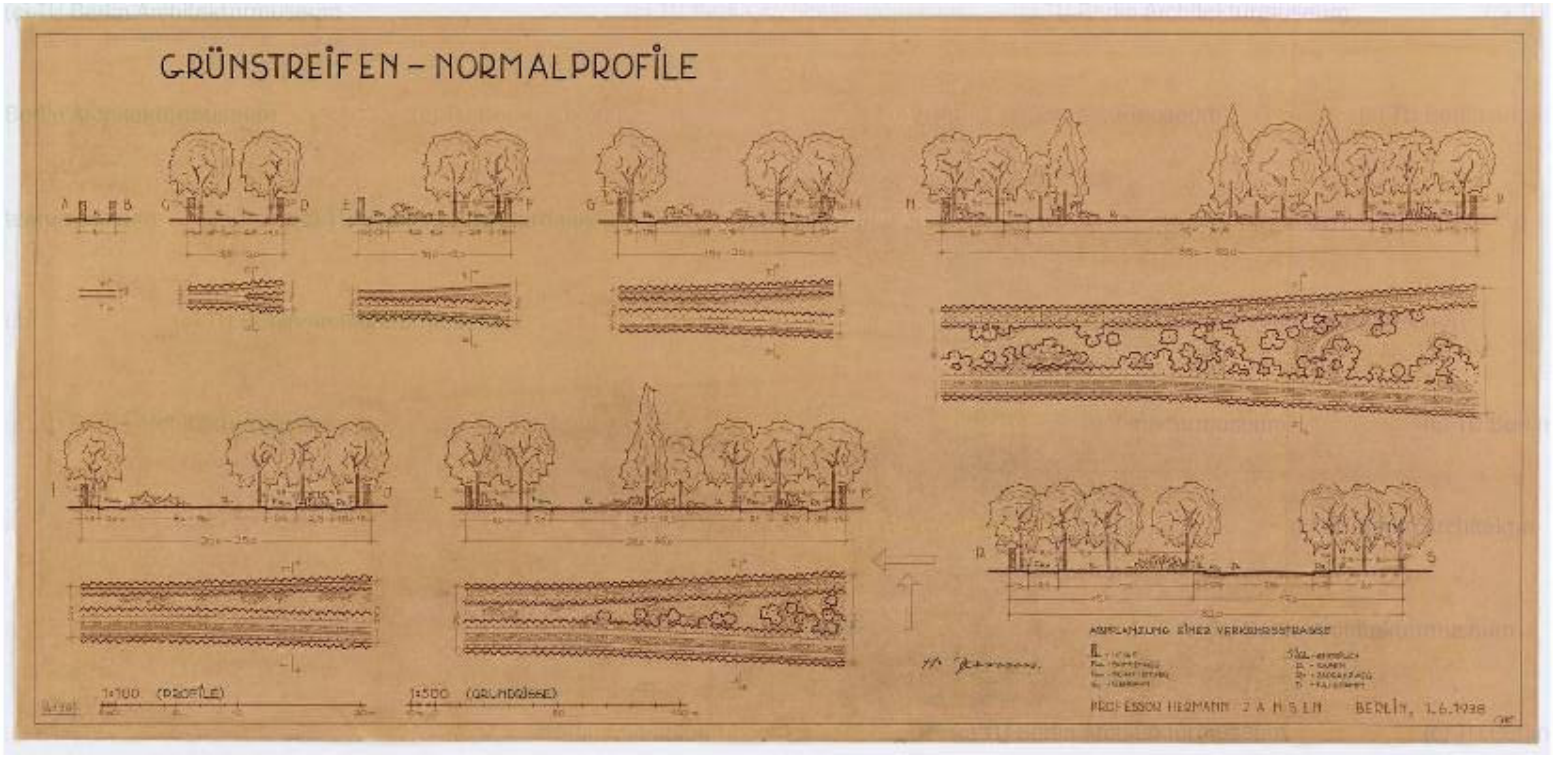


Figure 3.15. The profiles of the greenways (Grünstreifen) Jansen has sent in 1938. (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158427, accessed 20.04.2008)

Pedestrian greenways are also used to build the infrastructure, the rain water drainage system in particular. On an instance, in a letter sent to Jansen from the Municipality in 1933 (Appendix A, code 29), the director of the Development Directorate reports that some landowners asks for the plotting of their land in Cebeci, giving the coordinates of the location of the land. The director proposes here the designation of a 6 meter wide greenway, in order to build drainage, saying that the dry brook on this location causes floods in spring. Jansen agrees and advices application of the same drainage system that had been used at İncesu and Kavaklıdere, and says that 6 meters width is enough for the greenway and extending the greenway to the market place down the hill, and limiting its use for pedestrian traffic only (Appendix A, code 30). The 1/4000 scale plans that were annexed to this letter show a greenway which is absent in the 1932 plan at the mentioned coordinates (Figure 3.16).

Figure 3.16. Cebeci greenway proposal. Note the greenway at the detail of the plan on the right climbing uphill for two building blocks (The detail on the left is from Figure 3.8, and the detail on the right is from the 1932 1/4000 scale development plan, dated 6.5.1932. Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153918 and http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=153919, accessed 20.04.2008)

As this instance illustrates, the green strips are also used for building drainage systems and flood prevention and control, which is an additional use related with the urban hygiene and infrastructure. Together with the pedestrian circulation, recreational uses and agricultural activities, the green strips appear as a structural component of primary importance of the Jansen plan.

The pedestrian greenways proposed by Jansen can be categorized as arterial and collector pedestrian greenways. A third category can be added to these two as the greenways along the avenues and streets.

a. Arterial pedestrian greenways:

The arterial pedestrian greenways are the main streets of pedestrian traffic, which also run parallel to main traffic streets and provide alternative routes for pedestrian circulation free from the disturbances of vehicular traffic. They are at least 25 meters wide and are not divided by streets as secondary pedestrian greenways are. Together with the systemic green strips, they form the backbone of the green space structure. Unlike the systemic green strips, they do not follow a geomorphologic or hydrological trace as a principle, but they appear to be located according to and formed in relation with the vehicular road layout and the housing areas and their relation with public services. Nevertheless, these green strips follow the hill tops and ridges and keep them free from development.

The longest arterial pedestrian greenway is the one that connects the airport to Güven Park and Administrative Quarter (*Regierungsviertel*) (Figure 3.17). This strip flows in the middle of a housing area and its accessibility is increased by making use of dead end streets especially in the segment between the Şehit Gönenç Street and the Tandoğan Square are located today. This green strip runs parallel to the Gazi Mustafa

Kemal Boulevard (named the Mithatpaşa Street then) and functions as an alternative pedestrian route to the boulevard. There are two shorter perpendicular greenways that cut this greenway and the one closer to the airport provides connection with the Hippodrome and Gençlik Park. The second one runs down hill (where the Şehit Gönenç Street is today), crosses the Gazi Mustafa Kemal Boulevard and reaches to Sıhhiye Square through another 25 meters wide pedestrian greenway and connects to the İncesu Greenway. The Güven Park-Tandoğan Greenway connects two hilltops; one in Saraçoğlu Neighborhood today and Yılmaz Güney Stage is placed on the other, and follows the ridge to Tandoğan Square, where the airport was placed in the 1932 plan.

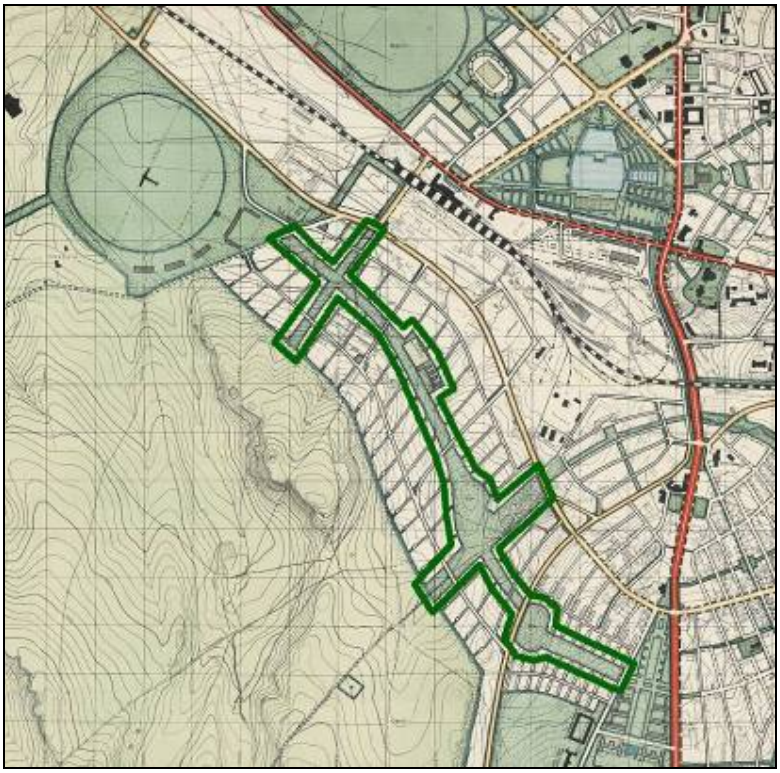


Figure 3.17. The Güven Park-Tandoğan Greenway (detail from Figure 3.8, the Güven Park-Tandoğan greenway is outlined by the author)

In the Workers' Housing Quarter, there are two arterial greenways. One of the greenways establishes the connection between the allotment gardens and the Çubuk Stream greenway. The other greenway is perpendicular to this one and divides the housing quarter into two. Jansen has used the dead end streets in the 1932 plan (Figure 3.18) to keep the greenways intact and continuous, but redesigned the housing quarter in 1936 and removed the dead end streets, instead, keeping the greenways uninterrupted by streets (Figure 3.19).

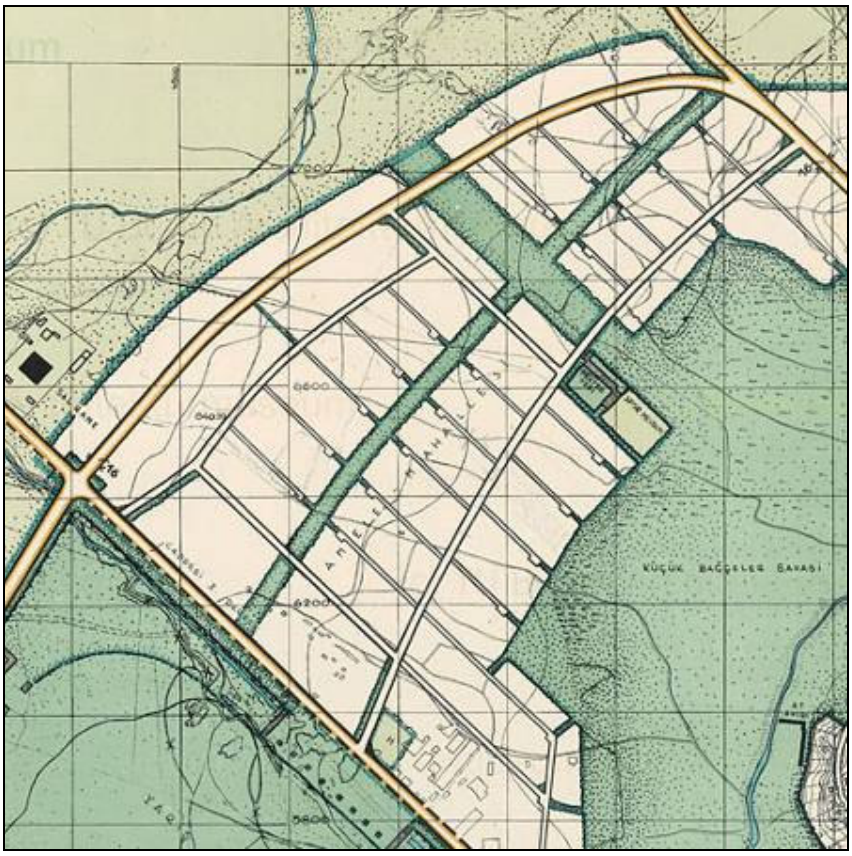


Figure 3.18. A detail of the Workers' Quarter from the 1932 Jansen Plan (detail from Figure 3.8)

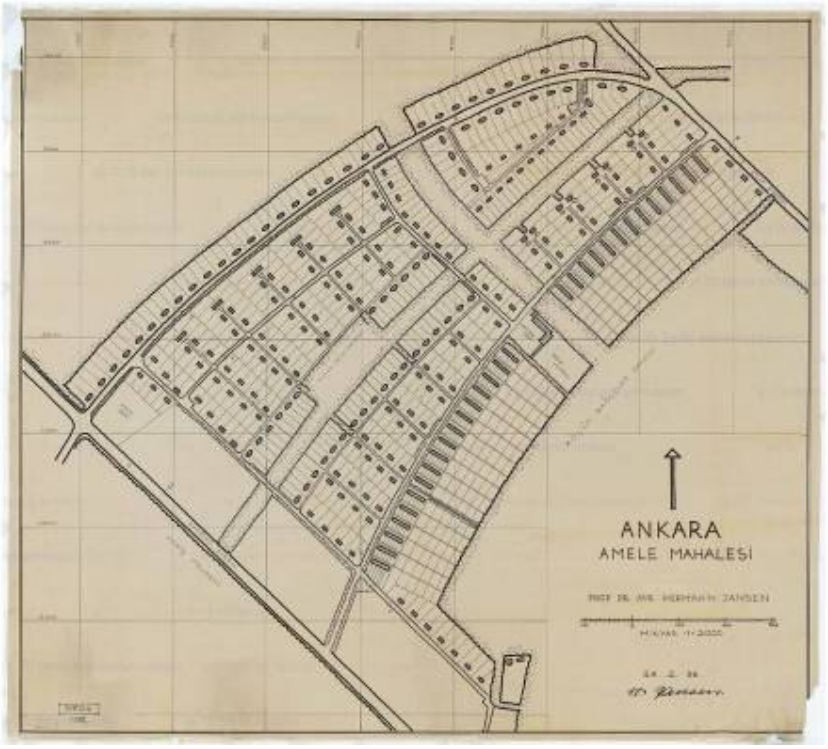


Figure 3.19. The plan of Workers' Housing Quarter (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158827, accessed 20.04.2008)

There are two more primary greenways in the 1932 plan that forms the important interconnections of the green structure. One is the greenway starting at the south of the contemporary National Assembly Park and following the ridge to the south, where today Hoşdere Street is developed. The second one is the greenway that links the Kızılay and Havuzbaşı Garden with the İncesu greenway. This greenway is called Sakarya Street today and is used as a pedestrian zone.

With the objective of establishing the visual relations, one with the Old city and the Castle and the other for providing a vista on the urban development in Yenişehir and Cebeci regions two greenways are proposed by Jansen. One of these greenways starts from the Theater Square (Hergelen Square today) and ends beside Suluhan (Figure 3.20).

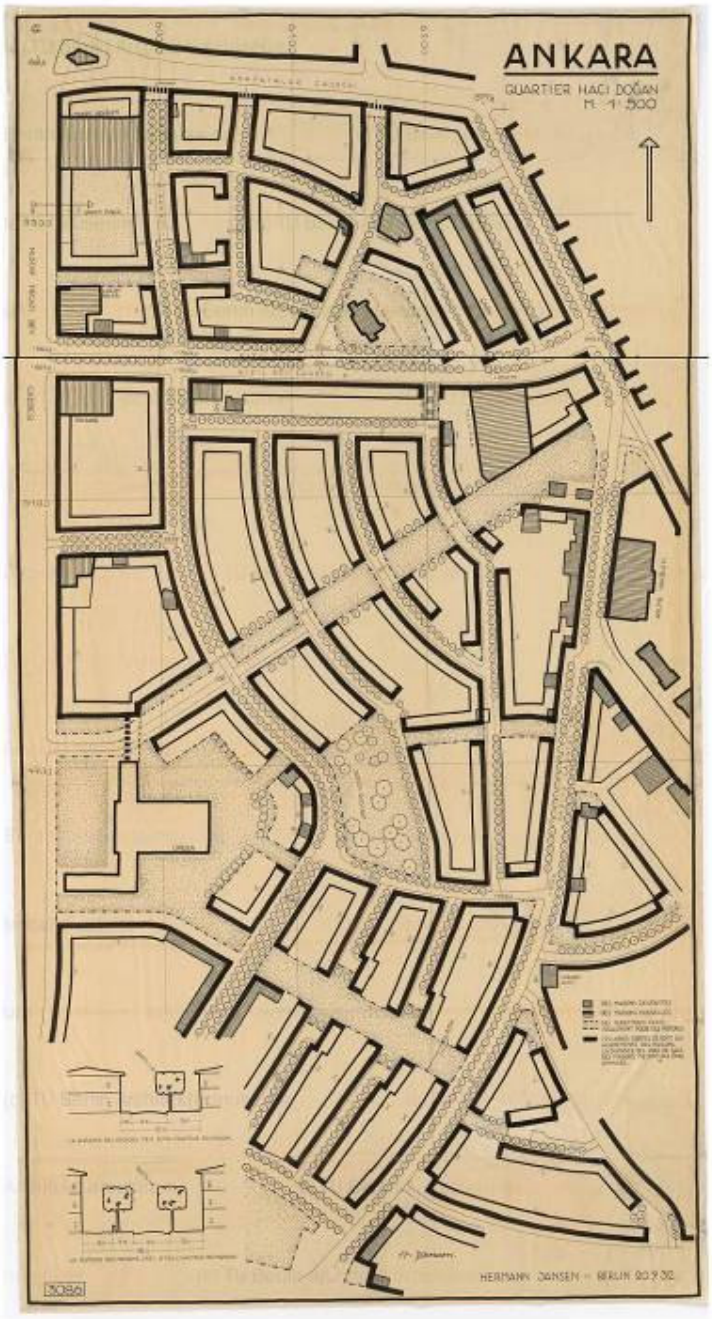


Figure 3.20. The plan of Hacı Doğan Quarter, the Old City (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=156468, accessed 20.04.2008)

The other important greenway is the one that climbs up the hill from Hacettepe to Samanpazarı (Figure 3.21). Jansen has described this greenway in detail saying that it will climb up the hill with terraces and there will be a cafe looking over to Cebeci, Yenişehir and the Administrative Quarter.

Figure 3.21. The plan of Hacettepe and the greenway leading to Samanpazarı (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=156054, accessed 20.04.2008)

b. Collector pedestrian greenways:

Collector pedestrian greenways are shorter, thinner and they are physically more divided by streets, compared to the arterial pedestrian greenways. This type of greenways provides access to arterial greenways, parks, sports areas and to the boulevards. These pedestrian greenways are placed perpendicular to the contours and provide the uphill and down hill pedestrian movement.

c. Greenways along the avenues and streets:

Jansen has made use of tree planted greenways alongside the streets where he sees fit. These greenways are planted with trees to provide shade to the pedestrians. The drawings of street profiles that Hermann Jansen sent from Berlin, show his main approach to sidewalk-street and pedestrian-vehicle relation, and the sun-shade relation on the sidewalks, as well. The Atatürk Boulevard is also a very important pedestrian promenade with its tree shaded wide sidewalks.
One of the typical plans that Jansen prepared to guide the implementation, displays the way the green spaces was to extend into the residential streets and form residential squares within the residential neighborhoods (Figure 3.22). This plan was sent with the profiles of the greenway types (Figure 3.15). The plan also shows a typical plan of a private garden (Figure 3.23) in addition to the locations of public parks in the districts and car parks (Figure 3.24). The typical private garden is composed of hedgerows, berry bushes, vegetable patches, a large fruit tree, small fruit trees, a lawn, a patio, flower beds and shrubs. This type of private gardens will have a surface area that ranges between 500 and 1000 square meters. This is another clue of Jansen's implication of the prevailing and practiced planning principles advocated by the social reformers in Germany during those times. Leberecht Migge's endeavors to achieve self sufficiency of each household through equipping each house with a garden to cultivate seem to have found implication in Jansen's Ankara development plan.

According to Jansen, the public car parks would serve the residents of residential streets and, therefore, there would not be car parks in the building parcels (Figure 3.24).

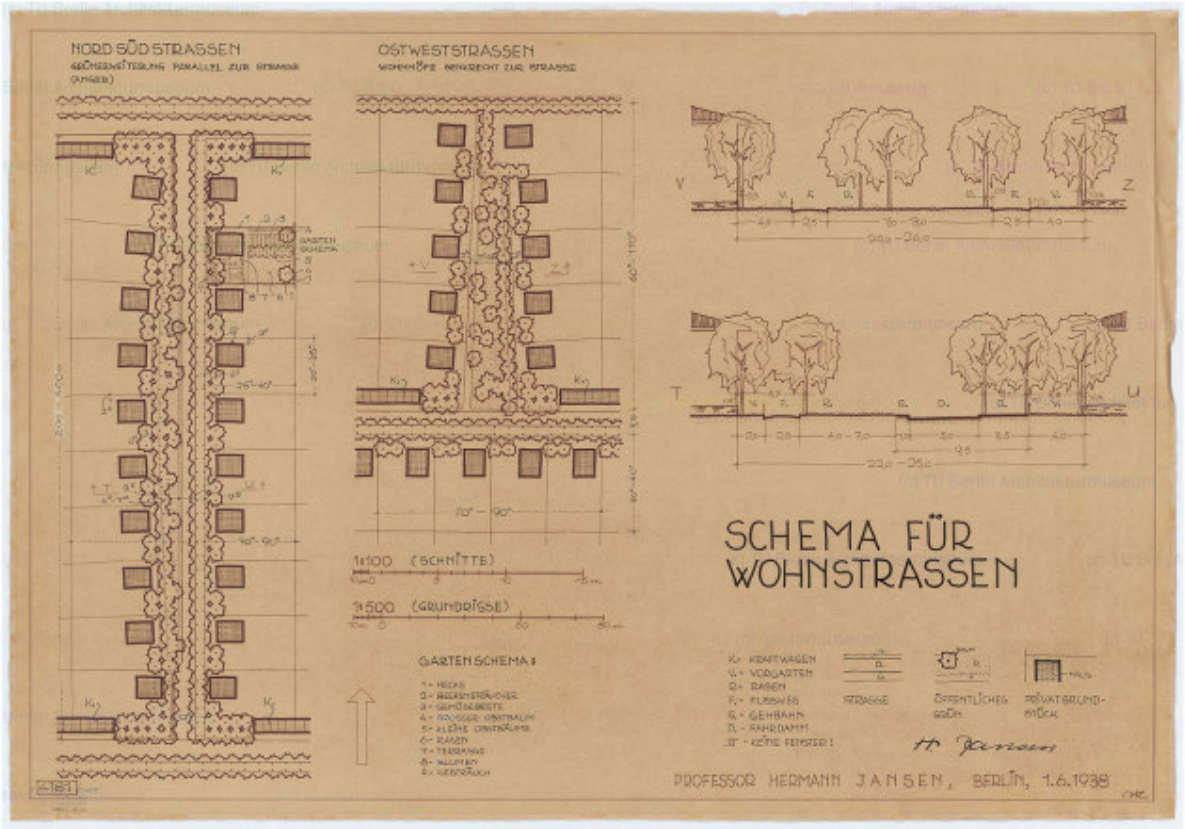


Figure 3.22. The profiles for north-south and east-west green extensions (1938) (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158431, accessed 20.04.2008)

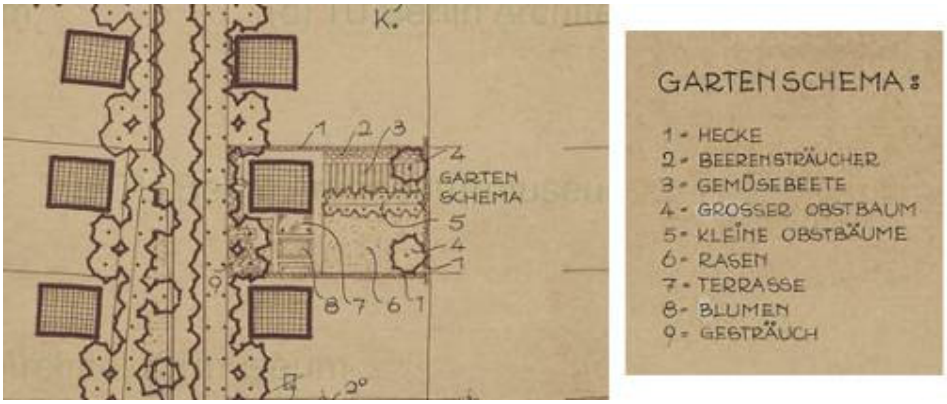


Figure 3.23. Type private garden plan detail from Figure 3.22

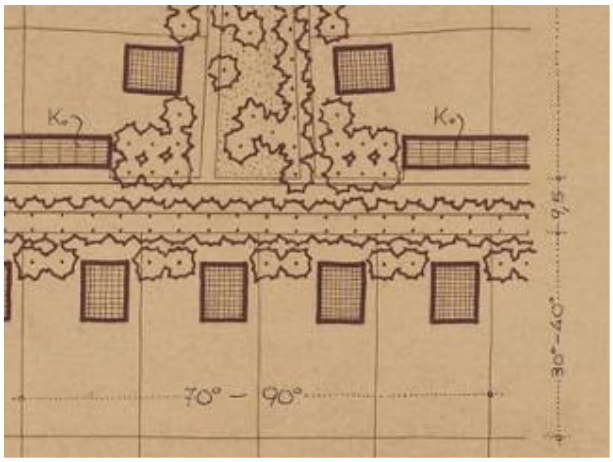


Figure 3.24. Detail from Figure 3.22 of the location of the public car parks represented with "K" meaning *kraftwagen* (Automobile)

3.4.2. Central Green Spaces

This type of green spaces mostly is similar to standard categories used during the planning and development process today, such as parks and sports fields. They are provided to meet the recreational use of the general public and they are the nodes where the greenways meet, and connect to each other forming a green structure.

3.4.2.1. The Hippodrome and sports fields

Jansen stressed the importance of physical exercise as a form of recreation and to improve health, especially of the youth, in the 1928 plan report, in his letters and in the 1932 plan report (Ankara Development Plan Report, 1937).

In the 1932 plan there are 3 types of sports fields proposed. The sport squares ("*spor meydanları*") is the smallest type of the sports fields and do not contain facilities for specific/programmed sports activities. Sports squares are located right next to schools and aim at providing, first the school children, then the neighboring houses, the place for any type of recreation (Appendix A, code 41). They are designed as simple open spaces, with little landscaping. There are three sports squares in the 1932 plan. One of these sports squares is placed next to the school at the workers' housing area, and the second one is neighbouring the school at Maltepe (Maltepe Primary School today). The third sport square is located at Kurtuluş right across the girls boarding school (TED Ankara College Primary School buildings today). All of these schools and sports squares are accessible by pedestrian greenways.

The second type is composed of a small stadium, a swimming pool and tennis courts. There are three of these sports areas that are located in different districts of Ankara. One is located next to the Hippodrome and it is designed to become a larger complex in 1934 by Hermann Jansen (Figure 3.25). The second one is located in Cebeci, where Cebeci Stadium is built (Figure 3.25 and Figure 3.27). The third one is placed at the north of the İsmet Paşa Neighborhood in the plan, where today SSK Hospital is placed, right across the Faculty of Agriculture campus and a military hospital (Figure 3.26).

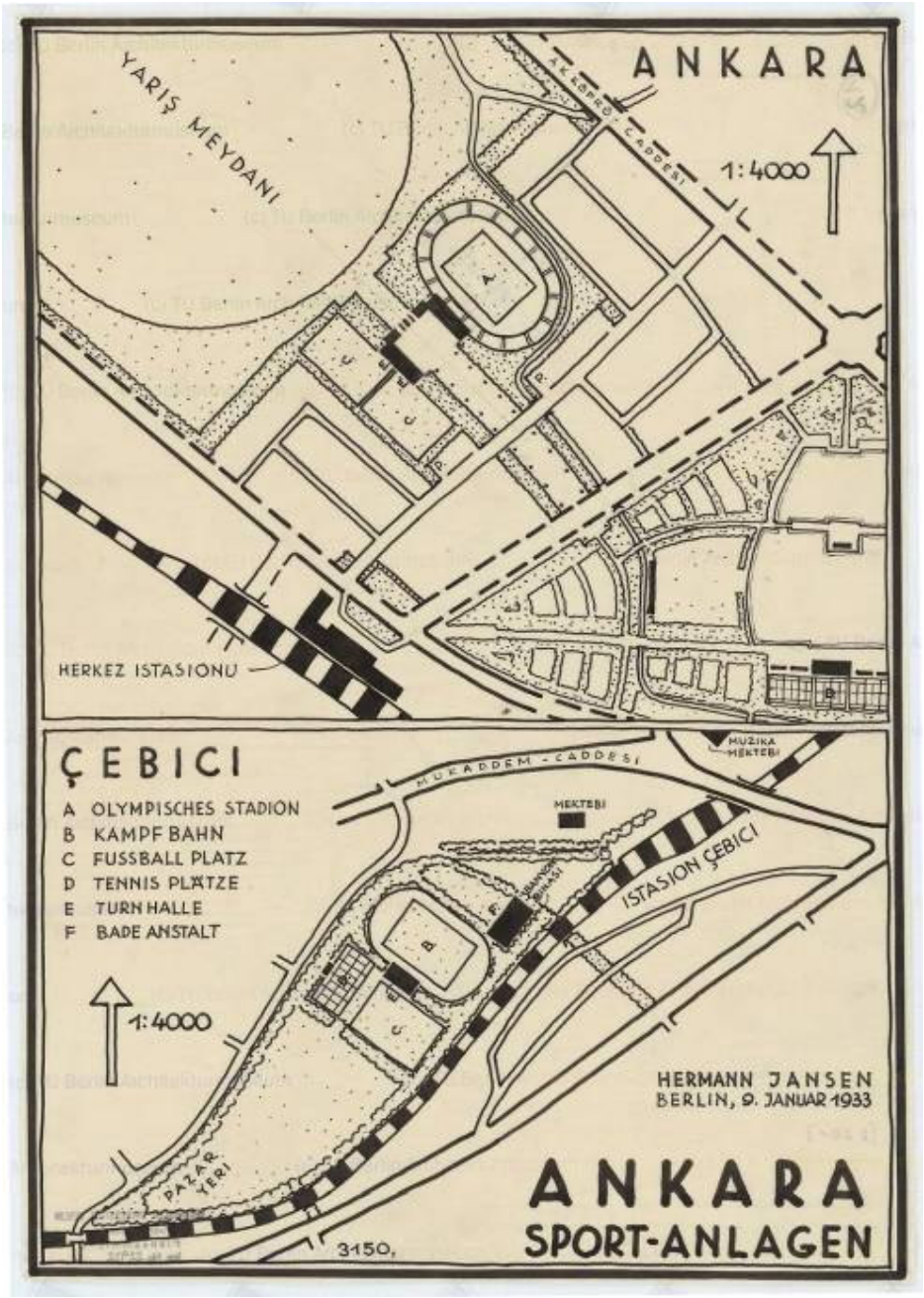


Figure 3.25. The plans of the sports facilities beside Hippodrome and at Cebeci (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158374, accessed 20.04.2008)

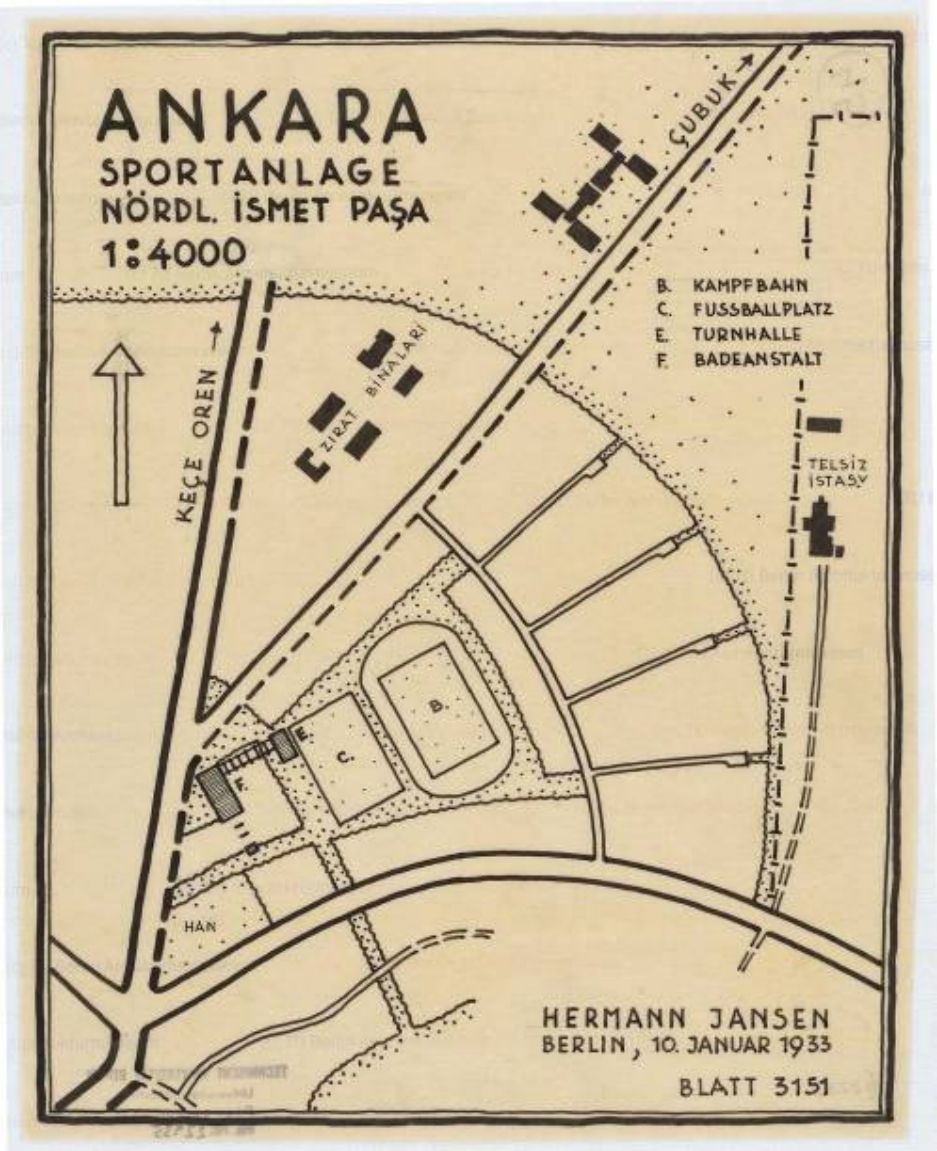


Figure 3.26. The plan of the sports facilities at the north of İsmet Paşa district (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158377, accessed 20.04.2008)

Figure 3.27. The general layout of the sports fields and facilities in the Cebeci district (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158375, accessed 20.04.2008)

The third type is the Hippodrome and the sports complex. This is the largest of the sports areas, planned to serve the whole population of the city, not just to meet their recreation needs and sports activities, but to serve as a procession and celebration area during national holidays. Figures 3.28 and 3.29 are two of the early (dated 1930) sketches of the Hippodrome. They also show the evolution of the design of May 19 Sports Complex and the Bazar Street.

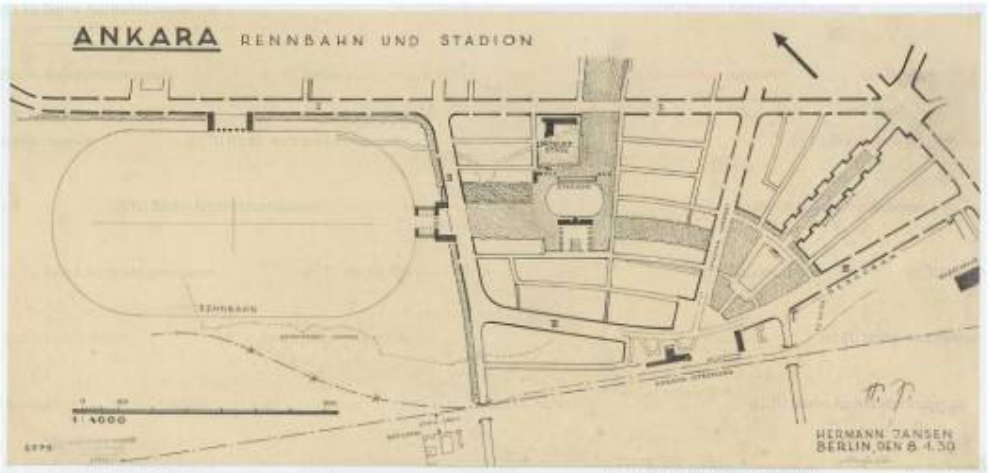


Figure 3.28. Jansen's 1930 plan of Hippodrome and May 19 Sports Complex (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158066, accessed 20.04.2008)

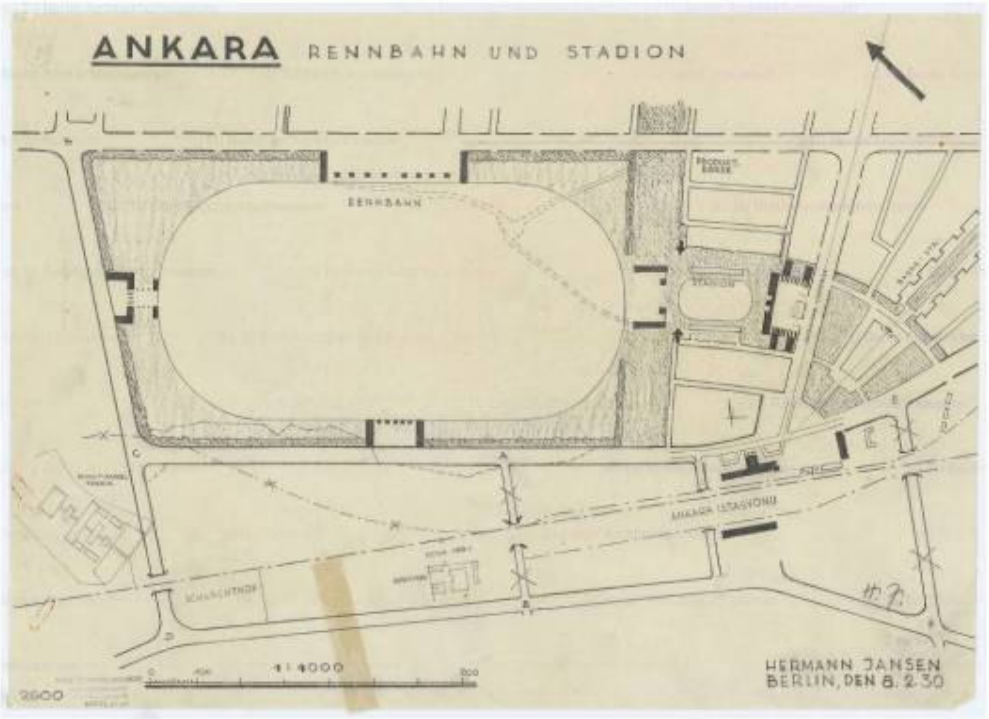


Figure 3.29. Jansen's 1930 plan of Hippodrome and May 19 Sports Complex (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158077, accessed 20.04.2008)

3.4.2.2. City parks

Parks and public gardens are probably the most classical categories in this section. The two parks in Ankara that were realized during the preparation of the 1932 development plan were the parks at the Zafer Square and Havuzbaşı in Kızılay. Güven Park, the National Assembly Garden (Meclis Bahçesi), the Youth Park and the Nursery (Fidanlık, Kurtuluş Park today) are Hermann Jansen's plan decisions.

3.4.2.3. Scenic parks as informal green areas

The existing excursion places of Old Ankara that had been used for long and the hilltops that were intentionally were not subject to development, i.e. they were left as free areas by Jansen. Hacettepe is one and may be the most important one of these places. Hermann Jansen advised and even insisted on keeping Hacettepe as it was; free from designed landscaping and arrangement. Turning down repeated attempts of the Municipality or other public institutions to use Hacettepe for a children playground (Appendix A, codes 1, 10, 11), for a school (Appendix A, codes 35, 36) or for arranging the hill as a park to place a statue of Mimar Sinan (Appendix A, codes 57, 58, 59), Jansen insisted on keeping the hill undesigned and sent a simple tree planting scheme (Figure 3.30) in response to the attempts mentioned (Appendix A, code 61, 62, 63). Additionally, Jansen warned against the removing of humus soil from Hacettepe and advised placing signs inhibiting this action and planting of trees at infrequent intervals (Appendix A, code 42).

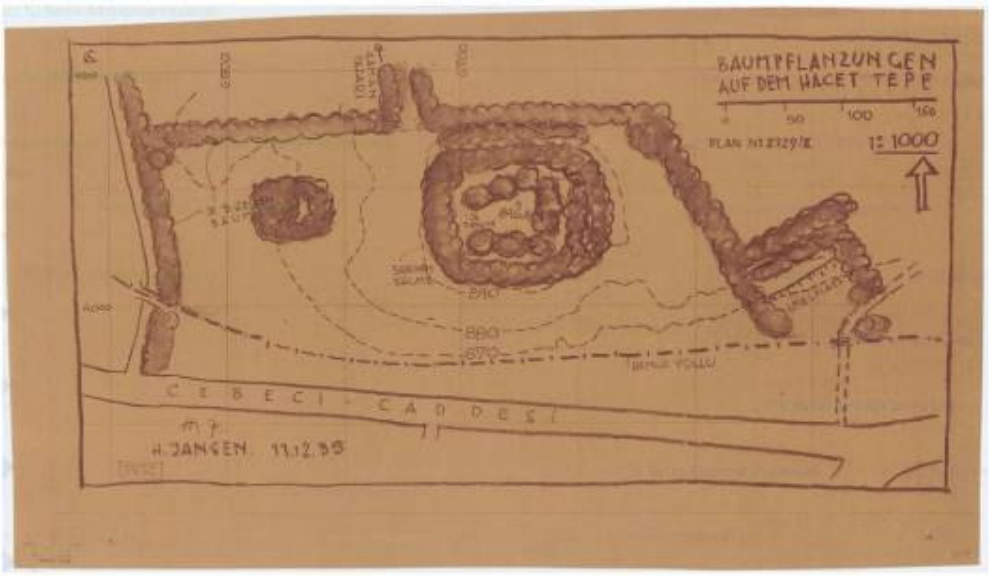


Figure 3.30. The tree planting scheme for Hacettepe by Hermann Jansen dated 11.12.1935 (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=156061, accessed 20.04.2008)

3.4.3. Allotment Gardens

The allotment gardens area (Küçük bahçeler sahası) in Jansen's 1932 plan is where agricultural production (mainly vegetable and fruit gardening) is proposed. The gardens are located between the workers' housing area and Ulus and the garden of First National Assembly (Figure 3.31). They are planned as vegetable gardens to be rented to those who wanted to cultivate to meet their own needs of food. According to Jansen, the only development that is acceptable in the allotment gardens is hut like small structures (Appendix A, code 42). In April 1934, the Municipality asked who would be responsible for leasing the allotment gardens. Unfortunately the answers sheet does not contain Jansen's answer to this question (Appendix A, codes 40, 41).

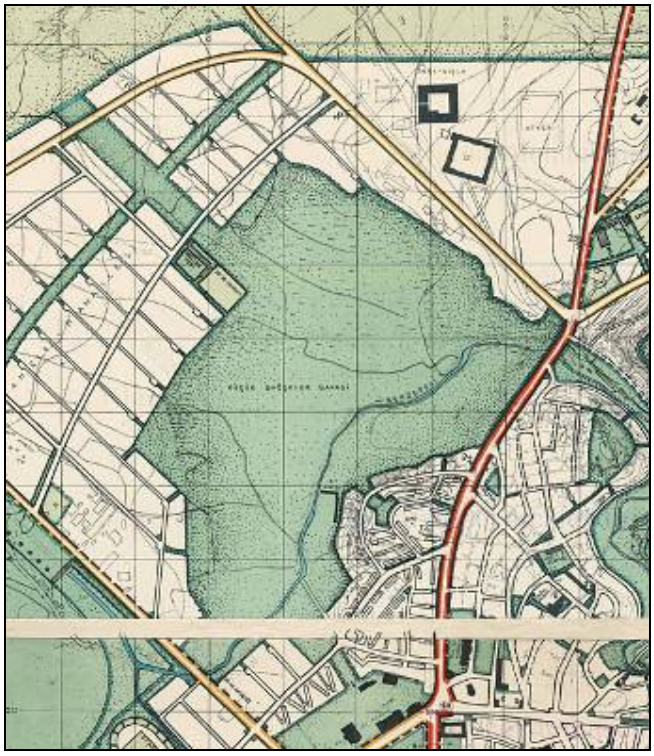


Figure 3.31. The allotment gardens from the 1932 Jansen Plan (Detail from Figure 3.8)

3.4.4. Squares

There are a series of squares on the Atatürk Boulevard and one square on the Mithatpaşa Street on the Jansen Plan of 1932. The Zafer Square is composed of two symmetrical squares, on both sides of the Atatürk Boulevard. These squares are designed green spaces. On the street-refuge in the middle of these two green squares, a statue of Atatürk, designed by the Italian sculptor Canonica, is placed. The other square, which is also situated in the Yenişehir district, is the Lozan Square on the Mithatpaşa Street.

3.5. Green Spaces in the Development Plans and Regulations

One year after the approval of Jansen's implementation plan, the Law of Buildings and Roads (Law no. 2290) was enacted in 1933. This law was one of the 6 laws that were enacted between 1930 and 1935 in order to set the legal framework to break away from the urban planning and development methods of the Ottoman period and regulate the development of cities in a modern and planned manner. The Buildings and Roads Law (*Ebniye ve Turuk Kanunu*) as well as the urban regulations dating back to 1880s lacked the features to achieve the development of cities as the *loci* of modernity (Tekeli, 1998, p.4-11). After the enactment of the law, Jansen wrote several reports criticizing it[18]. Only one of these reports is found at the Plan Archive of the Greater Municipality of Ankara and it is dated 27.03.1936.

Table 3.1. The land use standards of
1933 Municipality Buildings and Roads Law

Population (50 years projection)	* 50 =	m² houses, gardens, streets and squares
	* 4 =	m² trade and industry
	* 4 =	m² groves, fields, lakes and play grounds
	* 3 =	m² hospitals, graveyards, baths, hotels and cafés
	* 2 =	m² government and military institutions
	* 2 =	m² schools and libraries

The first innovation in the Buildings and Roads Law is the determination of the land use standards related with plan making (Table 3.1). The law determines the minimum amount of area for each land use and exerts the provision of 4 m² green space, or "groves, fields, lakes

[18] The title of the report dated 27.03.1936 (Appendix A, code 67) specifies that this report is complementary to a previous report dated 10.02.1936. In the report dated 27.03.1936 Jansen expressed his opinions about the Buildings and Roads Law and another law enacted on 17.6.1933. The law mentioned by date is probably the law regulating the establishment of the Bank of Municipalities (Belediyeler Bankası Kuruluş Kanunu, Kanun no. 2033) (Tekeli, 1998, p.10).

and play grounds" as stated by the law, for each person. Jansen does not find the standards for the open public spaces (including the streets, parks and green spaces) sufficient, saying that the German development law reserves 25-35 % of the surface area of the new towns for green spaces, and the most of this area is used for public green spaces and the least for the streets. Keeping the precious natural features such as streams and rivers, lakes, groves, etc. for the use of the city from the initiation of development would cost less and cause value increase in the long run (Appendix A, code 67).

Another point, on which Hermann Jansen disagrees, is the prohibition of dead ends and he advises the use of dead-end streets from the point of developing serene and economical housing quarters. He advises designation of dead-end streets of length not more than 100-120 meters and width at least 4.5 meters, if provided with ample amount of front gardens on each side (Appendix A, code 67).

The law determines the depth of building set back distance along the waterfronts as 10 meters and forces that strip to be left to the public use. Jansen criticizes the determination of keeping the public open space to 10 meters deep as being too narrow and advises keeping 25-30 meters of depth for such reservations (Appendix A, code 67).

The article 45 of the Municipality Buildings and Roads Law obliges each house hold to plant a tree or have one planted each year on the days specified by the Municipalities at the forestation areas in the development plans and holds the Municipalities responsible for protection of the saplings. Jansen criticizes this article also saying that massive amounts of afforestation must be the duty of the towns and villages and not the citizens. He also proposes setting up an inventory and safeguarding of the important trees and tree groups on the road sides, at the public spaces and also on the private properties by the state. The purchase of the old trees on private properties must be made

by the local governments to ensure their safekeeping as well (Appendix A, code 67).

The Buildings and Roads Law makes only that much account about the green spaces. It is certain that Jansen's opinions and critiques about the law, at least his opinions about the articles related with green spaces, were not taken into consideration as additional articles were made in the following years. The 1933 Buildings and Roads Law (Law no. 2290) was in use until the Development Law (Law no. 6785), in 1965, and the Development Regulation, in 1957, were enacted.

Against the 4 m^2 per person standard of the 1933 law, the 1956 law increases this amount to 7 m^2 per person. The Development Law also forbids making major changes, as development of buildings, and additions to the existing public buildings to the areas reserved for public services and buildings, such as roads, squares, car parks, green areas, parks, kindergartens, bazaars, market halls, and slaughterhouses. Unless expropriated according to the 4 years development program, the law allows the development of the places reserved for mentioned public services in accordance with the development regulation. In the article 8a, the 1957 Development Regulation asserts the same rule. In the Development Regulation article 34, the land readjustment share (*düzenleme ortaklık payı – DOP*) is evaluated as "*zayiat*", *zayiat* meaning "loss, causalities, damage" in English. The percentage of the parcels taken for provision of public services are deemed as loss by the regulation, but not as an distribution/reallocation of the gained value through development or right of the public.

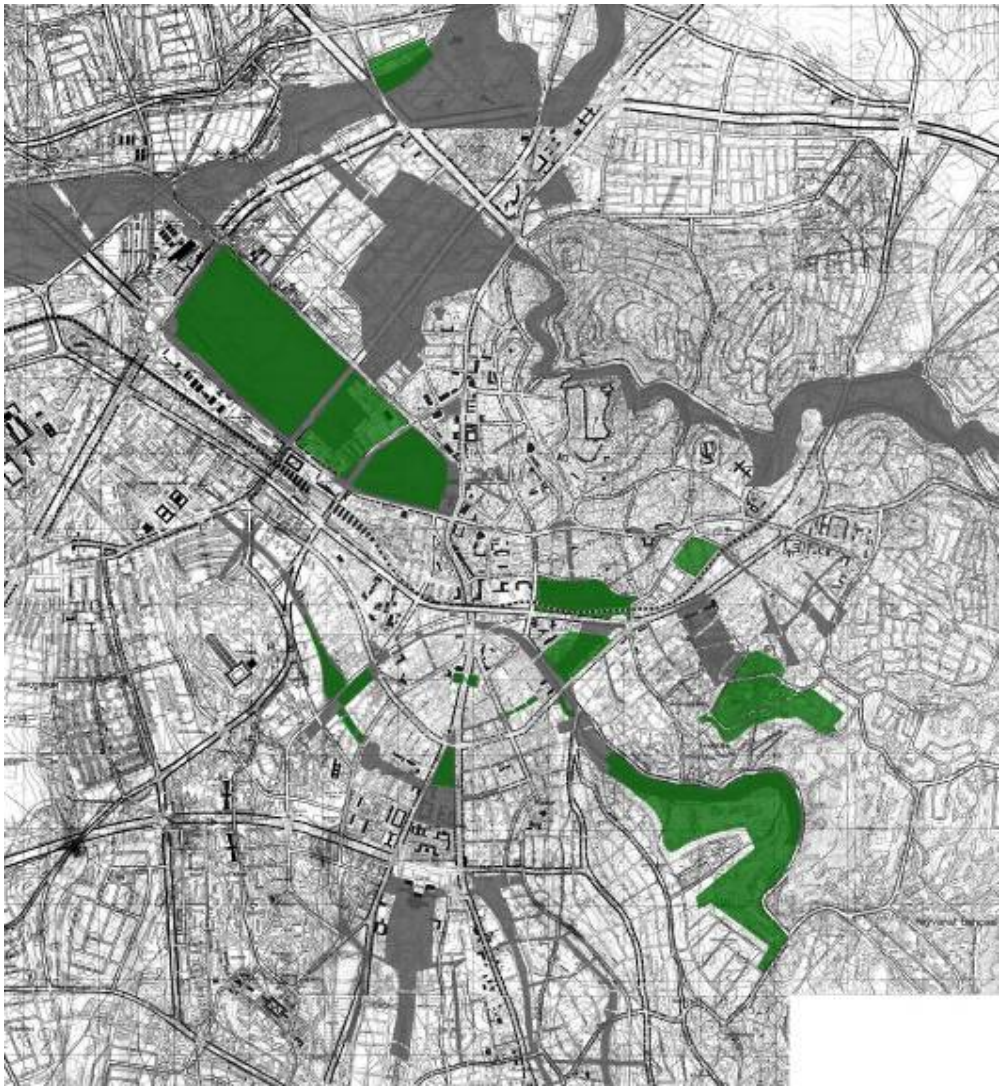


Figure 3.32. Detail of 1957 Uybadin-Yücel Ankara development plan. Jansen's 1932 greenspace proposals are superimposed over the greenspaces of 1957 plan. The green areas are the continuing decisions of Jansen's plan and proposals of the 1957 plan. The grey shades are Jansen's 1932 proposals (Baykan Günay's personal archive, the green and grey shades are added for emphasis by the author).

3.6. The Continuities and Discontinuities between the Jansen Plan and Uybadin-Yücel Plan

Comparing Jansen's 1932 plan with Uybadin-Yücel's 1957 development plan for Ankara shows that most of the components of the green space structure are replaced with other functions in the meantime (Figure 3.32). All the greenways along stream banks are taken into canals and turned into streets, as a result of the current engineering practice of 1950s. Only a green strip along the İncesu Stream is left, and even the Ankara River was partially taken into a canal. Most of the pedestrian greenways had already been turned into streets before the 1957 Uybadin-Yücel plan was prepared. Only some segments of the Güven Park-Tandoğan greenway was saved from these operations, a public strip which is still kept green. On the 1957 development plan the hippodrome and the 19 May sports complex are in the same location as they were in the Jansen plan but a highway (the Kazım Kara Bekir Avenue today) is developed separating the 19 May sports complex and the Hippodrome. Amongst the sports areas and squares of the Jansen plan, only the Cebeci Stadium is kept and others are discarded. The Güven Park and the Youth Park (Gençlik Parkı) were implemented in 1930 and they are kept in the Uybadin-Yücel plan too. The park along the İncesu Stream bank in İncesu, called the Kurtuluş Park today, and the Hacettepe Scenic Park are kept also. The allotment gardens next to the Workers' Housing Quarter are turned into the small industry zone in Uybadin-Yücel plan. Lastly, only the Zafer Square remained in the form of two square shaped gardens.

3.7. Evaluation

Out of the first two development plans of Ankara, Hermann Jansen's plans put forward the setting up of an extensive green space structure. Employing the design principles such as accessibility, continuity, whole-

parts relationship and pedestrian rights, Jansen proposed a conceptual green network composed of different types of green spaces for recreation, organized sports, pedestrian circulation, nature conservation and self sufficiency through agricultural production. The green network of Jansen's 1932 plan is a direct implementation of the concepts and principles related to green spaces of the contemporary German planning approach theorized and practiced by Migge, Wagner, Schumacher, May and the other architects, planners and landscape designers introduced in Chapter 2.

- Hermann Jansen's Ankara plan is an application of the models and principles developed in Germany in conformity with the Garden City ideals. The type of private garden for houses that he designs with fruit trees, berries and vegetables is a typical example of Migge's ideas; providing houses with their gardens to be cultivated by the occupiers to meet their own food needs, widely implemented in Germany (Figure 3.22, Figure 3.23).

- The allotment gardens are another German innovation, which became widespread in Europe and Great Britain during the 20th century. Allotment gardens were conceived as an element of urban morphology and proposed by Jansen in the Ankara development plan. A large area is allocated for this purpose around the river and next to the workers' quarter, in accordance with the social purpose of the idea. Although the management plan of the allotment gardens is not definite, it is clear at least that those gardens were to be leased to the citizens (Appendix A, codes 40, 41). Reserving the stream banks for agriculture and recreation resembles the public space development along the River Nidda in Römerstadt realized during Ernst May's service as city-architect of Frankfurt.

- The last and maybe the most essential transfer from the German planning approach to the planning of Ankara is the network of greenways linking all the green spaces, sport fields, social services and also neighborhoods and housing areas into a network of green spaces and greenways. This network forms a green structure which in turn structured the whole urban development. Setting up of a network green spaces making use of greenways is what Fritz Schumacher called for in his speech in 1924 International Town Planning conference (Chadwick, 1966, p.256). Only four years later, Hermann Jansen developed this model in his proposal for Ankara Master Plan competition.

Today, out of Jansen's green space proposals that are included in the 1957 development plan, only the Kurtuluş Park, Güven Park, and Youth Park (*Geçlik* Parkı) remain. The hippodrome and the 19 May Sports Complex is still in use as well as the Cebeci Stadium. Only the eastern garden of the two square shaped gardens forming the Zafer Square is still used as a park, while a shopping center is built over the square garden on the west. The Hacettepe Scenic Park is today occupied by the Hacettepe University Hospital, Faculty of Medicine, Faculty of Dentistry and Faculty of Pharmacy. Out of the greenways, only some small parks on the Güven Park-Tandoğan greenway remain as green spaces and the two greenways on the north and east of the Ziya Gökalp Street of today, has been turned into pedestrian roads (Sakarya and Yüksel pedestrian zones).

In the next chapter, the implementation and modification process of the Güven Park-Tandoğan greenway will be studied as a case-study. The Kumrular-Tandoğan Greenway is a part of the green space structure of Jansen's 1932 plan, though not of the 1928 plan. The Maltepe and Demirtepe districts are reserved for railroad loading and unloading bays in the 1928 plan and for housing in the 1932 plan (Figure 3.33).

1928 Jansen Plan 1932 Jansen Plan

Figure 3.33. Maltepe and Demirtepe districts in details from Jansen's 1928 and 1932 plans (The figure on the left is detail from Figure 3.7 and the figure on the right is detail from Figure 3.8)

The significance of this particular greenway is that it reflected Jansen's vision and principles on green space design and provision. The greenway which is a continuous arterial greenway with varying width is in the middle of a housing area today, there are schools and a sport square on it. It is located in an area which had not been inhabited before where development rights were set up directly by the development plan, and therefore it did not present any implementation problems that a built up area such as the Old City posed (Figure 3.34). These factors help single out the dynamics and the sequence of the plan modifications made in the area where the implementation was certainly easier. Today, there are a few parks remaining from Jansen's proposal of greenway in this area; hence the case study in the next chapter is made on still salvageable green spaces (Figure 3.35).

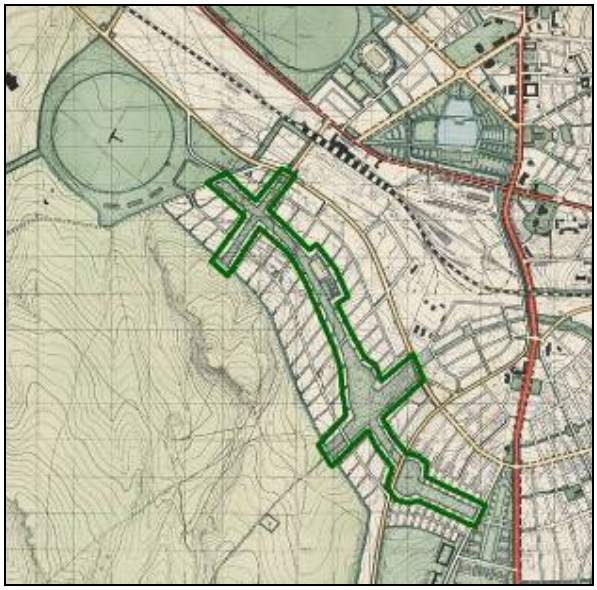


Figure 3.34. The Güven Park-Tandoğan greenway in 1932 plan (The greenway is outlined for emphasis on Figure 3.8)

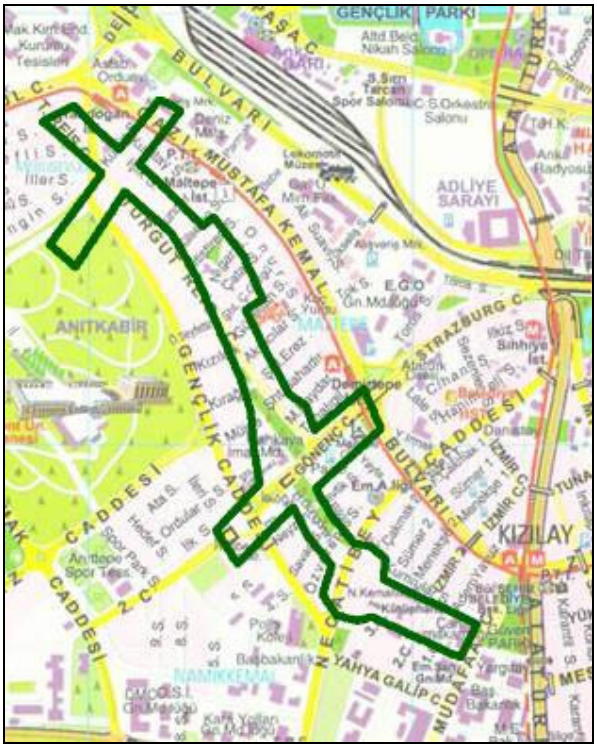


Figure 3.35. Demirtepe and Maltepe districts today and the outline of the Güvenpark-Tandoğan greenway superimposed (Ankara Touristic Map from personal archive)

CHAPTER 4

HISTORY AND EVALUATION OF THE CHANGING MORPHOLOGY OF THE GÜVEN PARK-TANDOĞAN GREENWAY

The green spaces in the study area have been subject to various modifications. Some may be considered as minor modifications that had to be made because of "bare" necessities that came out of changing needs or increasing building and the population density. Some modifications in certain parts of the green strip have disrupted the coherence and continuity of the green space structure because of the introduction of other uses though they have remained public. There are different types of modifications made to the urban green spaces and these interventions are classified in the present study according to their effects to the form and function of the green spaces.

Actors, on the other hand, are the third category these modifications can In addition to these modifications are determined by the intervention of the actors. Therefore, they can also be classified according to the type of actors. Those asking for changing the land use of green spaces in the development plan are mostly public institutions that vary from the municipality to other public organizations, but also to associations. This diversity of actors constitutes another topic of discussion.

Modifications appearing as a result of maintenance and upkeep or modifications that change the use but not the function are outside the scope of the analysis and as they do not require plan modification decisions none have been traced during the research.

4.1. The Changing Morphology of Güven Park-Tandoğan Greenway due to the Individual Plan Modifications

The oldest plan modifications related with the Güven Park-Tandoğan greenway date from 1940s, with the development of Saraçoğlu Residential Estate for the State Officials and the latest intervention is the present shopping center development on the Maltepe market place, the construction of which will end in 2008.

According to the changes to function, to their effect on the continuity of the greenway and on the relation and connections with the citywide network of green spaces, the plan modifications are grouped as major and minor plan modifications. The major plan modifications cause changes of function of parts of the greenway to other urban functions, break the connection with other parts of the urban green network or destroy the physical continuity of the segment of the network. Besides, major modifications may trigger implementation of further modifications or result in easier execution of other major modifications. The important modification causing the change is considered to be the first modification, in other words, the initial movement that causes a chain of events is the crucial one.

Minor plan modifications, on the other hand, are the successor modifications of specific major modifications that increase their consequences, such as widening of a street which was opened according to a major modification, or are just a repetition of the major

modification, as a change of function second to a major function change from green space and recreation area.

Out of the plan decisions related with the study area, 10 modifications are deemed to have major importance as they have caused the physical and functional breaking up as well as the disintegration of the green space structure. Some of these modifications have had a triggering effect and have caused other modifications, some of which are major and some minor. In the study area, the modifications made other than those in the Saraçoğlu Neighborhood development were realized in the 10 year period between 1950 and 1960.

Two things must be stressed here. Speaking of plan modifications here; as the implementation date of, all or components of, the Güven Park-Tandoğan greenway is not known, we are strictly speaking of changes made directly to the development plan decisions. The only implementation dates are of Özveren Park, in 1956, the parks on Süleyman Bey Street, in 1964, and the park on Neyzen Tevfik Street, in 1965. These parks are the remains of Jansen's Güven Park-Tandoğan greenway and they have remained as parks and not as a greenway as Jansen has proposed. The dates tell us that two of these parks were developed after the major plan modifications were made and that the implementations of almost all of the plan modifications are not always cases of felling of trees. Still so, the modifications are important from the point of destruction of the green space structure starting from the development plan, thus removing the green space structure from the start. The second point is that, there is not a data related with the implementation dates of the modifications.

4.1.1. Saraçoğlu Residential Estate for the State Officials Plan Modification

The Saraçoğlu Residential Estate for the State Officials – called as the Namık Kemal neighborhood today- and the "Political Club" (Siyasi Klüp) is a plan decision of Jansen in 1932 plan. Jansen elaborated several alternative plans for this section (Figures 4.1, 4.2 and 4.3).

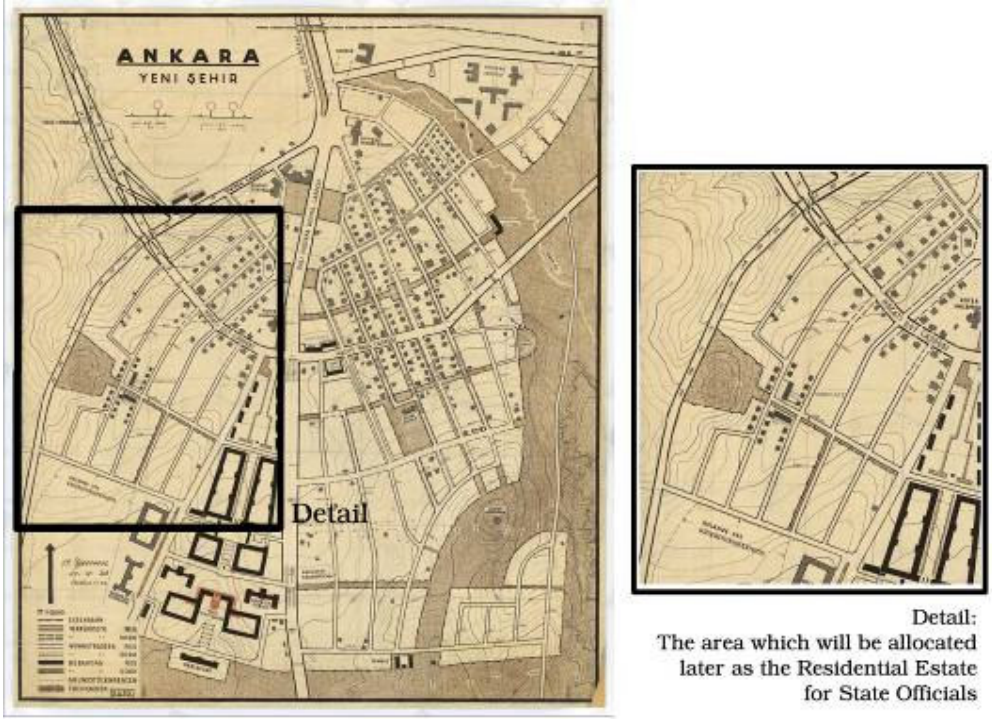


Figure 4.1. The plan of Yenişehir dated on 11.4.1930 (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=157954, accessed 20.04.2008)

The plan no. 2652 (Figure 4.1) shows one of Jansen's early designs for Yenişehir and the area which will be allocated later as the Residential Estate for the State Officials. The plan no. 3049 (Figure 4.2) shows the west of Yenişehir including Demirtepe and some part of Maltepe regions.

The Kumrular Street, which is missing in Figure 4.1, is opened and the narrow pedestrian green strip by the road is removed and a definite green corridor is placed between the Residential Estate for the State Officials, thus underlining the connection with Güven Park and the Ministries. Also as an indicator of the nearing completion of the final plan, the Kanlı Göl and Süleyman Bey Mezarlığı (Demirtepe and Maltepe today) housing districts and the other segments of the green strip extending to the Airport are placed to the north west of the Residential Estate for the State Officials in the plan no 3049 (Figure 4.2).

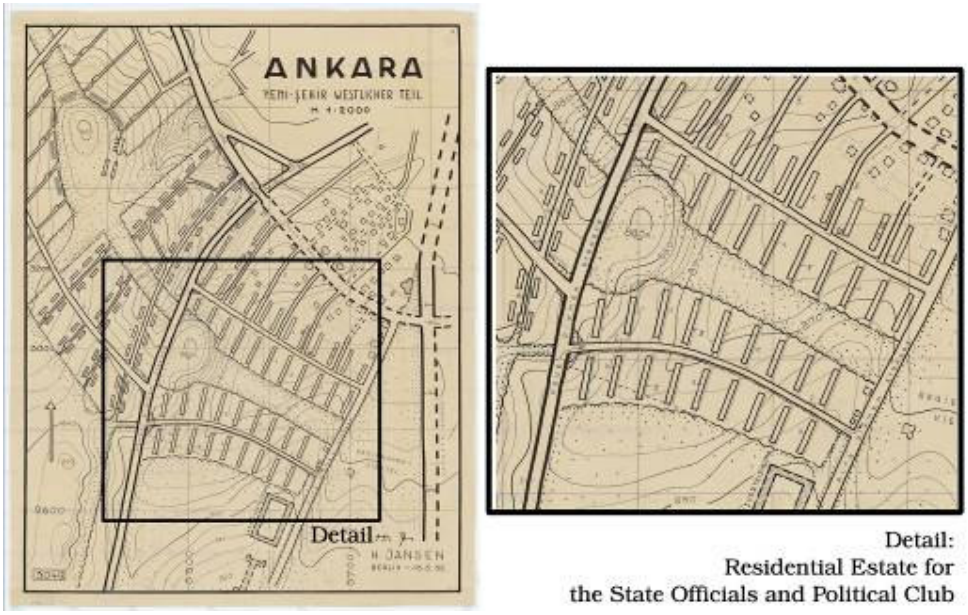


Figure 4.2. The plan of western part of Yenişehir (Yenişehir Westlicher Teil) (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=157980, accessed 20.04.2008)

Another plan of the Residential Estate for the State Officials is the plan no. 3084 (Figure 4.3). Compared with the previous plan of the district (Fig. 4.2), this plan shows some minor modifications as addition of two dead end streets to east and the south east of the hill. Jansen has not changed the linear green space, but the layout and the size of the buildings along the streets on the west and the buildings on the south.

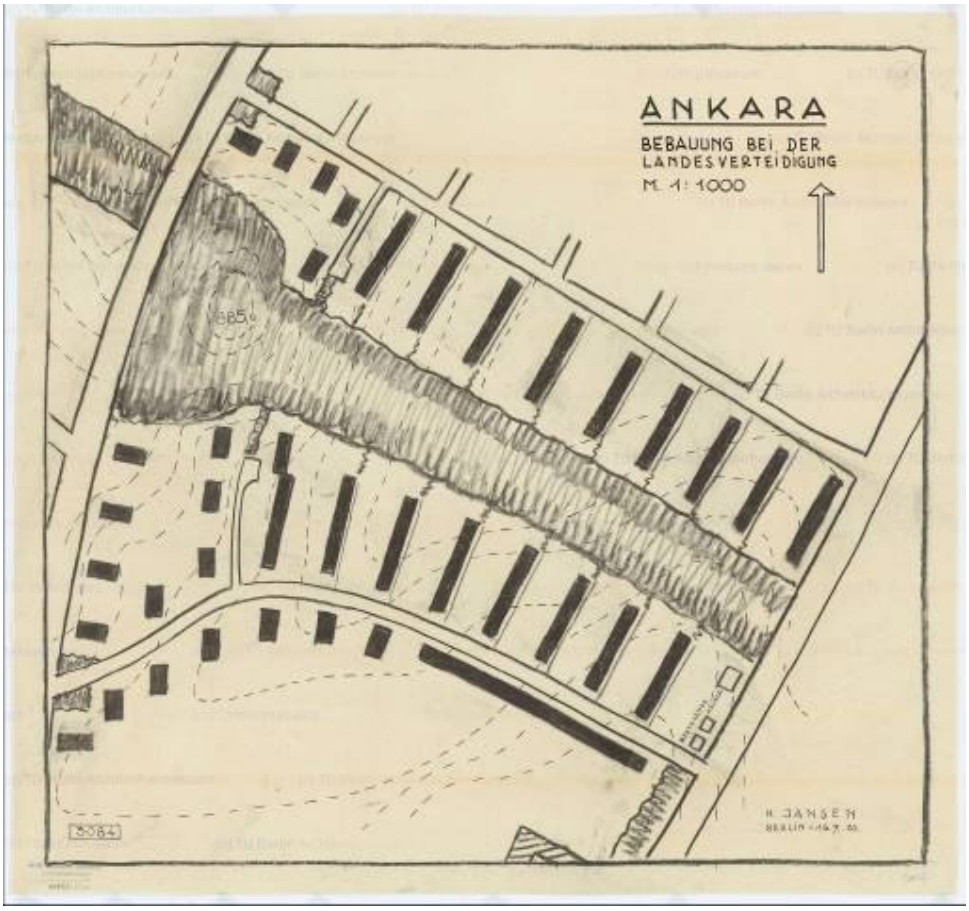


Figure 4.3. The plan of the housing development by the (Ministry of) National Defense (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=157978, accessed 20.04.2008)

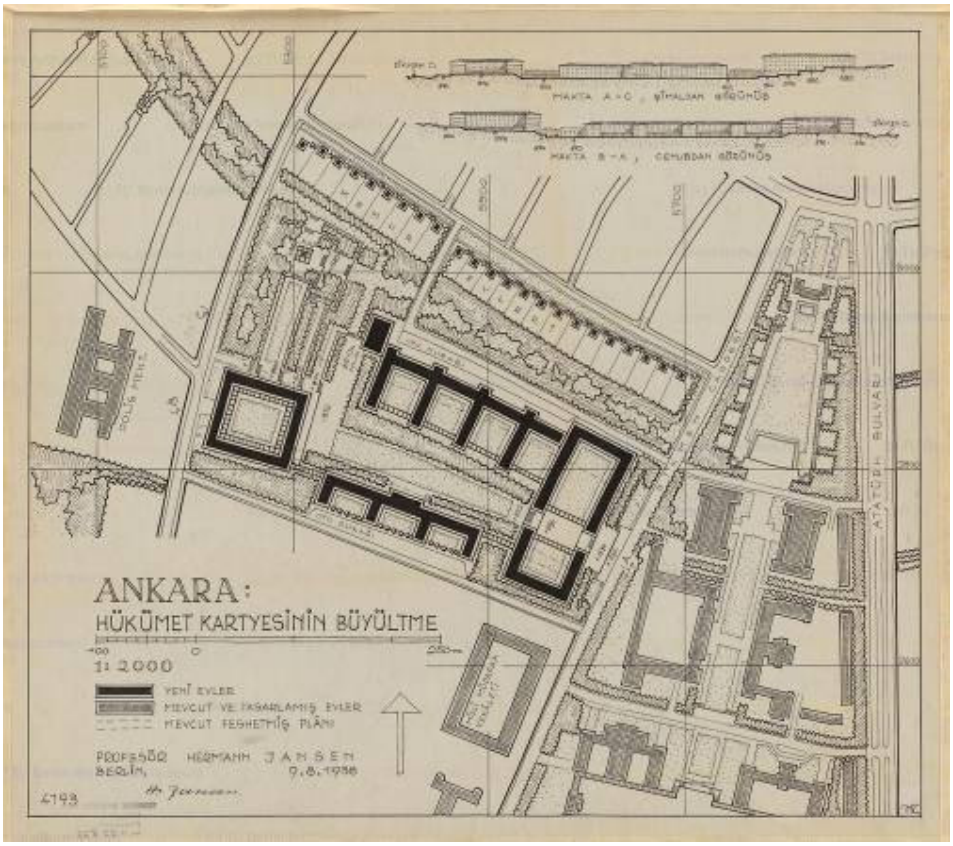


Figure 4.4. The modification plan for the Residential Estate for the State Officials prepared by Jansen. (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=158064, accessed 20.04.2008)

The first plan modification to this section was made by Jansen in 1938 before termination of his consultancy. With this modification, Jansen changed the previous layout of the quarter entirely and the linear green connection between Güven Park and the south section of the green strip.

The development of this neighborhood is started after 1938 when it was decided by the administration that Jansen's services were not needed anymore. In 23.6.1939, the Residential Estate for the State Officials and Political Club were redesigned by the Directorate of Urban Development

with Plan no. 5874/IV (Figure 4.4), opening a street that connects Kumrular Street and Yahya Galip Street, and straightening the curving lines of the greenway. The plan no. 5874/IV was cancelled by the plan no. 11434[19] in 1946 which probably made the first plan modification according to Bonatz's neighborhood design.

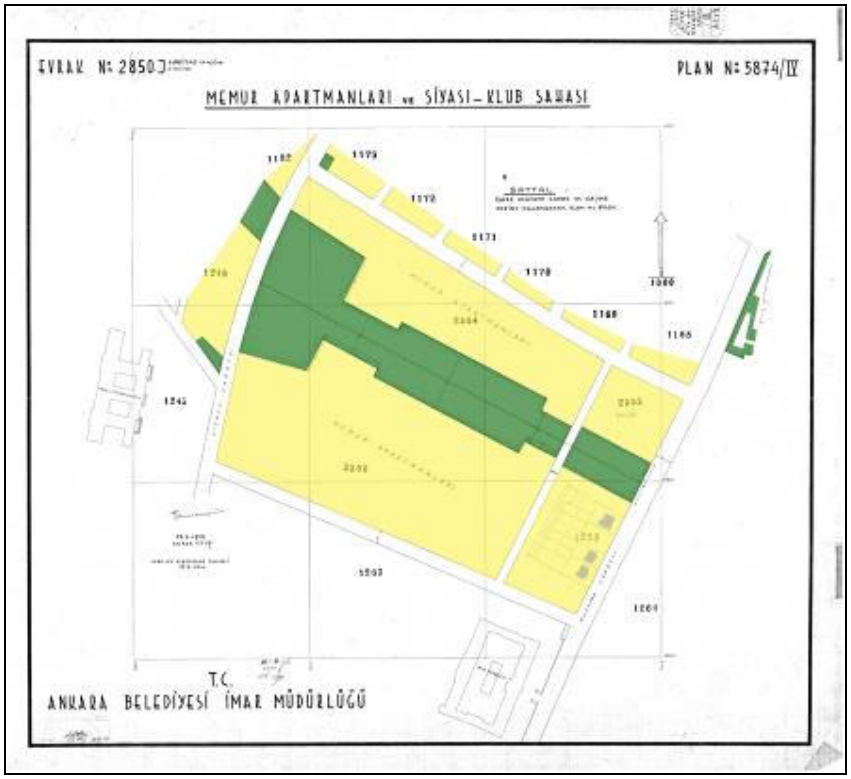


Figure 4.5. The revised plan of the Residential Estate for State Officials and the Political Club site. (Plan no. 5874/IV, 23.6.1939. Plan Archive of the Greater Ankara Municipality)

Paul Bonatz, on the other hand, redesigned the whole neighborhood and the building blocks. Bonatz's layout plan incorporates green spaces while it disregards the linearity of the central green strip that crossed the neighborhood, which was designed as part of the green structure of

[19] This plan was not found in the Plan Archive of Greater Ankara Municipality.

Jansen plan. Ministry buildings and those of other public institutions are placed on the plots on the Milli Müdafaa Street side of the building block number 2940, thus ruling out any possible connections with Güven Park (Figure 4.6 and 4.7). The layout of the building blocks that are placed on the perimeter of urban blocks and perpendicular to the green strip of Jansen, forms gardens in the middle. These gardens, though they are a great opportunity for the residents of the Saraçoğlu Neighborhood, do not provide through pedestrian traffic and are not practically connected to the green strip which had been initially proposed by Jansen. Also, as their entrances do not face each other, they do not form a through and continuous pedestrian green space and the layout internal green spaces makes perpendicular turns, causing the discontinuity of the green space (Figure 4.7).

Figure 4.6. The superposition of the linear green spaces in Jansen's and Directorate of Development's plans with Bonatz's neighborhood layout. The light and dark green shades are Jansen's and directorate's green strip proposals respectively and added by the author. (Plan no: 22040, 14.9.1954. Plan Archive of the Greater Ankara Municipality)

The Saraçoğlu layout of Bonatz is the first example of redevelopment modification, comprising a reconfiguration of Jansen's original layout. The green strip has been turned into a courtyard garden and lost its linear layout and its connection with the green space structure.

Figure 4.7. The layout of Bonatz for the Residential Estate for the State Officials. The original plan is cropped and colors are added for emphasis. (Plan no: 27685, 28.1.1955. Plan Archive of the Greater Ankara Municipality)

The second major modification is in the green area that lies parallel to the Şehit Gönenç Street today. This strip which was planned initially as a green area perpendicular to the primary green strip that passed through Demirtepe and Maltepe districts extending parallel to the Gazi Mustafa Kemal Boulevard (initially the Mithat Paşa Street). The earliest plan showing the presence of the Şehit Gönenç Street –as being open to motorized traffic- is dated to December 1953 (Figure 4.8). This is also

the plan on which the third modification, the allocation of Maltepe Mosque, is made. It is likely that the decision to open a street breadthways through the green space, at its widest section, has been given earlier than the allocation decision for the mosque.

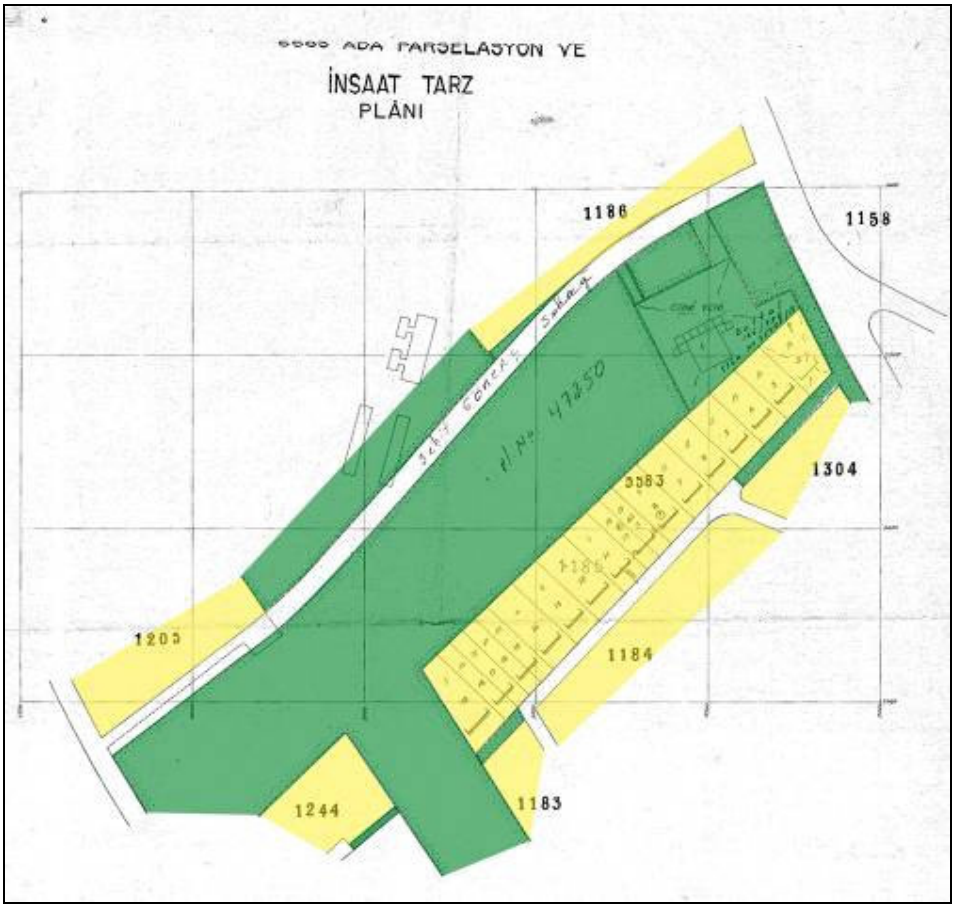


Figure 4.8. 1/1000 scale parcellation plan dated to 1953 indicating the Şehit Gönenç Street. The green area lying along it and the allocation of its northern corner to the Maltepe Mosque. (Plan no. 26491, 18.12.1953. Plan Archive of the Greater Ankara Municipality)

4.1.2. Şehit Gönenç Street Development

The opening of Şehit Gönenç Street has split the linear Güvenpark-Tandoğan Green Strip and pared the green strip perpendicular to it lengthwise. This modification has set up the vehicular access to the otherwise on foot accessible parts of the green space and has formed a portionable sized green spaces on each side of the Şehit Gönenç Street, thus making way for future modifications. This discussion will be extended at the end of this chapter.

4.1.3. Maltepe Mosque Development

As reported on the official web page of Maltepe Mosque[20], the first parcel the association was offered to build the mosque on was where the Yılmaz Güney Stage of Çankaya Municipality is placed today. Considering the land use and urban layout, leasehold of 99 years of the building block no. 5583 parcel 20 has been given to the Ankara Maltepe Mosque Development and Keeping Association (Ankara Maltepe Camii Yaptırma ve Yaşatma Derneği). The construction of the mosque started on 16.05.1954 and the mosque was opened on 03.08.1959 (Figure 4.9).

With allocation of Maltepe Mosque, 4120 m² of green space is changed from green space to public space and the mosque is built on the building block no. 5583 parcel no. 1. With the allocation of the gas station and car service in 1956, the parcel number will change.

[20] An association was formed in 1950 to build and sustain a mosque in Maltepe, "Ankara Maltepe'de Bir Cami Yaptırma Derneği" which changed its name to "Ankara Maltepe Camii Yaptırma ve Yaşatma Derneği" (http://www.maltepecamisi.org/tarihce.html, accessed 14.05.2008).

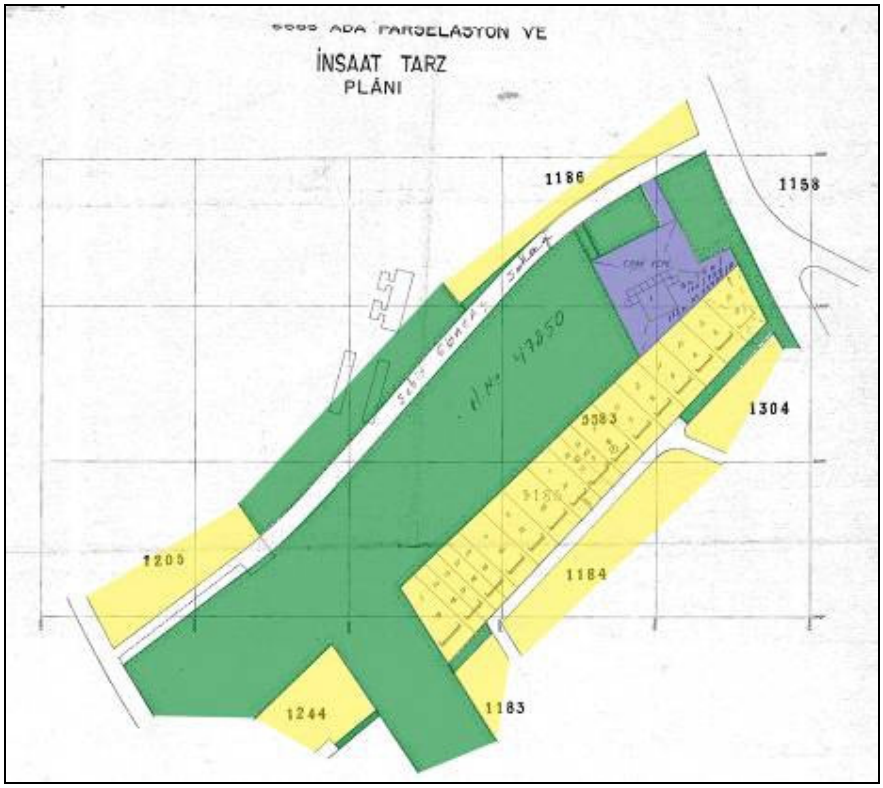


Figure 4.9. The allocation of a parcel for the construction of Maltepe Mosque on the green strip (Plan no 24691, 18.12.1953. Plan Archive of the Greater Ankara Municipality)

4.1.4. Ayla Street-Youth Street Connection

One year later in 19.11.1954, Ayla Street, a street making a loop on Özveren Ulus Street, was connected to the dead end street on the west of it, which opens to the street called Youth Street (Gençlik Caddesi) today (Figure 4.10). Ayla Street's contemporary name is Neyzen Tevfik Street. With this modification a street was opened over the green space, connecting Ayla Street to Gençlik Street and one of the dead end streets Jansen has used to provide semi-private neighborhood spaces and for pedestrian circulation has been destroyed (Figure 4.11).

Figure 4.10. Ayla Street and Özveren Ulus Street in Jansen plan. The street names are added by the author.

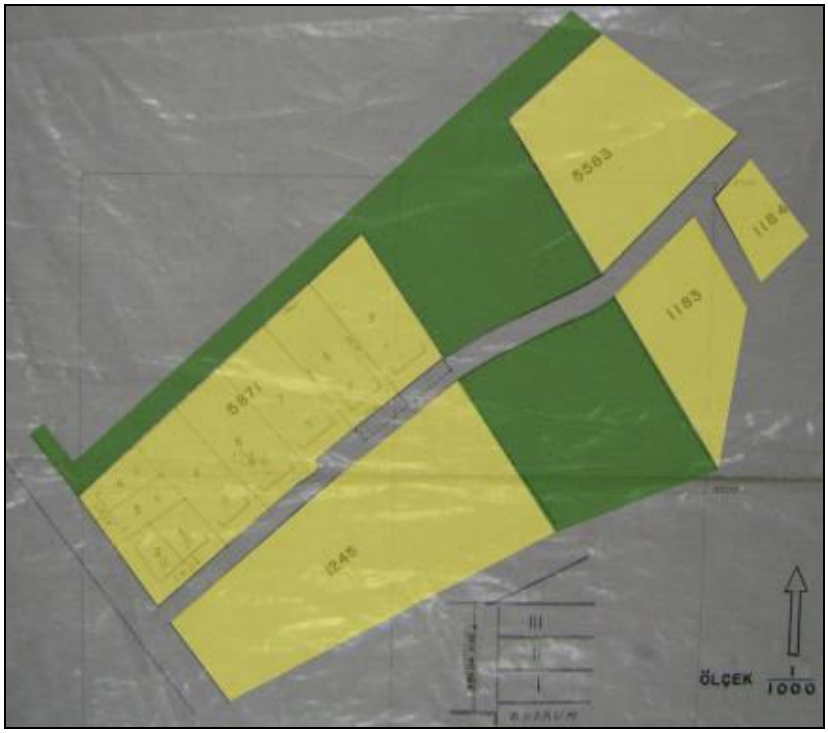


Figure 4.11. The opening of Ayla Street (Plan no. 27133, 19.11.1954. Plan Archive of the Greater Ankara Municipality)

4.1.5. Maltepe Gas Station Partitioning

In August 1956, a gas station and car service is allocated on the green space to the north east boundary of Maltepe Mosque, at the corner of Gazi Mustafa Kemal Boulevard and Şehit Gönenç Street (Figure 4.12). With this allocation, the relation of the green arc, curving towards north east and meeting the İncesu greenway on the west side of Atatürk Boulevard at Sıhhiye, which was diminished, now has been cut off.

Figure 4.12. The allocation of a parking area, a gas station and a car service area in the place of a green area on the Gazi Mustafa Kemal Boulevard. (Plan no. 31696, 3.8.1956. Plan Archive of the Greater Ankara Municipality)

4.1.6. Turgut Reis Street Development

The opening of the Turgut Reis and Süleyman Bey Streets are two other major splitting and paring modification made in 1950s. Though the modification plan for Turgut Reis Street development is missing, it is probable that it was opened earlier than Süleyman Bey Street. Turgut Reis Street development replaced the green strip from the Maltepe Primary School to the end of the green strip, near Tandoğan Square (Figure 4.13).

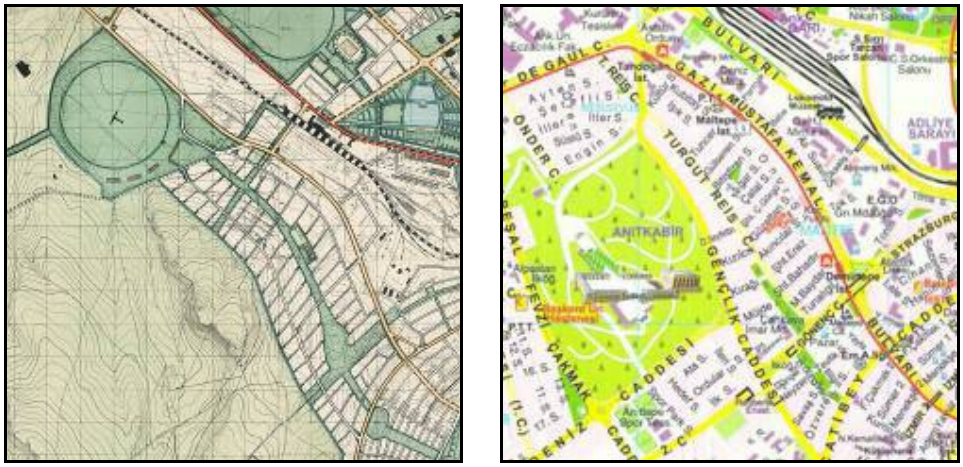


Figure 4.13. Turgut Reis Street development. Jansen' 1932 plan (left, detail from Figure 3.8) and the greenway at that section and contemporary city plan (right, personal archive) showing the street layout.

4.1.7. Süleyman Bey Street Expropriation and Development

The expropriation and modification plan for Süleyman Bey Street development is missing and the oldest plan with Süleyman Bey Street developed dates back to 1958. Though, this plan is not the modification plan for Süleyman Bey Street development, it is considered to depict an early stage of development (Figure 4.14). It is logical that Süleyman Bey Street development would have taken place after the Şehit Gönenç

Street development and not before Turgut Reis Street development. Today Süleyman Bey and Turgut Reis Streets connect De Gaulle Street and Şehit Gönenç Street. The section between De Gaulle Street and the Öz Street and Hale Street and the remaining segment is called Süleyman Bey Street. Opening of Turgut Reis made way for connecting it with Şehit Gönenç Street through Süleyman Bey Street. The opening of a street necessitated or encouraged other street developments and street widening operations.

Figure 4.14. Süleyman Bey Street development. The plan for MKE Workers' Housing is the oldest plan at hand depicting the initial stages of Süleyman Bey Street development. (Plan no. 36490, 11.4.1958. Plan Archive of the Greater Ankara Municipality)

It must be mentioned here that, the bend of the street seen in Figure 4.14 is straightened the same year in the plan no. 37970 and the street width is increased to 14 meters (Figure 4.15). On the plan no. 61300, titled “Turgut Reis Street Extension Plan” (7_1968_61300 Turgut Reis Caddesi Devamı Yol Planı), Süleyman Bey Street is widened 3 meters from 14 meters to 17 meters in 1968 (Figure 4.16). On the same plan, it is seen that the dead end streets of Jansen’s plan are destroyed and all the streets are connected to Süleyman Bey Street. The parking areas that were initially located at the ends of the cul-de-sacs are included in the neighboring parcels with the decision no. 66 of Development Executive Committee on 31.1.1968.

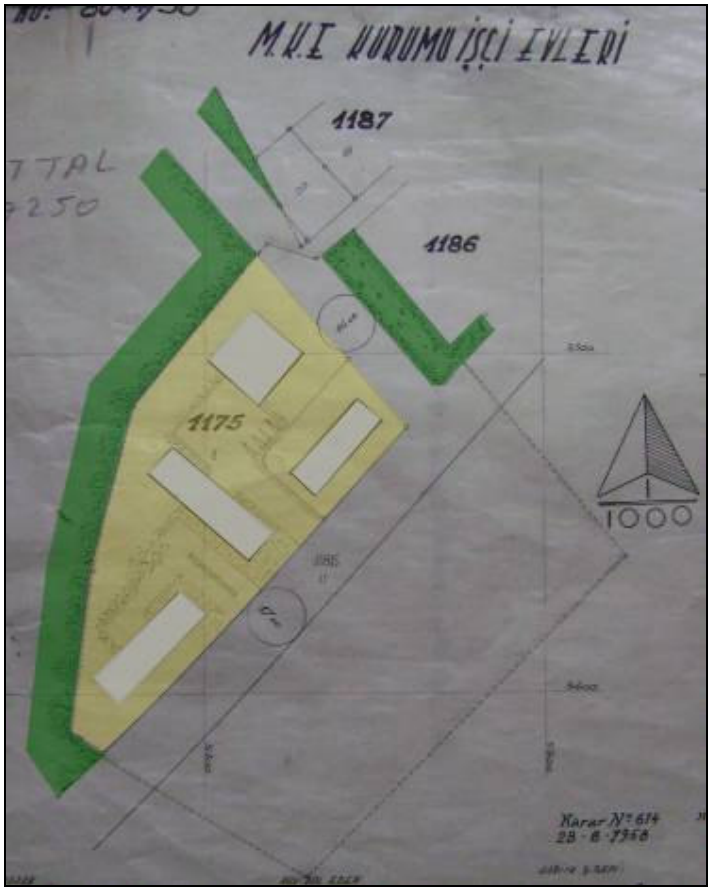


Figure 4.15. Süleyman Bey Street modification plan (Plan no. 37970, 28.8.1958. Plan Archive of the Greater Ankara Municipality)

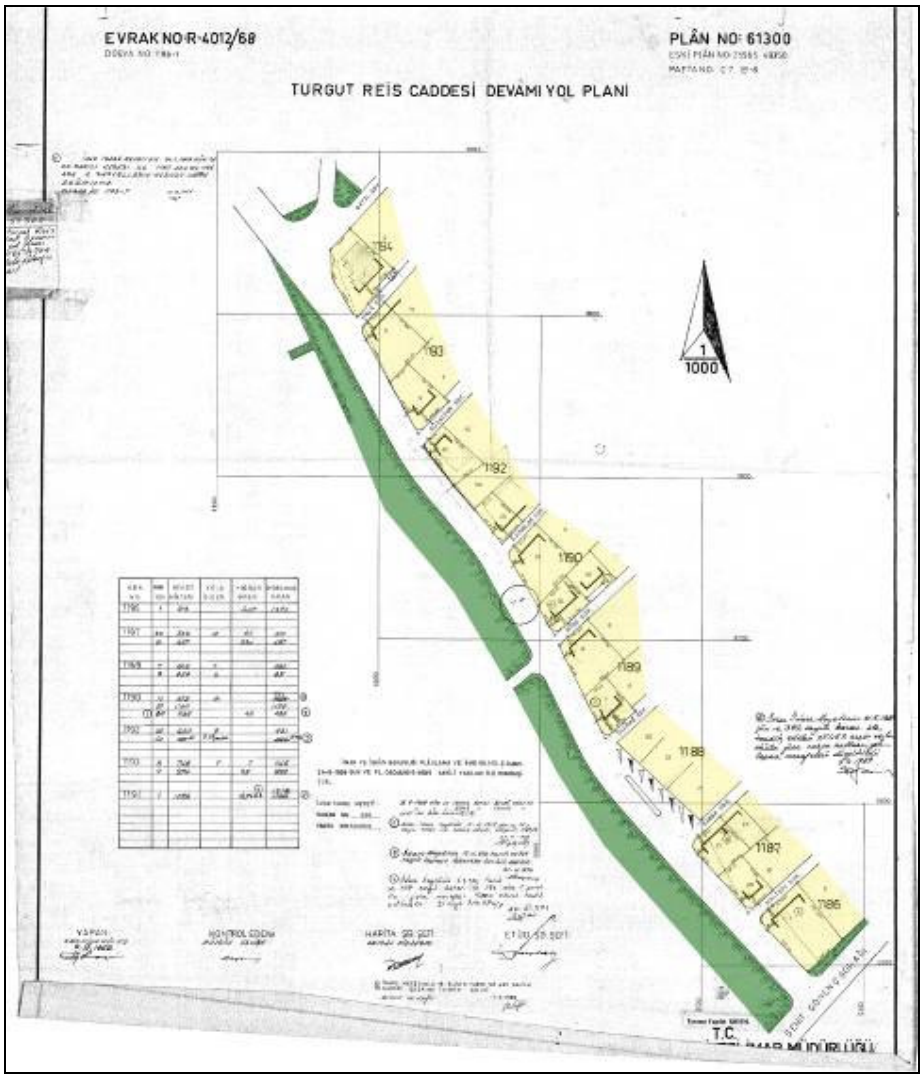


Figure 4.16. Turgut Reis Street Extension Plan (Plan no. 61300, 2.9.1968. Plan Archive of the Greater Ankara Municipality)

4.1.8. Hürriyet Primary School Partitioning

Hürriyet Primary School is allocated on the green space in 1957, with plan no. 33230. Actually, this is one of the locations that Jansen pointed out when he was asked by the Urban Development Directorate in 1933 to determine locations suitable to build schools. At a letter sent

to him from the Development Directorate (Appendix A, code 35), Jansen was asked to indicate the location that is convenient for the primary school that is going to be built on the area marked on the plan attached to the letter (which we don't have at hand). Jansen, in response to this demand, sent a 2 page letter stating that the authorities of the Ministry of Education had applied to him in 1929 with the same purpose. He responded with the same answer he had given to Ministry of Education that Hacettepe always had to be kept free of development and open to use and enjoyment of the urban population. Jansen, as an answer to this new letter and another letter sent to him asking for suitable locations for two other schools (Appendix A, code 28) sends a plan showing the locations he selected for the construction of a number of schools in different neighborhoods (Appendix A, code 46) (Figure 4.17).

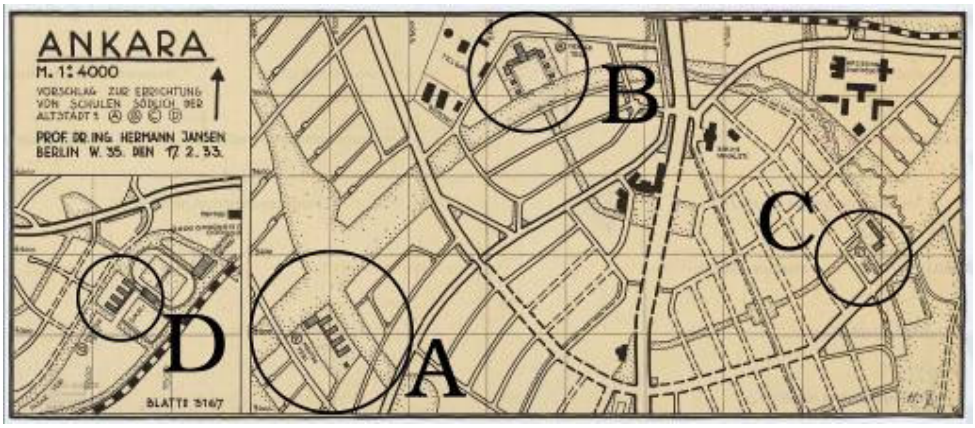


Figure 4.17. 1/4000 scale school location plan. Jansen indicated the location of 4 new schools (Attachment of the letter sent by Jansen to the Directorate of Urban Development. Circles and large letters are added for emphasis) (Das Architekturmuseum der Technischen Universität Berlin in der Universitätsbibliothek, http://architekturmuseum.ub.tu-berlin.de/index.php?set=1&p=79&Daten=157960, accessed 20.04.2008)

The Figure 4.17 indicates four suitable locations, on which schools would be built. It is important to point out that all the school locations are either on a green strip and they are connected to residential

quarters through the green space structure. Jansen changed the block layout of the 1932 plan to place the school on the location A, on the crossing of two green strips and not directly on the green strip. It is evident that the block and plot layout of the 1932 plan was already implemented before March 1957, when the allocation of the green area for the development of Hürriyet Primary School is decided (Figure 4.18). The school has not been built on the exact location Jansen determined but on the green strip on the north and the orientation of the school building has shifted 90 degrees. As Şehit Gönenç Street has replaced some part of that green strip before, the school development has destroyed the other part, disrupting the spatial continuity of the green structure.

Another important modification, which is also visible in Figure 4.18, is the opening of the street connecting Ayla Street (Neyzen Tevfik Street today) to Şehit Gönenç Street. It is evident that this street has been opened before the plan modification for the allocation of Hürriyet School is made.

Location B was changed too, and Jansen prepared himself the modification plan for the new location of the school. Today Atatürk High School is situated on the plot at the south of the original location B (Figure 4.17). Location C is where TED Ankara College was built and served from 1937 to 2004. Location D is, on the other hand, is thought in relation with the Cebeci Sports Square. Unlike other 3 locations, there is no school placed on or near this location. The nearest schools are Cebeci Junior High School (Kurtuluş Primary School then, architects Bruno Taut and Franz Hillinger) and Kurtuluş Junior High School Ernst (Architect Ernst Egli).

Figure 4.18. Hürriyet Primary School and the street connecting Şehit Gönenç and Neyzen Tevfik Streets (Plan no. 33230, 19.3.1957. Plan Archive of the Greater Ankara Municipality)

4.1.9. MKE Workers' Dwellings Partitioning

In 1958, starting with the plan number 36490 (Figure 4.19), a series of modifications was initiated. Starting with M.K.E. Workers' Dwellings, Sport Facilities Area and Müjde Street extension connecting to Şehit Gönenç Street are the main plan modifications in this green space. Today, as the last plan modification, some offices of Çankaya Municipality, Yılmaz Güney Stage and a small nursery are located in this location.

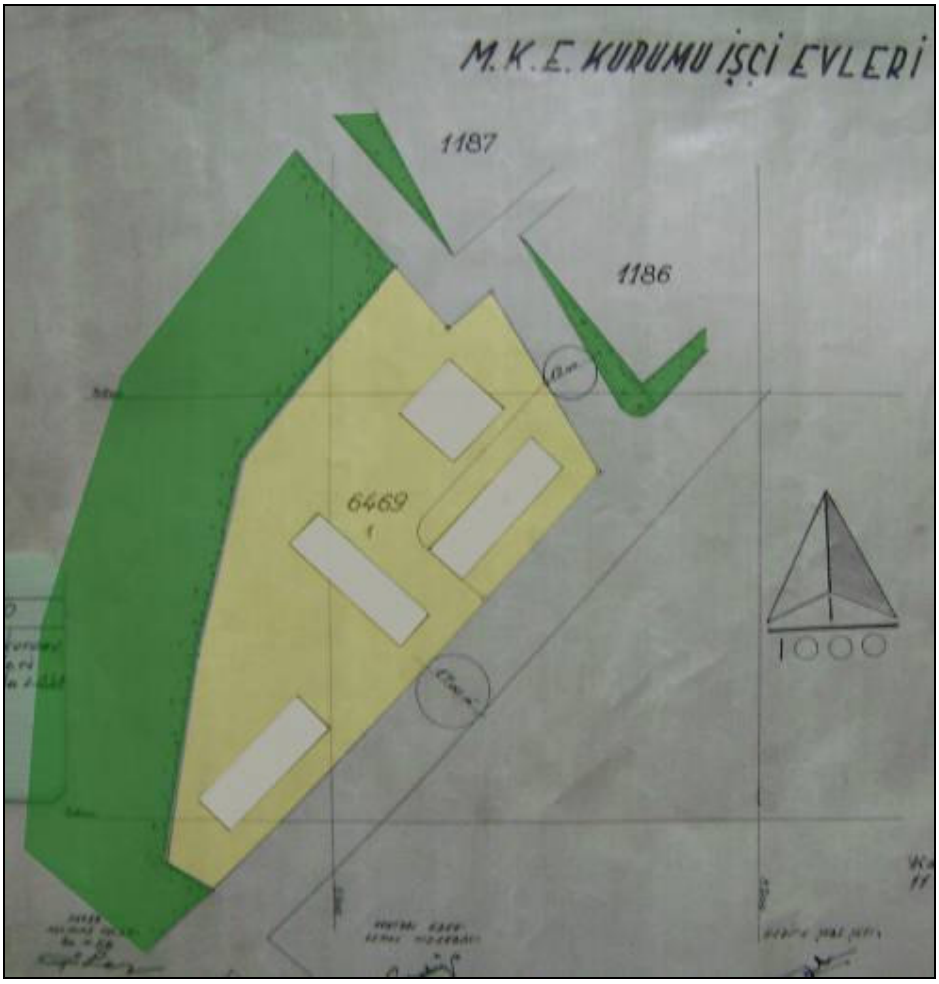


Figure 4.19. The plan showing the allocation and the layout of the MKE workers' dwellings on the corner of Süleyman Bey Street and Şehit Gönenç Streets. (Plan no. 36490, 11.4.1958. Plan Archive of the Greater Ankara Municipality)

4.1.10. Maltepe Market Place Partitioning

The tenth modification is the allocation for Maltepe market place on the green space at the south of Maltepe Mosque, in November 1960 with plan no. 44400 (Figure 4.20). As previous modification, the modification on this "parcel" is followed with other modification decisions, which were not realized, until the market place is replaced with an underground car park and shopping center in 2007-2008.

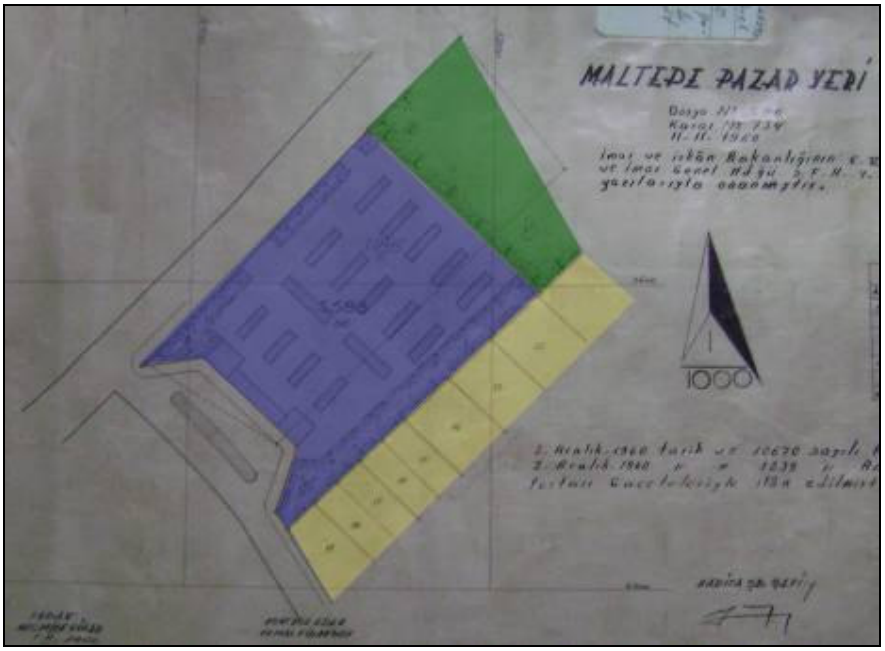


Figure 4.20. Allocation of Maltepe market place (Plan no 44400, 11.11.1960. Plan Archive of the Greater Ankara Municipality)

4.2. Types of Modifications on the Form of Green Spaces

Most plan modifications involve change in the configuration of the green spaces. They have different effects on the structure of green spaces depending on whether they are single green spaces or part of a green strip or a greenway. A classification of the plan modifications from the point of configuration reveals 5 types of interventions.

4.2.1. Redevelopment

Redevelopment is a modification which is not directly related with a specific green space but with a project dealing with an area including that green space also. In this type of modifications, whether the green space will be kept unchanged, be improved or be destroyed relies on the

public authority's decisions, the purpose of the redevelopment and the professionals who are entitled to prepare the redevelopment plan. When a part of a green strip or greenway is concerned, the question whether the unity of the green structure is preserved also relies on these factors.

4.2.2. Partitioning

Dividing the green space into two or more parts and changing the function or the physical organization of one or more of the parts will be called "Partitioning" in the analysis (Figure 4.21).

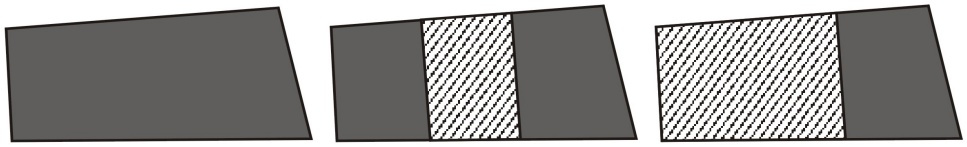


Figure 4.21. Partitioning

Depending on whether the new function conforms to the green space and its functions, these types of modifications, other than decreasing the amount of green space available, may also disrupt the physical continuity of green structures. This type of interventions may as well give way to future modifications of other green spaces.

4.2.3. Paring

Interventions to green spaces that slice strips from the edges, mostly to develop streets or to widen an existing street or to expand a parcel, are called paring modifications (Figure 4.22).

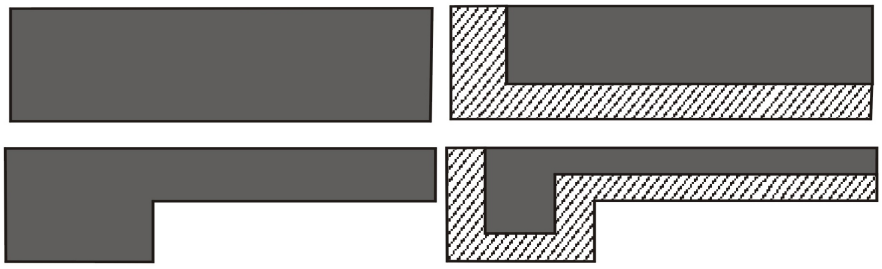


Figure 4.22. Paring

This type of modification decreases the surface area of the green spaces and depending on the condition of the paring; it has the potential of decreasing the accessibility and quality of the green space, by increasing the noise and dust caused by the motorized traffic in the street. Moreover, if the motorized and pedestrian circulation are not designed and implemented properly, this modification decreases the effective and comfortable use of green area by the children in particular.

4.2.4. Splitting

Interventions that cut across the green spaces with a linear structure like a street and separate the green spaces into two or more pieces are called splitting modifications (Figure 4.23). These modifications result with disruption of spatial continuity of the green space structure and sometimes even operate as facilitators of future partitioning modifications.

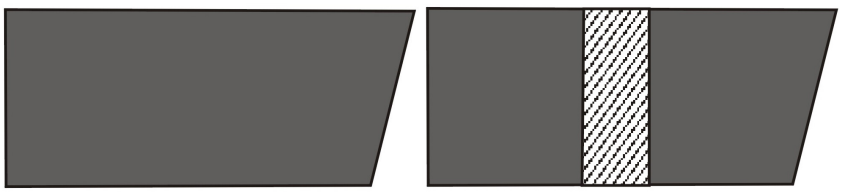


Figure 4.23. Splitting

4.2.5. Allocation

Allocating implies the interventions that involve the separation of small parcels for uses such as buffets, newspaper stands, or for necessary infrastructure conduits such as transformers, especially on the corners and edges (Figure 4.24).

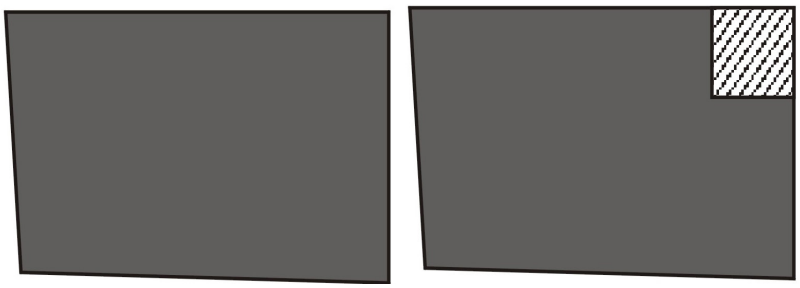


Figure 4.24. Allocation

The insertion of a playground or a basketball field is a modification allocating the area to a new use. But as the new uses allocated cope with the original purpose of the green spaces, such modifications are not analyzed in this study. On the other hand no plan modification decisions are found related with insertion of a playground or a sports field.

4.3. The Effect of the Plan Modifications on the Morphology of the Güven Park-Tandoğan Greenway: An Evaluation

In this chapter, the sequence of transformations of a greenway is surveyed. The modifications made are obviously related with the form and function of the greenway. A series of splitting and partitioning modifications created green spaces which are smaller, less coherent and consequently suitable for further modifications. The development of

Şehit Gönenç Street e.g., is a splitting modification that divided the Güven Park-Tandoğan greenway at the intersection of two greenways. This modification enabled the MKE Workers' Dwelling development, partitionings of Maltepe Mosque and the Maltepe Market Place by providing the inner parts of the greenway, previously accessible only on foot, with vehicular accessibility. Moreover, the opening of streets is followed by minor modifications, such as street widening operations that pare slices off green spaces. So, piecemeal plan modifications are made without considering the green space structure as a whole and the greenway is divided into pieces with sizes and dimensions fit for further modifications as partitionings. These piecemeal interventions have destroyed the spatial continuity of the greenway, and consequently the integrity of the greenspace structure.

The legal deficiencies were discussed in Chapter 3, but the example to how the Development Executive Committee used the right of prescribing regulations is reserved for this section. The Committee's decisions are directly related with permitting developments over the green spaces and the building parcels contrary to Jansen's plan principles, and consequently destroying the relation of houses and green spaces.

The three prejudications dated 1941 and 1942 (Appendix B, Decision no. 143, Decision no. 137 and Decision no. 152) allow access to buildings from the greenways having 30 meters width, but rejects the same appeal for the parcels opening to 45-50 meters wide green spaces. The reason for the rejection is that the Committee accepted the latter not as greenways but as green areas, i.e. as parks. From these three decisions, it is evident that 30 meters wide linear green spaces are deemed as greenways by the Development Executive Committee, but not when they are wider. The profile of a 32 meters wide greenway with a vehicular street, titled Plantation of a Thoroughfare (*Abpflanzung einer Verkehrsstrasse*), is sent by Jansen (Figure 3.15). It is likely that the Committee allowed access top buildings on account of this profile. Still,

three years later in 1945 (Appendix B, Decision no. 168), the Committee forms another prejudication and allows the development of garages on the parcels having only one frontage to the greenways or green spaces, justifying this by declaring that the service roads on greenways would also be used for the use of the neighboring residents' cars. The changing content of the decisions is noteworthy. Jansen forbid building of garages on private parcels and proposes the development of public car parks, but the prejudication in 1945 brings a decision against this principle by permitting building of garages on private parcels, and also against the intention of Jansen to develop serene and quiet neighborhoods.

The green space structure of the Jansen plan was altered piece by piece, by not only modifications made on the green spaces and greenways as demonstrated in the case of Güven Park-Tandoğan Greenway, but also by the modifications made on the building parcels. The spatial organization of Ankara developed by Hermann Jansen was based on reciprocal relations between land uses, green spaces and residential areas. It is destroyed by modifications made to the green spaces and also to the development areas.

CHAPTER 5

CONCLUSION

The construction of Ankara, the capital city of the young Republic of Turkey is a process that expresses the Republican will to create the modern setting for the flourishing new nation. The planned development was considered as a tool to create the modern capital city.

The first two development plans were prepared by two German planners. The first plan was Carl Lörcher's 1924 and 1925 plans. The Yenişehir section of this plan was implemented immediately to direct the urban development in this newly forming district of Ankara. However, the development area in this plan was not large enough to meet the needs of the new Capital; a new plan was needed to enlarge the new development areas of the capital. It was decided to obtain the second plan by a competition this time. The competition was held in 1928 to which three leading planners of the time was invited. These planners were Léon Jausseley, Joseph Brix and Hermann Jansen. Hermann Jansen's entry was selected by the jury and Jansen's final development plan was approved in 1932. Hermann Jansen will be the consultant of the Development Directorate until the end of 1938. In this period, Jansen sent many letters, drawings and plans to solve the problems arising during the implementation period.

The third plan of Ankara was obtained in 1954 through an international competition and the winners were two Turkish architects, Raşit Uybadin

and Nihat Yücel. This plan was approved in 1957. By the time this plan was prepared, the plan limits and the population target of Jansen plan were exceeded (Altaban, 1998, p.53).

Though the amount of green spaces available in the city in that period is not calculated, Öztan (1985, p.86) reports that the green space amount per person decreased from 5.1 m^2 in 1950 to 1.4 m^2 in 1980. It can be conferred that there was a declining tendency before 1950s as well. While the population increase is a reason of the decrease in the available amount of green spaces in the city, the insufficient provision of green spaces and the conversion of green spaces into other uses are also two other very important factors. The comparison of Jansen's 1932 Ankara development plan and Uybadin-Yücel 1957 development plan proves that Jansen's green space structure proposal was absent in 1957 (Figure 3.32).

In practice, among the many economic, demographic, geographic, plan related etc., dynamics that cause, curtail, direct or give character to the development and redevelopment of the city, the public institutions in charge of decisions related with the urban development are responsible for the execution of plans and the plan modifications. The development laws and regulations set the standards, rules of development, redevelopment and plan modifications, and determine the responsibilities and duties of the public institutions related with urban development. The first development plans are deemed to be important from the point of provision of green spaces and proposing a green space structure in Ankara. Hermann Jansen proposed a city wide and detailed green space structure, with its set of components, which provide accessibility of citizens to the public facilities and social services. This study sought to unravel the reasons and the process of modifications of green space, through a detailed analysis of Jansen's development plan and his green space structure proposal, the development laws and

regulations, and the modifications made to a component of the green space structure, Güven Park-Tandoğan Greenway.

Early development plans of Ankara, as the capital city of the new Republic, is significant in terms of reorganization and development of urban planning administration and legislative authority in the period between 1927 and 1960. Dominant characteristic of the period is that, the early attempts for comprehensive approach in urban planning started under the leadership of two German planners, Carl Lörcher in 1924-1925 and Hermann Jansen in 1928-1932.

When 1932 Jansen Plan is analyzed, it is found out that the plan had a system of greenspaces in which greenways were introduced as linkages between the major public spaces, historic and natural reserve areas, sports and educational facilities. It is evident that the configuration of the green spaces produce a megaform, quoting Maki's term, a continuous system of sport areas, parks and social facilities (such as schools) interconnected by pedestrian greenways. This system is also in close relation with the housing areas and opens to the countryside at the periphery of the city that is preserved as a greenbelt. On the other hand, the green space structure of Jansen's 1928 and 1932 Plans is basically a conceptual plan in which the components and the rules of the development of are defined. In fact, Jansen did not determined the exact uses of the green spaces in the implementation plans but drew many type plans and profiles, and explained in his letters to the Development Directorate the principles and rules for the implementation of the green spaces and the greenways that he brought in his plan.

Jansen determined several types of green spaces that form the green space structure. In the study, these green spaces are grouped under four categories. Greenways constitute the first category and under this category there are two subtypes, one of which is the greenways along stream banks and the other is the pedestrian greenways. Greenways

along stream banks are reserved mainly for agricultural and recreational purposes. According to their sizes and functions the pedestrian greenways are divided into three subtypes: arterial greenways, collector greenways and greenways along avenues and streets. Pedestrian greenways are mainly used to provide city wide pedestrian circulation from door step to the periphery of the city as an alternative to motorized traffic.

Jansen clearly declared that greenways should be kept free from the development of roads and buildings and only sport fields and public social services as schools would be built upon them. He prepared a series of type profiles and plans for pedestrian greenways that he sent with his letters at different times as a response to the demands of the Directorate of Development.

The other category is the central greens, under which the hippodrome and sport fields, city parks and scenic parks but also informal greens are placed as subtypes. The third and fourth categories are the allotment gardens and the squares, respectively.

Jansen prepared Ankara plans with a holistic approach where the interrelation of parts create the whole, in which the green space structure and the social services and housing areas mutually constitute the urban form. What was changed by plan modifications of the green space structure is this mutual relation creating the whole urban form.

The central green spaces of the Jansen plan were implemented to the greatest extent and today most of them are still in use. Most of the greenways, on the other hand, are converted to other functions. As greenways are linear in form, they were mostly converted to streets and the ones having the appropriate dimensions were opened to development. Some of the greenways are functioning as parts of pedestrian zones, but all the “green”s of the greenways in Jansen’s type

plans and profiles are paved, which is inevitable considering the high volume of pedestrian use in those areas.

The analysis of the modification process is made on the Güven Park-Tandoğan Greenway. The main reason why this part of the green space structure is analyzed is the presence of some of its segments as parks and that some parts are still being modified today. The other reason is that Demirtepe and Maltepe districts this greenway runs through was opened to development with 1932 Jansen Plan, and that it is a good example of the house-greenway-school-sport field relation Jansen conceptualized and implemented in his plan.

The functions that replaced Jansen's proposal of a greenway in the case study area are streets, the buildings of public institutions, social services (a school and a mosque) and a gas station. Jansen warned against and prohibited the development over green spaces and allowed only development of public institutions such as schools. Especially the streets and buildings are strictly prohibited from developing over the green spaces by Jansen. It is evident that the plan report and the Jansen letters were not taken into consideration by the Development Directorate and Ankara Municipality and that Güven Park-Tandoğan Greenway was modified.

To analyze the plan implementation and the modification process, the development plans, development laws and plan modifications are taken as variables and other dynamics are taken as constants. The morphological analysis of the transformation is made using the successive development plans and local plan modifications, taking other dynamics of urban development such as the increasing needs, demographic changes, spreading of the city as constants.

5.1. Development Laws and Regulations

As Ankara was the model city of the Republic developing according to a comprehensive urban development plan and the Building and Roads Law of Ottoman period was not sufficient to achieve this end, a new development law, Municipality Buildings and Roads Law, was enacted one year after approval of Jansen's development plan in 1932. The new development law was not made directly for the development of Ankara, but for all the cities of the Republic. Still, the emphasis that Jansen put on the green spaces is not reflected in the law. The definitions of green spaces and conditions of modifications to the green spaces were not included in the 1933 Municipality Buildings and Roads Law. This means that, the implementation of the components of Jansen's green space structure was not supported by the urban legislation in Turkey, in other words, they were deprived of legitimate legal definitions and status. However, the law of 1933 also lacked articles defining the conditions and rules under which plan modifications was to be made. The law establishing and determining the duties of Ankara City Development Directorate lacked a detailed description of the duties of the development authority, but simply held the Development Directorate responsible of making the plan modifications and the Cabinet of approving the modifications. This lack of regulation, including at least in the definitions of the green space types that were brought in the Jansen plan is a major problem, which apparently resulted in a certain ease in the modification of the green spaces, especially of the greenways of the Jansen plan.

It must be stressed here that the 1933 Municipality Buildings and Roads Law was effective until 1956, till it was replaced with the Development Law (No: 2290) and the Development Regulation was enacted in 1957. Until 1956, the urban development was regulated according to this law and the prejudications. With the prejudications

dated 1941 and 1942 (Appendix B, Decision no. 143, Decision no. 137 and Decision no. 152) a conditional permit to provide access to houses from greenways is given, but with the prejudication in 1945, building of garages on parcels and providing car access to them through the service roads on the greenways is permitted. This is an example of how the planning principles of Jansen were slowly worn and changed.

The new Development law (1956) and the Development Regulation (1957) were more detailed than the 1933 Municipality Buildings and Roads Law, but the green spaces were not paid attention as an integral part of the urban structure in this legislation either. In the Article 28, the Development Law entitles the Ministry of Development and Construction (İmar ve İskan Bakanlığı) to prepare city specific development regulations if needed, with the green space standard of 7 m^2 per person minimum. While the development of new buildings or making extensive revisions and additions to the existing buildings on the lands reserved for public services and buildings is prohibited by the Article 33 of the Development Law and by the Article 8.a of the Development Regulation, developments on these areas are allowed if only these areas are not expropriated by the municipality in 4 years. Though this article seems to be protecting the public services and public green spaces, it also defines how public services can be transformed to other functions. It is important that the development laws and regulations dated 1933, 1956 and 1957 do not ultimately place green spaces under protection from urban development.

5.2. "*Hâlî Arazi*": The Land Ownership Category of Green Spaces and Greenways

Another legal inadequacy that is considered as a factor enabling the modifications of green spaces is the status of the land ownership under which the majority of the green spaces, especially the greenways, are

placed. As seen from the legends of the 1928 and 1932 Jansen Plans, the appellation of the green strips and greenways is *"hâlî arazi"* in Turkish, and *freiflächen* in German. This is not a category defining their green, recreational, park-like, public character directly, as *freiflächen* in German do. It is seen from the projects sent by Jansen that this term is used in the 1928 Jansen Plan and it stayed in use in the plans and profiles he sent until the termination of his contract with the Development Directorate. The term *"hâlî arazi"* is from the Land Law which the Republic of Turkey inherited from the Ottoman Empire. The lands under the category of "*Hâlî Arazi*" belonged to the State and their property rights were not transferable; they were mostly arid and agriculturally unsuitable for production and they did not have a specific function other than being a piece of nature at the outskirts of the settlements. By the definition, the *hâlî arazi* is not the equivalent for open and green spaces and it is a contradiction to place urban lands in a development plan under this category. Urban development plans are made to remove and resolve ambiguities, not to create them.

Another issue is the reluctance of the public authority to produce the green space structure and later to preserve the implemented green spaces. This reluctance is reflected in the insufficiencies of the development laws and the history of the hastily and eagerly conducted plan modifications. Germany is a country which lived through one of the most problematic industrial urbanization experiences. The conceptual green space structure model imported to Ankara by Hermann Jansen is an accumulation of a set of solutions proposed to the problems of the industrial urbanization in Germany. This model is brought to a society, which did not experience the industrial urbanization and its dreadful problems. The green space structure and even district parks and sport fields may have been considered as futile by the public authority, though there is not such a record among the written documents. The implementation of the development plan is far from being far sighted and the actions of the Municipality and the Development Directorate

show that Jansen's views are not always shared. This is even reflected in the 1957 Development Regulation, that the 25% land readjustment share[21] used to provide public services and infrastructure such as roads, squares, car parks and green spaces is considered as "zayiat"[22]. In other words, the share of each building plot to be transferred to the public authority in order to provide the infrastructure, the public and the social services is considered as losses.

5.3. Modifications

In the study, based on a detailed plan analysis, the transformation process of urban greenways, focusing on the Güven Park-Tandoğan Greenway, is studied throughout Hermann Jansen's letters and the plan modifications from the archive documents to put forth the continuities and discontinuities among the plan decisions until our times. It is clearly seen that most of the greenways were transformed or modified either piecemeally or as a whole. As a result their function as linkages has been lost and the integrity of the green space structure as a megaform has disappeared. The conversion of the greenway that was originally planned as a pedestrian green space to other functions piece by piece has changed its recreational character. The repetition of these piecemeal modifications has finally destroyed the integrity of the greenway as a linkage in urban scale. The modifications that have changed the greenway drastically or initiated a modification process are determined and are identified as major modifications. Later, a typology of the modifications is developed and certain types of modifications are found out: These are the Redevelopment, Partitioning, Paring, Splitting, and Allocation.

[21] Land readjustment share: Düzenleme Ortaklık Payı

[22] *Zayiat* means "loss, losses, wastage" (*yitikler, kayıplar*), (www.tdk.gov.tr, accessed 16.8.2008).

The modifications that the case study area, Güven Park-Tandoğan greenway, has been subjected to, start with the redevelopment plan prepared for the eastern part of it, by Paul Bonatz when he designed the Residential Estate for the State Officials in mid 1940s. Other major modifications to the case study area start with Şehit Gönenç Street development in 1953 and can be traced until today. The modifications until the approval of the Uybadin-Yücel Plan in 1957 were related with the segment of the greenway between Güven Park and Şehit Gönenç Street. After the approval of the Uybadin-Yücel Plan, the first modifications to the greenway are Turgut Reis and Süleyman Bey Streets developments. Opening of these two streets are the proposals of the new development plan. Surprisingly, plan modifications are made to the Uybadin-Yücel Plan in 1958, just one year after the approval. The partitioning for the MKE Workers' Dwellings in 1958 and the Maltepe Market Place in 1960 are the examples of two major modifications made to the Uybadin-Yücel Plan. In other words, plan modifications have become a frequently used tool to direct the urban development. The accumulation of these piecemeal modifications resulted in the destruction of the greenway and a short segment is left for today.

As a significant consequence of not having lived the industrialization and industrial urbanization, the Turkish society did have neither a bourgeoisie, nor industrialists or social reformists (as Fourier, Lever, Saint Simon, Krupps or Siemens) who sought to ameliorate the living conditions in the cities by proposing solutions and by criticizing and intervening on the actions of the local governments. In the case of Ankara the bourgeoisie was the speculator and the bureaucrat at the same time, or the two were in very close relation. These relations were effective in making the plan modifications in 1930s. Gönül Tankut (1981, p.213) portrays this intertwined relation firmly giving a striking example to the favoring nature of, may be not all but some, of the plan modifications. The plan modification example that Tankut gives is about two high ranked bureaucrats' plots that were in Jansen's forestation

area proposal in the south of the Grand National Assembly. The forestation area proposal was modified, the road that ran through the forest was turned into a street and the two sides of the street were parceled, avoiding expropriation of the lands of the bureaucrats. This is an obvious example of the favoring relation between the Development Directorate and the influential personalities of the period.

5.4. Further Studies

In the urban development process of Ankara, the dynamics such as population increase, land speculation and the like resulted with many plan modifications and developments contrary to Jansen's plan principles. One of the main reasons of the plan modifications and source of direct transformation of the green spaces is the attitude of the public authority, namely the Development Executive Committee and the Development Directorate, towards the provision of and modifications on urban green spaces. Green spaces were perceived as reserve development areas in disposal of the Development Directorate and the Development Executive Committee. Additionally, the green space structure was not taken into account as one continuous body in itself that is in relation with social services and other green spaces. In return, with short sighted and pragmatic handling, the green space structure has been broken into smaller parts making it easier to allocate other functions. The other reasons that have made the modifications easier are the legal status of green spaces and the plan modifications.

This study is an attempt to further the previous studies of Fehmi Yavuz (1952, 1980) and Gönül Tankut (1993) by focusing specifically on the urban green structure concept of Jansen Plan, displaying the modifications of a part of Jansen's green space structure proposal in sequence. Further studies of production and modification history of green spaces from morphological perspective would reveal the dynamics

acting upon and attitudes towards the green spaces. Such studies would reveal valuable information that would be used to develop the needed and insufficient articles in the urban development laws and regulations in Turkey, even today, including plan making, land acquisition for green spaces, implementation, plan modification and green space provision.

This study is an endeavor to tell the story of a component of the Jansen's 1932 Plan, and it provides the necessary historical data related with the urban green space structure in general and specifically about Güvenpark-Tandoğan Greenway. Studies on the place of urban green spaces in the development of urban morphology are scarce. Individual histories of city parks, such as Kurtuluş Park, Botanik Park and of other public spaces and the specific implementation histories of development plans following the Jansen Plan can constitute the topic of further studies on the green structure of Ankara. The analysis in this study is conducted using the development plans and plan modification decisions. Further studies taking other dynamics into consideration, such as the new planned or unplanned housing areas, increasing of the car ownership per year, density increasing, the amount of lands under public ownership and relating these three data sets with the new street developments and the changes in the amount of green spaces in the city scale would reveal other correlations related with the provision and modification of urban green spaces.

Though the relation with the urban morphogenesis school is vague, the study falls to third area of study defined by Whitehand (1992, p.7), trying to explain what has been planned, regarding the green space structure, and what has been realized, and how it has been modified. With a wider and different set of variables and in a wider time span, other dynamics acting on and having part in modifications of the green spaces would reveal more accurate and detailed information on the way the green spaces are approached, how they are perceived, how they are

modified and on the resulting urban form. Such studies would also be very useful to establish new relations between morphogenesis and urban quality studies.

Parallel to the newly developing techniques of plan making and implementation, similar to the other big cities of the world, today Ankara needs urgently an "urban green areas management authority" which may accumulate information, resources and imaginative ideas and develop realistic and pedestrian centered strategies rather than individual and subjective decisions for the improvement and future development of Ankara "green space structure", and the system of greenways as one of the major and original component of it.

As a closing remark, Lewis Mumford's (1968, p. 91) call for setting up of networks of green in the cities of the future can be quoted. City of Ankara seems to have had and lost that chance.

> "In the cities of the future, ribbons of green must run through every quarter, forming a continuous web of garden and mall, widening at the edge of the city into protective greenbelts, so that landscape and garden will become an integral part of urban no less than rural life, for both weekdays and holiday uses."

REFERENCES

Altaban, Ö. (1998). "Cumhuriyetin Kent Planlama Politikaları ve Ankara Deneyimi". In Y. Sey (Ed.). *75 Yılda Değişen Kent ve Mimarlık*. Bilanço 98 Yayın Dizisi, İstanbul: Tarih Vakfı Yayınları.

Ankara İmar Komisyonu. (1954). *Ankara Şehri Yeni İmar Planına Ait İmar Komisyonu Raporu*. Ankara: Doğuş Ltd. O. Matbaası.

Ankara İmar Müdürlüğü. (1946). *Ankara Şehri İmar Kılavuzu.* Ankara: Ankara İmar Müdürlüğü.

Arslan, M., Barış, E., Erdoğan, E. and Dilaver, Z. (2000). *Yeşil Yol Planlaması: Ankara Örneği.* Ankara: Ankara Üniversitesi Fen Bilimleri Enstitüsü BAP 2004.

Banerjee, T. and Southworth M. (Eds.). (1991). *City Sense and City Design: Writings and Projects of Kevin Lynch.* Massachusetts: The MIT Press.

Beaufoy, H. (1997). "'Order out of chaos': the London Society and the planning of London 1912-1920". *Planning Perspectives*, 12, pp. 135-164.

Benevolo, L. (1967). *The Origins of Modern Town Planning*. Massachusetts: The MIT Press.

Berlin Senate Department for Urban Development. (n.d.) *The History of Berlin's Urban Green Space*. http://www.stadtentwicklung.berlin.de/

umwelt/stadtgruen/geschichte/en/stadtgruen/index.shtml, accessed 15.06.2008.

Berlin Senate Department for Urban Development. (n.d.) *The History of Open Space Development in Berlin*. http://www.stadtentwicklung.berlin.de/umwelt/landschaftsplanung/chronik/index_en.shtml, accessed 22.04.2008.

Birch, E. L. (2002). "Five Generations of the Garden City: Tracing Howard's Legacy in Twentieth Century Residential Planning". In K. C. Parsons and D. Schuyler (Eds.). *From Garden City to Green City – The Legacy of Ebenezer Howard.* Baltimore: The Johns Hopkins University Press.

Bollerey, F., and Hartmann, K. (1980). "A Patriarchal Utopia: The garden city and housing reform in Germany at the turn of the century". In A. Sutcliffe (Ed.). *The Rise of Modern Urban Planning 1800-1914.* London: Mansell Publishing.

Bölling, C. (2007). "Migge, Leberecht". In *Grove Art Online*. *Oxford Art Online*. http://www.oxfordartonline.com, accessed 20 Sep. 2008.

Çakan, C. & Okçuoğlu, Y. (1977). "Ankara'da İmarlı Alanda Yoğunluk Sorunu". *Mimarlık*, 152, 15, 3, pp. 42-53.

Çalışkan Sancaktar, E. (2003). *Ankara Metropoliten Alanı İçin Açık ve Yeşil Alan Özelliklerinin Belirlenmesi Üzerine Bir Araştırma*. Unpublished Ph.D. Thesis. Ankara: Ankara Üniversitesi Fen Bilimleri Enstitüsü, Peyzaj Mimarlığı Anabilim Dalı.

Carmona, M., Heath, T., Oc, T. & Tiesdell S. (2003). *Public Places - Urban Spaces: The Dimensions of Urban Design*. Oxford: Elsevier, Architectural Press.

Cengizkan, A. (2004). *Ankara'nın İlk Planı: 1924-25 Lörcher Planı*. Ankara Enstitüsü Vakfı. Ankara: Arkadaş Yayıncılık Ltd.

Conzen, M.R.G. (1960). *Alnwick, Northumberland: A Study in Town-Plan Analysis*. The Institute of British Geographers Publication: 27. London: Orge Philip and Son Ltd.

Curtis, W. J. R. (1987). *Modern Architecture Since 1900*. 2nd edition. London: Phaidon Press.

"Deutsche Gartenstadtgesellschaft" (n.d.). In *Grove Art Online*. *Oxford Art Online*. http://www.oxfordartonline.com, accessed 20.09.2008.

Forsyth, A. & Musacchio, L. R. (2005). *Designing Small Parks.* New Jersey: John Wiley & Sows, Inc.

Franck, K. A. & Schneekloth, L H. (1994). *Ordering Space: Types in Architecture and Design.* New York: Van Nostrand Reinhold.

Freestone R. (Ed.) (2000). *Urban Planning in a Changing World: The Twentieth Century Experience*. London, New York: E&FN Spon.

Freestone, R. (2002). "Greenbelts in City and Regional Planning". In K. C. Parsons and D. Schuyler (Eds.). *From Garden City to Green City – The Legacy of Ebenezer Howard*. Baltimore: The Johns Hopkins University Press.

Gök, T. (1980). *Kent Planlama ile İlgili Yasal Kurallardan Seçmeler*, Ankara: Orta Doğu Teknik Üniversitesi.

Günay, B. (2005). "Ankara Çekirdek Alanının Oluşumu ve 1990 Nazım Planı Hakkında Bir Değerlendirme". In T. Şenyapılı (Ed.). *Cumhuriyet'in Ankarası*. Ankara: ODTÜ Geliştirme Vakfı Yayıncılık ve İletişim A. Ş.

Hall, P. (1990). *Cities of Tomorrow: an intellectual history of urban planning and design in the twentieth century***.** Oxford: Basil Blackwell, Ltd.

Hoskins, W. G. (1955). *The Making of the English Landscape.* London: Hodder and Stoughton Ltd.

Jansen, H. (1929). "Ankara Şehri imar projesi izahnamesi". In T.C. Ankara Şehremaneti. *Ankara Şehri'nin Profesör M. Jausseley, Jansen ve Brix taraflarından yapılan plan ve projelere ait izahnameler.* Ankara: Hakimiyeti Milliye Matbaası.

Jansen, H. (1937). *Ankara İmar Planı.* İstanbul: Alaeddin Kıral Basımevi.

Jenkins, J. (2007). "Introduction: Domesticity, Design and the Shaping of the Social". *German History*, 25, 4, pp. 465-489.

Kampffmeyer, H. (1908). "Die Gartenstadtbewegung". *Jahrbücher für Nationalökonomie und Statistik*, III. Series, 36. Stuttgart: Lucius & Lucius Verlagsgesellschaft mbH.

Keleş, R. (1972). *Şehirciliğin Kuramsal Temelleri*, Ankara: AÜSBF Yayınları.

Lilley, K. D. (2000). "Mapping the medieval city: plan analysis and urban history". *Urban History*, 27, pp. 5-30.

Little, C. E. (1990). *Greenways for America*. Baltimore: The Johns Hopkins University Press.

Lynch, K. (1971). *Site Planning*. Massachusetts: The MIT Press.

Lynch, K. (1981). *A Theory of Good City Form.* Massachusetts: The MIT Press.

Mumford, L. (1968). *The Urban Prospect.* New York: Harcourt, Brace & World.

Nolen, J. (1929). *City Planning; a series of papers presenting the essential elements of a city plan.* New York: Donald Appleton.

Öztan, Y. (1985). "Cumhuriyet Döneminde Ankara'nın Yeşil Alan Planlaması". In *Ankara Kenti Altınpark Düzenleme Yarışması.* Ankara: Ankara Büyükşehir Belediyesi.

Richards, J. M. (1962). *Introduction to Modern Architecture.* Harmondsworth, Middlesex, Great Britain: Penguin Books, Ltd.

Schubert, D. (2004). "Theodor Fritsch and the German (*völkische*) version of the Garden City: the Garden City invented two years before Ebenezer Howard". *Planning Perspectives,* 19, 1, pp. 3-35.

Sönmez, M. T. (1998). *Osmanlı'dan Günümüze Toprak Mülkiyeti Açıklamalı Sözlük*. Ankara: Yayımevi A.Ş.

Sonne, W. (2004). "Berlin: Capital under changing political regimes". In D. L. A. Gordon (Ed.). *Planning Twentieth Century Capital Cities*. London and New York: Routledge.

Starr, R. (1987). “The Motive Behind Olmsted’s Park”. In N. Glazer and M. Lilla (Eds.). *The Public Face of Architecture; Civic Culture & Public Spaces*. New York: The Free Press, MacMillan Inc.

Steenson, M. W. (2003). *Grüne Gemeinschaft: Leberecht Migge, Bruno Taut, Hannes Meyer and Ernst May Viewed Through an Ecological Lens.* Unpublished Undergraduate Thesis. Wisconsin: University of Wisconsin.

Sutcliffe A. (Ed.) (1980). *The Rise of Modern Urban Planning 1800-1914*. London: Mansell Publishing.

Sutcliffe, A. (1981). *Towards the Planned City: Germany, Britain, the United States and France 1780-1914*. Oxford: Basil Blackwell.

Şahin, N. (Ed.). (1992). *Ankara Konuşmaları*. Ankara: TMMOB Mimarlar Odası Ankara Şubesi Yayınları.

T.C. Ankara İmar Müdürlüğü. (1946). *Ankara Şehri İmar Klavuzu (No: 1)*. Ankara: Ziraat Matbaası.

T.C. Ankara Şehremaneti (1929) *Ankara Şehri’nin Profesör M. Jausseley, Jansen ve Brix taraflarından yapılan plan ve projelere ait izahnameler*. Ankara: Hakimiyeti Milliye Matbaası.

Tankut, G, (1993). *Bir Başkentin İmarı: Ankara: 1929-1939*. İstanbul: Anahtar Kitaplar.

Tankut, G. (1998). “Ankara’nın Planlı İmarı ve Şehir Mimarisi”. *Mimarlık*, 284, 36, 6, pp. 20-21.

Tekeli, İ. (1998). “Türkiye’de Cumhuriyet Döneminde Kentsel Gelişme ve Kent Planlaması”. In Y. Sey (Ed.). *75 Yılda Değişen Kent ve Mimarlık*. Bilanço 98 Yayın Dizisi. İstanbul: Tarih Vakfı Yayınları.

TMMOB Mimarlar Odası Ankara Şubesi. (1994). *Ankara Söyleşileri*. Ankara: TMMOB Mimarlar Odası Ankara Şubesi.

Uhlig, G. (1986). "Sozialräumliche Konzeption der Frankfurter Siedlungen". In H. Klotz (Ed.). *Ernst May und das Neue Frankfurt, 1925-1930, Ausstellungskatalog*. Berlin: Wilhelm Ernst & Sohn.

Uludağ. Z. (1998). "Cumhuriyet Döneminde Rekreasyon ve Gençlik Parkı Örneği". In Y. Sey (Ed.). *75 Yılda Değişen Kent ve Mimarlık*. Bilanço 98 Yayın Dizisi. İstanbul: Tarih Vakfı Yayınları.

Uybadin, R. & Yücel, N. (1953). *Ankara İmar Planı İzah Notu*. Unpublished report.

Van Rooijen, M. (2000). "Open Space, Urban Planning and the Evolution of the Green City". In R. Freestone (Ed.). *Urban Planning in a Changing World: The Twentieth Century Experience*. London, New York: E&FN Spon.

Vardar, A. (1989). "Başkent'in İlk Planları". *Planlama*, 89, 2-3-4, pp. 38-50.

Whitehand, J. W. R. & Whitehand, S. M. (1984). "The physical fabric of town centres: the agents of change". *Transactions of the Institute of British Geographers,* New Series, 9:2, pp. 231-247.

Whitehand, J. W. R. (1977). "The basis for an historico-geographical theory of urban form". *Transactions of the Institute of British Geographers*, New Series 2, 3, pp. 400-416.

Whitehand, J. W. R. (1992). "Recent Advances in Urban Morphology". *Urban Studies,* 29, 3-4, pp. 619-636.

Whitehand, J. W. R. (1992). *The Making of the Urban Landscape*. Oxford: Basil Blackwell.

Whitehand, J. W. R. (2007, June). *Conzenian Urban Morphology and Urban Landscapes*. Paper presented at the 6th International Space Syntax Symposium, İstanbul: I.T.U. Faculty of Architecture, http://www.spacesyntaxistanbul. itu.edu.tr, accessed 20.06.2008.

Yavuz, F. (1952). *Ankara'nın İmarı ve Şehirciliğimiz*. Ankara: AÜSBF Yayınları No: 21-3.

Yavuz, F. (1966). "Ankara ve Şehirciliğimiz". *Mimarlık*, 37, 4, 11, pp. 43-45.

Yavuz, F. (1980). *Kentsel Topraklar: Ülkemizde ve Başka Ülkelerde*, Ankara: AÜSBF Yayınları.

APPENDIX A

INDEX AND REVIEW OF SELECTED JANSEN AND MUNICIPALITY LETTERS

Table A.1. Index of selected Jansen and Municipality letters

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
1	Belediye		07/07/1929	1488	Himayei Etfal Cemiyeti, oyun ve jimnastik ekipmanı içeren bir çocuk bahçesi yapmak istiyor, bunun için de Hacettpe'yi uygun buluyormuş.		Ekte parkın kurulması uygun bulunulan alanı gösteren kroki varmış.
2	Jansen		15/02/1930		Kız Lisesi yer seçimi: Lozan Meydanı'ndan İncesu'ya doğru giden yeşil yolun İncesu ucunu teklif ediyor. Genişlemeye ve okul için spor sahaları yapmaya elverişli olduğuna işaret ediyor.		2604 nolu plan

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
3	Jansen		23/02/1930	396	Lozan Meydanı'nın düzenlenmesi		2603 nolu plan
4	Jansen	12(?)	14/04/1930		P1020029 sonunda Kız Lisesi'ne giden yeşil yol ile ilgili bilgi.		
5	Jansen	19	08/05/1930	1128.A	8. Lozan M.-Kız Lisesi arası yeşil yolun hafif yer değiştirmesi... 13. Yeşil alan düzenleme sınırı içinde kalan bir binaya dair ve genel olarak yeşil alanlarda inşaat yasağına dair kısa bilgi. 14. Önemli madde. Hamur kanunu çıkarılmasını öneriyor.		2562 ve 2670 nolu plan 7 tane kız lisesi planı
6	Belediye		03/06/1930		Su Deposu/Kocatepe'dei bazı parsellerin hamur işlemi		P1000982-83
7	Belediye		21/06/1930	1489	2. maddede Cebeci tarafında yeşil alan içine Halk Fırkası şubesi yapılması.	24.05.1930/23 nolu mektup	3L numaralı plan
8	Belediye		05/07/1930	1490	Sağnak yağmurlar yüzünden Dikmen caddesinden akan sular Kızılay binasının bodrum katını basmış, yüksekliği kimi yerde 50 santimetreyi bulan sel gelmiş. Dikmen ve Mustafa Kemal Paşa caddeleri dere halini almış.		

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
10	Jansen	30	12/08/1930	1809	Himayei Etfal Cemiyetinin Hacettepe'ye oyun bahçesi yapmasına itirazım yok, ama tepenin kamusal yeşil olarak kalmasına engel olmadıkça.	1487 nolu mektup	2723 ve 2724 nolu planlar
11	Belediye		27/09/1930	2020.A	Hacettepe'ye Himaei Etfal'in yapmakistediği çocuk bahçesi teklifi.		
12	Jansen	32	11/10/1930		Eski Şehir'deki yeşil yollara dair kısa bilgi	1734 nolu mektup	2746 nolu plan
13	Jansen	33	29/10/1930		Mustafa Kemal Paşa Cad. Profili. Ortada 15 m genişliğinde promenad, ileride tranvaya terk edilebilir. Sağlık Bakanlığı önünde İncesu'nun kanalı 10 metre genişlik, 2 metre derinlide. İncesu'nun mecrasına dair bilgi var.	1733 nolu mektup	2754 nolu 1/2000 ölçekli plan
14	Jansen	67	02/03/1932	316e	Cebeci'deki yeşil yollar ile ilgili değişiklik talebi ve Jansen'in cevabı var.	27.02.1932 /233.C	2985 nolu plan
15	Belediye		16/03/1932	125	Kavaklıdere'de Ahsaf/Asaf Bey'in arazisi yola ve yeşil alana denk geliyormuş. İstimlak bedeli çok yüksek, planla ilgili "mütalaa" lütfen.		2996 nolu S-5B planı
16	Belediye		16/03/1932	325.C	Çocuk parkı tesisatına ait 462 ve 468 nolu planları inceleyip		462 ve 468 nolu planlar

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
17	Belediye		15/05/1932	653.C/129	Sonunda Asaf Bey arsası ile ilgili çözüm. Jansen Nisan 09/04/1932de Ankara'da iken çözmüş.		5.B nolu pafta
18	Belediye		16/06/1932	886.E	Daha önce gönderilen planlar ile daha sonraki planlar arasında uyuşmazlıklar var. Bahriye Cad üzerindeki yeşil yolun güzergahı değişmiş. İsmet Paşa Tepesi ve etrafı önceden inşaat sahası iken şimdi yeşil saha olmu. Akaretler sokağı ile Sıhhiye sokağı arasındaki yeşil yol eğim ve civardaki yapılaşma yüzünden bina yapılması yasak bahçe olması uygun görülmüş.	30.05.1932/79 ve 03.06.1932/80 numaralı mektuplar	
19	Jansen	84	19/07/1932	1301(g/c?)	b, e, f, m yeşil yollarla ilgili maddeler	05.07,1932/1062.C	3086, 3087 nolu planlar ve 3 kopya özel plan
20	Belediye		11/08/1932	1539.E	2. madde İsmetpaşa Tepesi'ni içine alan yeşil alanın sınırları ile ilgili, 3. madde ise Cumhuriyet Bahçesi sınırları ile ilgili, 10. madde de August mabedinin"musadif" kısmında 1/4000lik planda görülen yeşil alan, 1/2000lik planda yok, hangisi doğru?		Hacı Bayram, Tabakhane ve İsmet Paşa mahallerini içeren 1/500lük plan
21	Belediye		22/09/1932	1810.C	6. Yenişehir'de Mimar Kemalettin Mektebi önünden geçen yeşil yol 2 ayrı planda farklı farklı gösterilmiş. Görüş soruluyor.		2652 nolu 1/20000lik plan ve bir başka 1/20000lik plan parçası

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
22	Jansen		28/09/1932	1858C	Adakale Akaretler caddesindeki yeşil yolun tasfiyesine itiraz	24.06.1932 tarihli tezkere	
23	Belediye		22/10/1932		22/10/1932 tarihinde Jansen'e sorulanlardan: 6. Lozan Meydanı'ndan MühendisFırat Bey'in evi önünden geçen yeşil yol 504 nolu plan gibi yapılıp bahçe duvarları yerlerinde tutulmalıdır.		
24	Belediye		08/12/1932	2225.E	1/4000,1/2000ve 1/500lük planlar teslim edilmiş ve uygulamada sıkıntı çekmemek için değişmesi veya eklenmesi istenen şeyler: 18. 1/2000 ölçekli 3115 nolu planda 4800,5000 ve 6500,6700 koordinatlarındaki yer eskiden “top endah mahalli bulunan” yere çocuk bahçesi yapmak istiyoruz. Buraya ulaşan bir yol da çizdik kırmızı ile. 27. Aynı planda 4400, 4600 ve 7100 koordinatlarındaki İnönü Mektebi'nin yanındaki arazi şahıs mülkiyetinde olduğundan istimlak edilmesi gerekeceğinden, okul sınırından sonra inşaat için boş alan bırakıp yeşil olarak gösterdik. 40. İzmir Caddesi'nde sokak boyunda bırakılan yeşil bantı emlak sahipleri bahçelerine katmak istiyorlar, görüş bildirin.		

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
25	Jansen	97	12/01/1933		Stadyum ve spor alanları ile ilgili	02.01.1932 tarihli mektup	3150 ve 3151 nolu planlar
26	Belediye		02/02/1933	160.D	Madde 18: Çocuk bahçesi için 1/500lük plan yapılıyor, bittiği zaman gönderedeğiz. 27'ye bak?37. Garbdaki caddenin umumi/kamusal olarak kalması uygun. 44. maddede Jansen'den gelmiş 1/2000 ölçekli pazar yeri belirlenmiş yerlerin listesi v ar. Biri "Yenişehirde İncesu kenarı", acaba Kurtuluş pazarı olabilir mi Abdi İpekçi Parkı yanındaki?		
27	Belediye		08/02/1933	168.D	Eskişehir'le Yenişehir arasında ve Bomonti civarında yatılı (Leyli?) bir kız bir erkek lisesi bir de "nihari" ortaokul binası yapılacaktır. Yer gösterir misiniz?		
28	Belediye		02/03/1933	311.D	Cebeci'de 1/200 planda 4000/4200 ve 8000/8300 koordinatlarındaki dere yağmur zamanlarında sele yol açıyor. Belirtilen ada parsel taksimatında kanalizasyon geçirmek için 6 metrelikyeşil yol bırakacağız, görüşünüz.		
29	Jansen	103	15/03/1933	432-?	İncesu, Kavaklıdere ve yeşil yollar ile ilgili	02.03.1933 tarihli, 311.D numaralı mektuba cevap	

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
30	Belediye		17/04/1933	624.D	3115 nolu planda 6500-6700 ve 4800-4950 koordinatındaki yere çocuk bahçesi yapılmasına karar verilmişken, valilik oraya ilkokul yapmaya karar veriyor. Fikir soruluyor.		3115 nolu plan
31	Belediye		26/04/1933	694.D	Cebeci'deki derenin (?İncesu'nun) sele yol açmaması için kanalizasyona alınması ve güzergahı meselesi, Atıf Bey mahallesindeki yeşil saha içinde mevcut binalar kaldığı için sınırı tedil edilmeli, 1931de yapılan 2704 nolu planda tanzim edilen Cebeci'deki kimi parseller bugün onanmış planda yeşil alan içinde kalmaktadır ve sahibi bina yapmak istiyor. Bunlar hakkında mütalaalarınızı...	16.03.193 3/103 nolu mektup (Bu mektup ile 3115, 3.B, 3173, 3156, 3174 nolu planlar alınmış)	Ekli giden planlar var ama numara belirtilmemiş.
32	Jansen	109	10/05/1933	815	Stadyum, yeşil yollar ve Atıf Bey mahallesindeki 943 rakımlı tepedeki yeşil alanlar hakkında	26.04.193 3/694,D 08.12.193 2/2225.C	
33	Jansen	124	12/08/1933	1792	4. Atıf Bey 943 rakımlı tepe ile ilgili, 8. yeşil saha, 6. Çıkmaz sokaklarla ilgili,	22.07.193 3/1455.D	3252, 3253, 3254 nolu planlar
34	Belediye		27/11/1933	2608.D	Hacettepe'de ilkolkul yapılması istendiğinden, Jansen'den 826 nolu planda B ile göseterilen kısımda uygun yeri işaretlemesi isteniyor.		
35	Jansen	132		2880.D	Hacettepe'de okul yapılması projesine karşı	27.11.193 3/2608.D	3167

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
36	Jansen	743.I	15/03/1934	220.D/21	Gençlik Parkı hakkında	20.02.1934 tarihli mukavelename teklifi	3350 nolu plan (3351 nolu plan daha sonra gelecekmiş)
37	Jansen	795.E / 07/04/1934	19/03/1934		Gençlik Parkı hakkında açıklama ve uygulama planı (3350 ve 3351 nolu planlara sonradan ek)		
38	Jansen		21/03/1934	172.F	Ankara'nın Ürbanistlik Cihetinden İnkişafında Hava Korunması Şartları: Yeşil alanların ve yeşil yolların hava saldırılarında ve yangınlardan korunmadaki rolleri ve önemi anlatılıyor 1. sayfanın sonu 2. sayfanın başında.		
39	Belediye				1934 Nisan'ında Jansen Ankara'dayken ona sorulanların listesi: 4. Küçük bahçelerin kiralanması nasıl olacak, kimin sorumluluğunda olacaklar? 7. Okulların etrafındaki yeşil alanlar kimin malı olacak? Arsa sınırları yaya yolları olacak mı? 8. Kamusal yeşil yolların bitişleri (makta'ı) nasıl olacak? Arsa sınırlarında yaya yolları olacak mı?		
40	Jansen		15/04/1934	881.E	Nisan 1934 sorularının cevapları: 4. Cevap yok 7. Bu yeşil alanlar kamuya da açık olabilir ama kullanım için öncelik “mektepten çıkanların idman cemiyetleri”nde olmalıdır. 8. (Burada 9.soru ve cevap) Yeşil yollar bahçeler gibi ele alınmalı. Yeşil yollarda ağaç dikimine/bitkilendirmeye (garsiyat) dair teklifler hazırlayacağım. Yeşil yol bir başka yola komşuluk ediyorsa yaya yolu yapmak gereksizdir.		

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
41	Jansen		10/06/1934	1697.E	7. Hacettepe'den humuslu toprağın taşınmasını yasaklayan levhalar konulmalı, tepeye seyrek ağaç dikilmesine çalışılmalı.15. Küçük bahçeler sahasında barakalar hariç yapı yasağı konmalı. Yerinde inceleme yaptıktan sonra ulaşım ve gezinti yolları teklifi yapılacak.		
42	Belediye		09/10/1934	2674.E	Prof.Jansen'le görüşülecek şeyler: 8. yeşil yol profilleri 15,04,1934'de Jansen bildirmis, 10. Küçük bahçeler bölgesinde inşaat durumu ne olacak?, 22. Gazi Bulvarı 1036 no.lu adada yeşil alan tadil (Toygarzade Naşit Bey arsası), 23. Gazi Bulvarı'nda Sağlık Bakanlığı önünde yeşil alan sınırı tayini (Eskş. Mebusu Emin Bey'in yeri), 32. Samanpazarı bahçesinin güneyindeki yeşil yolun durumu, 33. Lozan Meydanı'ndan doğuya giden yolun durumu.		
43	Belediye		17/10/1934		Prof.Jansen'le görüşülecek işler hakkında protokol: 1. Ortaokul yeri seçimi, 11,10,1934/1889 nolu plan, 8. Yeşil yol genel manzara ve profilleri 10,10,1934/1898 nolu plan, 10. Küçük b. sahasında inşaat durumuna cevap, 22. Toygarzade Raşit/Naşit Bey arsası için 13,10,1934/1901 nolu pafta, 23. Emin Bey arsası için 13,10,1934/1899 nolu pafta, 32. Saman pazarının güneyindeki yeşil yol için 12,10,1934/1910 ve 17,10,1934/1911 nolu paftalar, 33. Lozan meydanındna doğuya giden yol için 17,10,1934/1903 nolu pafta.	09.10.1934/2674.E	
44	Belediye		23/10/1934	2827.E	16. Madde Dikmen ve İncesu'dan gelen sellere tedbir alınması için fikir soruyor Jansen'e.		

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
45	Jansen		03/11/1934	1661.E ye ek	Gönderilen profillerin numara listesi		
46	Belediye		18/12/1934	3369.E	Benzin satış ve araç muayene istasyonlarına yerlerine özellikle de park köşeleri gibi kamu/belediye mülkiyetindeki alanlardan yer gösterilmesi ricası.		
47	Jansen	168	09/01/1935	99.F	Benzin depoları problemini taksi ve otobüs durakları problemi ile çözeceğim. 2827.E nolu mektubun 10.maddesine bakınız.	3369.E	
48	Jansen	173	14/01/1935	147.F	Yozgat Meb'usu'nun verdiği çocuk bahçesi yapılacak sahanın krokisiyle ilgili.		Orijinal kroki
49	Belediye		21/01/1935	99.F	Biri Yenişehir'de biri Eskişehir'de olmak üzere 2 benzin istasyonu ve araç bakım istasyonuna acil ihtiyaç var. Birisi için Samanpazarı'nda, diğeri için de Gazi Bulvarı üzerindeki İncesu köprüsü, Sağlık Bakanlığı ve Ordu Evi arasında bir yer ayrılabilir mi?	09.01.1935/168 nolu mektup	
50	Belediye		26/01/1935	147.F	Çocuk bahçesi yapılacak yerin tarifi. Orada oturanlar istemiş çocuk bahçesi yapılmasını.	14.01.1935/173 no lu mektup	
51	Nafia V.	195/12732	13/02/1935	461.F/527.F	Bentderesi'ndeki eski Roma bendi h. Jansen'in Bentderesi'nin suyunun kalitesi ileilgili sorularına cevap: Kalitesiz, kirli, tortulu ve plaja ve havuza uygun değil.	26.01.1935/265 nolu mektup	

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
52	Belediye		27/02/1935	673.F	Jansen'in Ankara'da cevaplaması istenen sorular: 9. Emniyet Anıtı etrafının bitkisel düzenlemesinin kesinleşmesi, 14. Yozgat Meb'usunun ilettiği çocuk bahçesi meselesinin çözülmesi, 18.soru 1935 yılı içinde bitirlmesi istenen işleri kapsıyor: t.Erkek Lisesi ile Hacettepe arasındaki alan.		
53	Belediye		26/03/1935	673.F	Mart 1935'de Prof. Jansen ile Ankara'da konuşulan ve yapılan işler ile ilgili protokol: 9. Güven Park'ın bitkilendirilmesi ile ilgili (3506 ve 3507 nolu planlar).		
54	Jansen	209	16/05/1935	1932.F	Benzin satış yerleri, taksi durağı yer seçimi: Ankara'da 3509 nolu planla sorun çözülmüş.	1785.F nolu mektup	
55	Jansen	221	22/07/1935	2770.F	Çubuk Barajı'nın alt kısmına yapılması düşünülen bahçelerle ilgili.		
56	Belediye		14/10/1935	3847.F	Hacettepe'ye Mimar Sinan Anıtı dikilmesi ile ilgili fikrin ilk olrtaya çıktığı ve Belediye'den acele yollanan mektup.		
57	Jansen	244	18/10/1935	4116.F	Jansen'in Hacettepe'ye Mimar Sinan anıtı dikilmesi ile ilgili fikirleri	14.10.1935/3847.F	
58	Jansen	244	18/10/1935	4116.F	Jansen'in Hacettepe'ye Mimar Sinan anıtı dikilmesi ile ilgili fikirleri ve teklifleri	14.10.1935/3847.F	3680 nolu 1/500lük plan (?3545/A?)

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
59	Jansen	248	23/11/1935	4504.F	Çankırı caddesinin sonundaki bölge planı		3698 nolu plan
60	Belediye		30/11/1935	4634	Hacettepe'ye Mimar Sinan Anıtı dikilmeyecek ama ağaçlandırma ile ilgili bilgi yollanması isteniyor.	18.10.1935/244 nolu mektup	
61	Belediye		12/12/1935		Ekim-Aralık 1935'de Jansen'in Ankara'da bulunduğu sırada yapılan işlere ait protokol: 4. Hacettepe'nin ağaçlandırılması 1/1000lik 3732 nolu plan,		
62	Jansen	249	08/01/1936	368.G/533.G ?	Hacettepe'de ağaçlandırması ile ilgili Ankara'da çizilen planla ilgili		
63	Jansen	255	27/01/1936	599.G	Kamutay ile küçük bahçeler sahası arasındaki mahalle planı		3710 nolu plan
64	Jansen	266	07/03/1936	1590.G	Yeşil alan sistemi ile işgili geniş açıklama.		1/10000 nolu Ankara civar planı
65	Jansen	267	14/03/1936	1903.G	Amele Mahallesi ve çevresi ile ilgili bilgi		3804 ve 3805 nolu planlar

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
66	Jansen		27/03/1936		Yenişehircilik kanunu ve ilgili diğer yazılarını bütünleyen bir rapor: Yol kesişimlerinde parsel büyüklüğü ile ortaya üçgen yeşil alan çıkmasının kaynağı var. Aynı sayfada Madde F: yeşil alan ölçüleri 10m.den az olmamalı, 25-30m iyi.Madde H: Yol profilleri ile ilgili. Ağaçlandırma ile ilgili bilgi. Kamusal alanların miktarı ile ilgili fikirler.		
67	Jansen		30/04/1936		Ankara Üniversite sahasına ait proje hakkında izahat raporu		
68	Jansen		30/04/1936		Ankara Üniversite sahasına ait proje hakkında izahat raporu: Hacettepe'den Kurtuluş'a yeşil alan.		
69	Belediye		14/05/1936	2753.G	Necatibey Cad. Tadili	22.04.1936/2383.G nolu mektup	3077/A nolu plan
70	Belediye		29/05/1936	1590.G	1/10000lik Ankara planı ile ilgili İmar İdare Heyeti Raporu	07.03.1936/266/1590.G nolu mektup	
71	İmar İdare Heyeti		29/05/1936	2647.G	İİH Karar no:119: Madde 3, üniversite parkı ve spor sahaları ile ilgili uygulanamama gerekçesi.		3086/IV.9 ve 3087/III sayılı tekliflerden bahsediliyor
72	Jansen	275	16/07/1936	3813.G	Necati Bey Cad. Tadili, yeşil sahalara dokunmadan	14.05.1936/2753.G	3902 nolu plan

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
73	Belediye		14/08/1936	4019.G	Golf sahasının ilgili planlara aktarılması		3344 nolu plan
74	Jansen	282	26/08/1936	4306.G	Golf sahasını civar planına geçireceğim, ama şeklini basitleştirerek.	14.08.1936/4019.G nolu mektup	
75	Jansen	285	01/09/1936	4414.G	Civar planına ait bir detay planı ve yeşil sahalarla ilgili açıklama		3934 nolu plan
76	Jansen	293	30/09/1936	4747.G	No.3 3955 nolu planda Necatibey'in güneybatısındaki tadilat ve imar bilgisi var	4567.G nolu mektup	
77	Belediye		07/10/1936	4306.C	Golf sahasının planlara amaözellikle 1/5000lik 3390nolu plana doğru geçirilmesi.	24.08.1936/282 nolu mektup	
78	Jansen	294		5185.G	Golf sahasını civar planına geçireceğim, ama şeklini basitleştirerek.	07.10.1936/4306.G/C?	
79	Jansen	298	27/10/1936	5188.G	1036 ada ile ilgili		
80	Jansen	302	16/11/1936	5476.G	Halk Partisi binası için demiryolunun güneyindeki otobüs garajlarının yerine, sıhhat müzesinin önündeki meydana öneriyor. Daha önce de 3951 ve 3952 nolu planlarla yer önermiş.		

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
81	Jansen	310	12/12/1936	5709.G	Hamamönü mahallesi ile ilgili. AMA 3967 nolu planda yeşil alanlar bağlantıları var Eskişehir ile Cebeci arasında.		3973 nolu plan
82	Belediye		25/01/1937	208.H	Cebeci'de yüksek okul bölgesinde uygulama ve yeşil yol güzergah teklifi vs.		3650/IX nolu plan
83	Belediye		20/03/1937	791.H	Genel Kurmay'ın sorduğu sorular: C. ve D önemli.		
84	Jansen	330		1407.H	Genel Kurmay'ın sorularına cevap. C'ye verilen cevap hava saldırısı durumunda faydalı olacak yeşil alanlar ve yeşil yolların yeterli olduğu ve uygulandığı belirtiliyor. D maddesinde sel tehlikesineaçık yerlere konut koymadığını söylüyor, baharda sel alan yerin kendisinden önce iskana açılmış Yenişehir kısmı olduğunu söylüyor.	20.03.1937/791.H	
85	Jansen		08/06/1937	2666.H	Yüksek okul mah hakkında yeni teklif. 1935 Nisanında verdiği teklif uygun olmayınca bunu veriyor.		4047 nolu plan
86	Belediye		10/07/1937		Ortadan itibaren Jansen'in şikayet ettiği Ankara'da yolunda gitmeyen imar işlerine Jansen'in kendisine gelen bireysel başvurulara cevap vermesinin de yol açtığını öğreniyoruz.	17.06.1937 tarihli mektup	
87	Jansen	9	23/07/1937	3351.H	Belediye Başkanı Tandoğan'a yüksek okul mahallesi ile ilgili bilgi veriyor.	20.07.1937/649.H ve 29.06.1937 no ve tarihli mektuplar	4047 nolu plan

(Table A.1 continued)

Code	Letter from	Letter No.	Date	Document No.	Subject	Reply to	Appendices
88	Jansen	20	06/09/1937	3992.H	Numune Hastahanesi'nin yanına yeni hastahane binasının yeri ve yüksekliğini soruyor.		
89	Jansen	24	29/09/1937	4288.H	Hamamönünde yapılmak istenen okul binasının yer seçimine itiraz	21.09.1937/4086.H nolu mektup	3967nolu plan
90	Jansen	28	27/10/1937	4553.H	Üniversite sahası ile ilgili genel ilkelerin özeti.		4113 nolu plan
91	Jansen	32	20/12/1937	5305.H	Hamamönü'nde yapılmak istenen okulun yer seçimine itirazı kabul edilmiyor, Jansen de istenen alan için bir proje yolluyor.	20.11.1937/4288 nolu mektup	4131 nolu plan
92	Jansen	42	20/04/1938	2012.İ	Prof. Dr. Hüseyin Avni Göktürk'ün isteğinin reddi ve belediyeden çözüm isteği.		dscf7193, Avni Göktürk'e verilen 20/04/1938 tarihli cevap mektubu.
93	Jansen	47	20/06/1938	3293.İ	4180 ve 4182 nolu planlarda yeşil yol ve alan profillerinin açıklamaları var.		4178, 4180, 4182 nolu planlar
94	Jansen	(508.J?)		(508.J?)	Tıp Fakültesi planı için 3865 numaralı ve 10/04/1936 tarihli Yüksek Okullar Mahallesi planına da bakın diyor.	17.12.1938/6708.İ nolu mektuptan Fen Şubesi'nin 14. sorusuna cevap.	4233 nolu plan
95	Jansen	11 (?)			2. Müsteşar Kemal Beyefendi'nin arsasının Su Deposu'nda yeşil alanda kalmasına dair...		2642 nolu plan

Date: 11.10.1930
No: 32
Abstract: Short information about the greenways in the Old City

Jansen says that the roads, depicted as green in the plan, are designed for pedestrian use only.

Date: 19.07.1932
No: 84 / /1301 (G?/C?)
Abstract: In articles b, e, f and m, Jansen is answering questions related with problems that arose during preparation of plans.

Article e: The greenway having a width of 25 meters and leading to the Castle from the Opera should be kept free from development and be kept free from vehicular transportation.

Article f: The greenways should at all times be used for pedestrian circulation and never for vehicular transportation.

Date: 02.03.1933
No: 311.D
Abstract: The director of the Development Directorate proposes designation of a 6 meter wide greenway in Cebeci, in order to build drainage ("kanalizasyon ameliyatını kolaylaştırmak için") since this stream is prone to flooding and asks Jansen his opinion on this matter.

Date: 15.03.1933
No: 103 / 432-?
Abstract: Jansen accepts and advises application of the same drainage system that has been used at İncesu and Kavaklıdere, and that 6 meters width is enough and extending the greenway to the market and limiting its use for pedestrians only.

Date: 21.03.1934
No: 172.F
Abstract: Ankara'nın Ürbanistlik Cihetinden İnkişafında Hava Korunması Şartları

Protection from air raids and the general plan (of Ankara)
3. The measures that can be taken for protection from air raids are integrated into the plan. The housing is dispersed rather than concentrated in plan of Ankara. The extensive green network that contains the housing areas in the plan has gained importance from the point of air raid protection ("hava korunması"), other than health issues: The residential premises of Ankara are divided into districts as Yenişehir,

Cebeci, Amele Mahallesi and Old City. Little gardens, sports fields and narrows greenways further divide these rather large housing areas into smaller quarters (check plan number 3063). Consequently, fire would be effective only in that quarter, unless put out. The importance of the (interconnected) green network from the point of air raid protection necessitates implementation of the structure as demonstrated in the plan. The green corridors in Old City that provide the view to the Castle are important from the same point. This type of division also provides air movement that would protect the high density housing areas at times of gas bomb attacks, and limits the fire as well.
It is mandatory to keep the density low at the new development areas.

Date: -
No: -
Abstract: The list of questions asked to Jansen when he was in Ankara in April 1934

4. How will the little gardens be rented? Under whose supervision will they be?
7. To whom will the green spaces around the schools will belong to? Will these gardens be open to public?
8. How will the section/profile (*makta'*) of the public greenways be? Will there be pedestrian ways at the borders of the greenways?

http://www.osmanlicaturkce.com/?k=Makta&t=%40
Makta'

- Kesilen yer, kat'edilen yer, kesinti yeri.
- Uzun bir cismin enliğine kesildiği yerin görünüşü.
- Edb: Her manzumenin, hususen gazellerin ve kasidelerin ilk beytine matla', son beytine makta' denir; makta'da şâirin ismi bulunur.

Date: 15.04.1934
No: 881.E
Abstract: Jansen's answers to the above questions

4. Jansen has not given any answers to the 4th question, or even if he has given an answer, it is not recorded.
7. These green spaces can be open to the public, but the sports clubs of the schools should have the priority to use these green spaces.
9. (Q8 is answered at the 9th place) Greenways should be conceived, designed and allotted as gardens. I will prepare proposals for forestation/planting ("garsiyat") of the greenways. If there is another road along the border of the greenway, there is no need of building a pedestrian way.

Date: 07.03.1936
No: 266 / 1590.G
Abstract: Detailed explanation of green space system

Land use decisions:

1. Old city
2. Inner development area (İç tevsi sahası): Yenişehir, Cebeci and Kooperatif Mahallesi. Parcels of 600-1000 sqm. reserved for housing.
3. Outer development area (Dış tevsi sahası): Between Yenişehir and Çankaya. Parcels of 1000 sqm. reserved for villas.
4. Important gardens area: The outer parts of Çankaya, Dikmen, Etlik, Keçiören and the south of Mamak. These gardens are composed of vineyards and fruit gardens and buildings in summer residence style should be allowed.
5. The stream beds and their valleys are used for vegetable farming and development is prohibited at all costs.
6. Industry zone
7. The periphery of the city is left free from development and is used for grazing and agriculture.

The green space network is expanded by the green spaces surrounding the important gardens zone. These green spaces are either valleys or "promenade greens" (*temaşa yolu yeşilleri*). "Promenade greens" are either new or existing, tree lined/wooded roads having building prohibition on each side in a buffer of 30 meters in order to provide the character. Promenade greens connect the open spaces at the hill tops.

Date: 27.03.1936
No: -
Abstract: Yeni şehircilik kanunu ve ilgili diğer yazılarını bütünleyen bir rapor: dscf6995'de yol kesişimlerinde parsel büyüklüğü ile ortaya üçgen yeşil alan çıkmasının kaynağı var. Aynı sayfada Madde F: yeşil alan ölçüleri 10m.den az olmamalı, 25-30m iyi.Madde H: Yol profilleri ile ilgili. 6998 başı ağaçlandırma ile ilgili. 6999 kamusal alanların miktarı ile ilgili fikirler.

This report is mainly about Jansen's consideraitons on the "Yeni Şehircilik Kanunu" (dated 17/06/1933, which is probably Belediye Yapı ve Yollar Yasası No. 2920).

On the 2nd page of this report, Jansen warns that, separating the industrial zones and the housing with green spaces is one of the most important duties of a "urbanistlikte mümareseli mütahassıs" (experienced urbanist/planner). He also states that implementation of the wrong decisions would be very costly or reversal of these wrong decisions (as too wide or too many roads) after the implementation is either impossible or very costly also.

On the 4th page, Jansen advises the size of the building parcel bordering the Y-junction should not be lesser than that there would (18-20 metre cepheli bir evin inşasına izin verecek boyutta olmalı, kavşağa kadar kalan

alan boş kalmalı). Green areas located at the "Sahillerde" should have a width greater than 10 meters in cities, and 25-30 meters outside the cities.

On the same page, at article H, Jansen expresses his thoughts on the street sections and says that the "profil" of the pedestrian roads are as important as the vehicular roads and separation (by means of sidewalks, as we understand from the figure) of pedestrian and vehicular traffic must be sought after, regarding the climatic conditions and the course/ trajectory of sun. Jansen proposes 1/1 ratio for vehicular/sidewalk design, which means designation of the roads and sidewalks with the same widths. The width of the sidewalk and road should be minimum 3,5-4,5 meters and 6,5-8,5 meters on an average. Jansen proposes planting of trees on every street, but if the width of the road is smaller than 6,5 meters the planting should be done on the front gardens of the houses.

On page 7, Jansen criticizes the new urban development law and says that the standards for open spaces (for new roads, public parks/gardens and public spaces) are not enough; exemplifying from the German development regulation that, %25-30 of Yenişehir would be needed for open spaces according to the German regulation.

He generalizes that it is the objective of modern urbanism to separate the 25% of the total urbanized area and use it for the rather costly roads and the other public areas and to allocate the most "mümkün olan en çok miktarı" for public open spaces ("umumi serbest sahalara"). Keeping the precious natural features, such as hills, sports fields, valleys, water basins, lakes, castles, groves, etc, free from development in the development plan is important since it costs less to expropriate.

Jansen clearly states that natural features cause increase in land values ("ehemmiyetli bir kıymet yükselişi") in cities.

From the points of hygiene and architecture, all buildings, not only in Ankara but in all of the cities in Anatolia, should be 2 storeys high and higher buildings should be allowed only along a few streets. Increasing of building height and spreading of cities must be prohibited.

Date: 01/09/1936
No: 285 / 4414.G

Abstract: Civar planına ait bir detay planı ve yeşil sahalarla ilgili açıklama

In order to curb the urban development at the south of Yenişehir from spreading, wide buffers of green have been used to separate the districts. These green buffers follow the valleys where development and road building is prohibited. This green network start from the south of the new government quarter and south east of the "Water Reservoir" (Su Deposu/Kocatepe) and is designated as an afforested park (orman parkı) since there are not any forests at hand around Yenişehir.

Date: 20/03/1937
No: 791.H

Abstract: Genelkurmay asks the Development Directorate several questions about the development plan of Ankara from the point of war time and bombardment security and defense. Head of the Directorate forwards these questions to Jansen asking for his opinions on these issues.

The articles A and B are related with the density of the Yenişehir settlement and width of the roads in and around Yenişehir and Turkish General Staff's concern about incidents that would occur with higher densities and narrower roads during an air raid. Lower the buildings, wider the roads, lower the densities=rapid fire and first aid accessibility, less casualties.

Article C. Building of rather large squares planted with trees at every district is advised for daily recreational use of the people at peace times, and as refuges from the air raids at war times.

Article D. It is seen that the development for housing is being made in on the beds of the streams and sloping grounds. These areas are under flood threat at peace time and under the threat of gas attacks at war time. Development should be banished at such sites and be placed at higher grounds.

Date:
330 / No: 1704.H

Abstract: Jansen's reply to the above letter

Article C. The green and open spaces are implemented and districts are separated from each other with green spaces. The greenways in the Old City area are important from the point of stopping the spreading of fire also.

Article D. Development at lower grounds are prohibited in my development plan. The only place that was flooded in spring had been built during the previous plan period before me and is the lowest part of Yenişehir.

Date: 20/06/1938
No: 47 / 3293.İ

Abstract: The profile of the greenways (plans numbered 4180 and 4182) and a descriptive report

Several drawings of profiles and plantation for greenways, ranging from 3 meters to 50 meters wide, are given in the plans. To provide shade to the users, the roads are placed at the south and south east of the narrow strips. At the wider strips, two roads are designed, one of which will be in the shade and the other one in the sun.

Bicycle paths are proposed through strips wider than 10 meters, but at places where slope permits use of bicycle. The bicycle paths lead up to where slope increases and disappear without any change of the profile.

Not only rows of trees but also groups of trees must be planted at strips wider than 25 meters.

Ample amount of seats must be placed at the strips.

The plan numbered 8182 show arranging the greenways with green squares. These green squares provide a beautiful site to place the houses around and the opportunity to cluster the houses. On the roads running east-west, the strips are placed parallel to the roads, on the south side of them. On the north side of the road square like spaces called residential courtyards are placed. As a result, every garden will be provided with the best orientation to sun. The courtyards are only open to pedestrian use, but would be used by the fire brigade when needed.

The cars of the residents will be parked at the public garage, in order to avoid building of private garages at varying styles and to maintain the tranquility of the house courtyards.

APPENDIX B

DEVELOPMENT EXECUTIVE COMMITTEE DECISIONS

These 4 prejudications were published in the Ankara City Development Guide (Ankara Şehri İmar Kılavuzu) dated 1946.

Decision no. 143
Date: 26/9/1941

30 metre genişliğindeki tulani (uzunlamasına) bir yeşil sahanın yeşil yol gibi telakki edilerek bu yeşilden cephe almak üzere parsel teşkil edilebileceği hakkında

İmar Müd.'nden 2319 L. sayılı 26/9/1941 tarihli yazı
1297 ada 3 parsel
1297 ile 1298 adalar arasındaki 30 metrelik yeşilin yeşil yol sayılması ve 1297 ve 1298 adaların buraya bakan parsellerinin buradan da cephe alması uygun görülmüş.

Decision no. 137
Date: 16/10/1942

45-50 metre genişliğindeki bir yeşil sahanın yeşil yol sayılamayacağı ve yeşil sahalardan cephe verilmemesi hakkında

İmar Md.den 3556 M. nolu 9/10/1942 tarihli yazı
1197 ada 5 parsel 110m derinlikde. Güney batısında 45-50 metre genişliğinde yeşil saha var. Burasının yeşil yol sayılıp bu ada parselin ikiye ifrazı ve "badema" yeşil sahalardan cephe verilmemesi.

Decision no. 152
Date: 4/12/1942

30 m. genişliğindeki bir yeşil sahanın yol addedilerek parsellere buradan cephe verilebileceği hakkında

İmar Md.den 4183 M. 27/11/1942 tarihli yazı, ilişik 8726 no.lu çap 1297 ada 2454m2 lik 7 nolu parselin ikiye ifraz talebi. Parselin bir tarafı yol bir tarafı 30 metrelik yeşil, burayı yeşil yol sayıp, 143 nolu 29/9/1941 tarihli kararla uyumlu bulup ifrazına izin veriyorlar.

Decision no. 168
Date: 14/12/1945

Yalnız bir yeşil yol veya yeşil sahadan başka cephesi bulunmayan arsalarda yapılacak binalara da diğer yollardaki binalar gibi garaj inşasına izin verilebileceğine dair

İmar Müd.den 3070 sayılı 14/12/1945 tarihli yazı
Maltepe'deki 1188 ada 23 parsel bina ve garaj yapmak istiyor. Garaja izin verilmeye çekinilmiş. İdare Heyeti izin veriyor. Gerekçe: Yeşil yollar genel trafik için olamsa da cenaze, vidanjör gibi (servis yolu) araçların geçişine izin verildiği ve bu arada bina sakinlerinin özel araçlarının girip çıkmasına uygun olmaları doğal olduğundan, yeşil sahadan cephe alan arsaların ilerideki yol ihtiyacı da düşünülerek garaja izin verilmesi sakıncasızdır.

APPENDIX C

INDEX OF PLAN MODIFICATIONS

Table C.1. List of major plan modifications

Major Plan Modifications	Modification Type
Bonatz Saraçoğlu section (5874, 22040)	Redevelopment
	Plan no. 22040, October 1954
Şehit Gönenç Street development	Splitting
	The oldest plan with Şehit Gönenç Street development is dated December 1953 plan no. 24691
Maltepe Mosque (24691)	Partitioning
	Maltepe Mosque: Plan no. 24691 Karar no. 725 Tarih 18.12.1953 Vekiller Heyeti Karar no. 4/2312 Tarih 18.1.1954
Ayla Street / Neyzen Tevfik Street development	Splitting
	Plan no. 27133 Karar no. 765 19.11.1954 Vekiller Heyeti'nin tasdiki Karar no. 4/4172 Tarih: 25.12.1954 Resmi Gazete ilanı 1.10.1955 ve 8173 sayı.
Gas station (31696)	Partitioning
	Gas station: Plan no: 31696, Karar no:983 3.8.1956 Vekiller Heyeti tastik Karar no 4/7949 tarih: 14.9.1956

(Table C.1 continued)

Major Plan Modifications	Modification Type
Turgut Reis Street development	Paring
Süleyman Bey Street development	Paring
	36490 ve 37970 nolu planlarda Süleyman Bey açılmış. Bu planlardan ilkinde (36490, Karar no. 255, tarih 11.04.1958) Süleyman Bey 12 metre genişliğinde ve parsellere göre zig zaglı gidiyor. Sonraki planda ise (37970, decision no. 614, date 28.8.1958) düzeltilmiş ve genişliği 14 metreye çıkartılmış, Plan no 61300'de de 17 metre (İmar ve İskan Bakanlığı Planlama ve İmar Gn.Md.Ş.D.Bşk. 24.6.1968 gün ve Pl. 060132615-6635 sayılı yazıları ile onanmıştır. İmar İdare Heyeti Kara no: 656 Tarih: 6.9.1968. 18.9.1968 gün ve 13004 sayılı Resmi Gazete).
	Süleyman Bey Plan no. 61300 Evrak no: R-4012/68 Dosya no: 1186-1 İmar ve İskan Bakanlığı Planlama ve İmar Gn.Md.Ş.D.Bşk. 24.6.1968 ve Pl. 060122615-6635 sayılı yazıları ile onanmıştır. İmar İdare Heyeti Karar no: 656, Tarih: 6.9.1968 Resmi Gazete ilan tarihi 18.9.1968 ve 13004 sayı.
	Eski planlar: 25965, 48350
Hürriyet Primary School Allocation (33230)	Partitioning
	Karar no.172 19.3.1957 Resmi Gazete'de ilanı 1.8.1957
MKE Kurumu İşçi Evleri (36490, 37970), 47250, Spor Tesisleri Alanı (62330) .	Partitioning
	MKE Kurumu İşçi Evleri Yapı Koperatifi, Plan no. 36490 and plan no. 37970, 1958
	Plan no. 62330 İmar ve İskan Bakanlığı P. Ve İmar Gn. Md. Ş.D.Bşk. 14.1.1970 tarih ve Pl. 060133116/418 sayılı yazıları ile onanmıştı. İmar İdare Heyeti Karar tarihi 23.1.1970, karar no: 44. Resmi gazete ilan tarihi 4.2.1970, sayı 13417.
	Müjde Sokak'ın Şehit Gönenç Sokağına bağlanması: Plan no. 47250 Modification 3: İmar İskan Bakanlığı Planlama ve İmar Gn. Müd. 15.02.1980 günü H-06-03-060133116/1379 sayılı yazıları ile onanan etüd gereğince gerekli düzeltmeler yapıldı. Dosya no:1241/15 Etüd arş. No: 71414 Karar no: 187 25.3.1980.

(Table C.1 continued)

Major Plan Modifications	Modification Type
Maltepe Pazar Yeri (44400)	Partitioning
	Plan no 44400: İmar ve İskan Bakanlığı'nın 6.8.1960 tarihli ve Planlama ve İmar Genel Müd. Ş.F.H. 4-113-3475-8260 sayılı yazılarıyla onanmıştır. Dosya no: 506 Karar no:734 11.11.1960. 2 Aralık 1960 tarihli 10670 sayılı Resmi Gazete'de ilan edilmiştir.

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Burat, Sinan
Nationality: Turkish (TC)
Date and Place of Birth: 19 March 1973, Ankara
Marital Status: Married
Phone: +90 312 210 62 46
email: burat@arch.metu.edu.tr

EDUCATION

Degree	Institution	Year of Graduation
MS	METU City and regional Planning	2000
BS	AUFA Landscape Architecture	1996
High School	Yükseliş College, Ankara	1991

WORK EXPERIENCE

Year	Place	Enrollment
2000-Present	METU Department of City and Regional Planning	Research Assistant
1995-1996	ARTI Mimarlık LTD. ŞTİ., Ankara	Landscape Architect

FOREIGN LANGUAGES

Advanced English

PUBLICATIONS

Burat, S., Erten, S. (2001) Ankara'nın "Obje"lerine bak, Gözlerimin Yaşına Bak! *Mimarlık*, *Year: 39, 301*, Ankara: Union of Chambers of Turkish Engineers and Architects, Chamber of Architects.

Erten, S., Çimen, D., Burat, S. (2005) Türkiye'de Kentsel Tasarım Proje Yarışmaları ve Disiplinlerarası Çalışmayı Öğrenme Süreci. *Planlama, 2005/3, 33*. Ankara: Union of Chambers of Turkish Engineers and Architects, Journal of the Chamber of City Planners.