ANALYSIS OF URBAN MORPHOLOGY IN SQUATTER TRANSFORMATION AREAS

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ABSTRACT

ANALYSIS OF URBAN MORPHOLOGY IN SQUATTER TRANSFORMATION AREAS

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The impacts and results of urban transformation have been discussed as an important issue in developing countries by different disciplines as political economy, urban design, city planning and urban sociology. Urban transformation projects in Turkey are mainly criticized since the main focus is about physical transformation. In this context, the aim of the study is to determine what quality of space is produced by urban transformation projects in Turkey. Urban transformation projects create a different scale, scope and content of space that the environmental and structural quality generally raises with respect to squatter settlements. Urban morphology deals with the spatial structure and character of an urban area by examining its patterns and the process of its development. Furthermore, it gives clues about the social space constructed in the physical space. Two main transformation models have been implemented to solve the squatter problem in Turkey as the large-scale redevelopment projects and the partial implementation plans. In this study, via urban morphology and urban design analysis tool, the quality of spaces created through urban transformation projects are investigated by analyzing and comparing transformed areas in Turkey with an existing squatter settlement which is Antakya, Bagriyanik district.

Keywords: Urban transformation, urban morphology, Antakya, Bağrıyanık District, Squatter settlements, Urban design

ÖZ

KENTSEL DÖNÜŞÜM ALANLARINDA KENT MORFOLOJİSİNİN İRDELENMESİ

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Gelişmekte olan ülkelerde kentsel dönüşümün etkileri ve sonuçları siyasal ekonomi, kentsel tasarım, kent planlama ve kent sosyolojisi gibi farklı disiplinlerde önemli bir olgu olarak tartışılmaktadır. Türkiye'de kentsel dönüşüm projelerine dair yapılan eleştiriler genel olarak projelerin fiziksel mekân dönüşümü odaklı olmasıdır. Bu bağlamda çalışmanın amacı Türkiye'de kentsel dönüşüm projeleri vasıtasıyla üretilen mekânların kalitesinin irdelenmesidir. Kentsel dönüşüm projeleri, gecekondu yerleşmelerinin çevresel ve yapısal kalitesini arttırmakla beraber daha farklı bir ölçek, kapsam ve mekânsal içerik yaratmaktadır. Kent morfolojisi doku ve gelişim süreçlerini irdeleyerek kentsel alanın mekânsal yapısı ve karakteriyle uğraşmaktadır. Ayrıca, fiziksel mekânda kurulan sosyal mekâna dair ipuçları vermektedir. Türkiye'nin gecekondulaşma ve çözüm sürecinde iki temel dönüşüm modeli görülmekte olup, bunlar geniş ölçekli kentsel dönüşüm projeleri ile parçacı yaklaşımı olan ıslah imar planlarıdır. Bu çalışmada kent morfolojisi ve kentsel tasarım araçları vasıtasıyla Türkiye'de kentsel dönüşüme uğramış alanlar ile Antakya Bağrıyanık örneğini içeren dönüşüme uğramamış alanların karşılaştırılması yoluyla kentsel dönüşüm projeleriyle üretilen mekân kalitesi irdelenmektedir.

Anahtar Kelimeler: *Kentsel dönüşüm, kent morfolojisi, Antakya, Bağrıyanık Bölgesi, Gecekondu alanları, Kentsel tasarım*

To 301 Mine Workers,

Died in Soma, Manisa, Turkey

13.05.2014

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I would like to express my deepest gratitude to my advisor, Assoc. Prof. Dr. Emine Yetişkul Şenbil, whose expertise, understanding, patience added considerably my graduate experience. The words cannot express my heartfelt gratitude, gratefulness for her priceless guidance and support in my life.

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CHAPTER 1

INTRODUCTION

"Dynamics of the economic structure and ever evolving activities, further highlighted by the mobility of social classes turns the city into an arena of conflicts. Under these circumstances the city produces and reproduces itself. Consequently there has always been a need for some kind of action by the related public agencies with reference to the regeneration or reproduction or transformation of the urban environment." (Günay, 2009)

Cities and their parts emerge, grow, decline and regenerate or die in a cyclical fashion since urban arena is always subject to change. Cities are formed with the agglomeration of specialized various uses. However, the major use having the highest share in land use of built environment is residential areas. The physical and social pattern of the residential quarters in cities reflects the wealth, status and culture of the city. The right to housing is codified as a human right in the Universal Declaration of Human Rights (HABITAT, 2000). Thus, the human right to access adequate housing is the right of everyone. However, affordability housing is limited in urban areas and public housing provision could not meet housing demand. Even though, one of the main missions of local and central governments is to plan urban development and provide housing for their citizens, unauthorized housing development is urgent when the authorized housing provision and the number of houses produced through legal processes are inadequate to meet the demands of urban citizens.

Urban redevelopment has deep roots that the famous burning of Rome on the night of July 18 (or 19) in AD 64 might be considered as an early example of "systematic slum clearance project" (Mumford, 1966, 255; cited in Günay, 2009). The role of redevelopment throughout the history can be explained as the re-creation of decayed parts of cities. In Turkey, like other developing and under-developed countries, squatter housing is an important problem. Turkey has been dealing with squatter problem since 1950s via different intervention approaches including clearance, redevelopment and legitimization. In fact, two models of transformation in squatter settlement areas have been implemented with a wide range of examples in last decades in Turkey as; transformation by improvement and redevelopment plans and transformation by large scale transformation projects.

Urban space can be understood in two dimensions as social space and built space. The social space can be identified as the spatial implication of social institutions while the built space or physical space can be defined as morphology, the way it affects our perceptions, the way it is used and the meanings it can elicit (Colquhoun, 1989, p. 223; cited in Madanipour, 2000). Madanipour (1996, p. 3) defines urban design as a socio-spatial process understood as an agglomeration of people, objects and events. He also identifies that environment cannot be perceived as unrelated collection of material objects; on the other hand, space cannot be only regarded as a container of social relations without a physical dimension. The squatter housing as a phenomenon and squatter housing transformation as a process of urban change both involves physical and social aspects of urban space.

1.1. Problem Statement

Squatter housing development is a widespread problem in many Third World Countries and in Turkey as well. The problem appeared especially due to the rapid urbanization in

metropolitan areas after the Second World War. Moreover, in Turkey the legalization of squatter settlements and transformation of these settlements have become the main urban development policies of the governments from the 1980s. Two main models have been implemented to solve the squatter problem in Turkey. Both models were developed with popular political approaches. The first one came true after the distribution of title deeds and approval of improvement plans, prepared according to law numbered 2981. Increase in the development rights of squatter areas brought the demolition and reconstruction in these areas. The first model aims to provide a rapid transformation of squatter areas by private contractors. After 1980s, 'transformation projects' appeared for renewal of these areas which could not be transformed by private market forces. This model involves organization and cooperation of stakeholders through public-private partnerships. One of the characteristics of the latter transformation model was the involvement of central and local governments in the processes as a profit. These self-financing projects generated surpluses that were also shared by local governments, private companies and squatter owners. On the other hand, by improvement plans, the rent was shared between the land owners and small contractors.

In the 2000s, the transformation projects were both accelerated and enlarged in scale. Moreover, the generated rents were increased by a more centralized approach mainly governed by Housing Development Administration. In 2012, the amnesty laws were replaced by a new law “Urban Transformation Law for Areas with Disaster Risk” numbered by 6306. The scope and scale of urban transformation were enlarged and the government intervention in urban development increased. Furthermore, squatter settlement areas located not only in the center of the cities but also in the periphery became subject to urban transformation projects.

Urban transformation processes are generally criticized that the projects have developed with a physical scope and the social, economic and cultural impacts of the projects have

not been discussed. Affordability in housing provision, displacement of lower income groups, social infrastructure provision and quality of life have not been on the agenda. Although, a group of literature focused on the urban policy dimension of the transformation projects, the research in analyzing the spatial results of the projects were limited.

Urban design is not confined to the investigation of urban physical space apart from social, cultural and economic dynamics. Madanipour (1996) explains urban design as a socio-spatial process understood as an agglomeration of people, objects and events (p. 3). Similarly urban Design Tas Force (2000) points out that the best way to promote successful and sustainable regeneration, is to think about urban design from the start of the planning and development process. Thus, whether the focus of the projects is physical or not, investigation and analyses of the morphological results of urban transformation may also be discussed. Moreover, what is replaced by those projects can be also evaluated. Since social and physical space of an urban area have an integrated relationship, the morphology erased and created are also issues of successful regeneration.

1.2. Hypothesis, Aim and Scope of the Study

Under the light of above mentioned points, the main question of the study is determined as; *"How the urban space has been transforming in the squatter settlement areas?"* According to this main research question, other sub-questions can be expressed, such as "*Urban transformation policies have generated better quality of urban spaces?", "How the social-space has changed through urban transformation projects?", "What kind of morphological features in urban transformation areas has been formed through improvement plans and large scale redevelopment projects".*

According to the main research question and the sub-questions, the hypothesis of the research is determined as "*Urban transformation processes in Turkey, do not create better quality of physical space with respect to urban design criteria".*

As mentioned in current literature, urban transformation processes in Turkey have not been developed with a focus of physical space changes. Thus, the major aim of this study is to test the hypothesis by comparing the urban forms of transformation projects with the form of squatter settlements. Both social and physical aspects are emphasized in the evaluation of urban morphology. Under the umbrella of the major aim, the study is integrated with the spatial and social evolution of two typical transformed areas and a squatter site in Turkey. Morphological features as well as urban design values of these cases are analyzed.

This research also aims to provide a table of criteria for the evaluation of urban transformation areas. This table covers the items related to social strengths and weaknesses of urban transformation projects as well as the morphological values including urban design elements. By this way, the success level of urban transformation projects in squatter settlements can be measured.

In this study, I concentrate on the transformation of residential areas since a significant portion of the building stock is composed of residential areas. Besides, practices in urban transformation in Turkey up until now are mostly the transformation of residential areas. In this respect, the study begins with a review of the main concepts of 'urban form'. The evolution of urban form through the development and evolution of cities, the elements creating or affecting the forms are discussed. In addition to urban morphology concepts, the role of urban morphology in urban regeneration is investigated. Then the squatter housing and its legal frame in Turkey, the tools to intervene into squatter problem are investigated. Then two examples of urban transformation projects are analyzed and the

main case study area, Antakya Bağrıyanık District which has not been subjected to development pressure or transformation regulation is examined in terms of morphological features. The conclusion covers the results, found by the comparison between the transformed and non-transformed areas.

1.3. Method and Data Resources

Case studies can be designed as a single example or multiple examples, where a multiple-case design follows a replication rather than sampling logic. Tellis (1997) assets that multiple cases strengthen the results by replicating the pattern-matching, thus it increases confidence in the robustness of the theory. In this study three cases are selected that two of them are control cases.

The first control case is the Dikmen Valley Urban Transformation Project. The project is selected as a control case due to two reasons. Firstly, all stages of the transformation project have not been completed so the non-transformed parts can be still visualized and observed. Secondly, the project is a well-known and typical example of large scale urban transformation projects in Turkey. The project is a model for private-public partnership, including social aims and public participation.

The second control case is the Şentepe Urban Transformation Project which is a typical example of urban transformation by improvement plans. The project is reliable as a control case since the complete transformation of the area has not been completed that the process of changes in terms of urban morphological elements can be easily visualized and observed. Furthermore, the project can be regarded as a typical example of urban transformation model conducted by small contractors on individual parcels via improvement plans. By control cases, the two major approaches dominate the urban development in Turkey. Models of urban transformation can be observed as large-scale

redevelopment schemes of public-private corporation and transformation by improvement plans via private sector.

Antakya, Bağrıyanık district, where development pressure is limited and urban regeneration project has not been developed recently, is selected as the main case study for this thesis. The case study is selected due to two main reasons. Firstly the area has characteristic features of squatter settlements in Turkey. Secondly, the area is free from development pressures since the property rights have not been gained by the inhabitants due to the status of the district. The district is located on 2-B land in addition to small lands of treasury and municipality. Thereby, the land is not subject to development and speculative gains. The use value of the squatters is maximized. Thus, the urban pattern created only due to choices and needs of inhabitants without regarding any economic benefits.

Table 1.1: Research Design of the Study

	Case Type	**Case Study Type**
Dikmen Valley Urban Transformation Project	Control Case	Multiple-Case
Şentepe Urban Transformation Project	Control Case	Multiple-Case
Antakya Bağrıyanık District	Main Case	Multiple-Case

Due to the empirical approach covered in terms of site analysis, the data resources used for in the study can be listed as;

- The redevelopment plans, projects, protocols and reports of transformation projects;
- Analyses, articles, theses,
- Satellite images,
- Direct observations.
- Physical artifacts

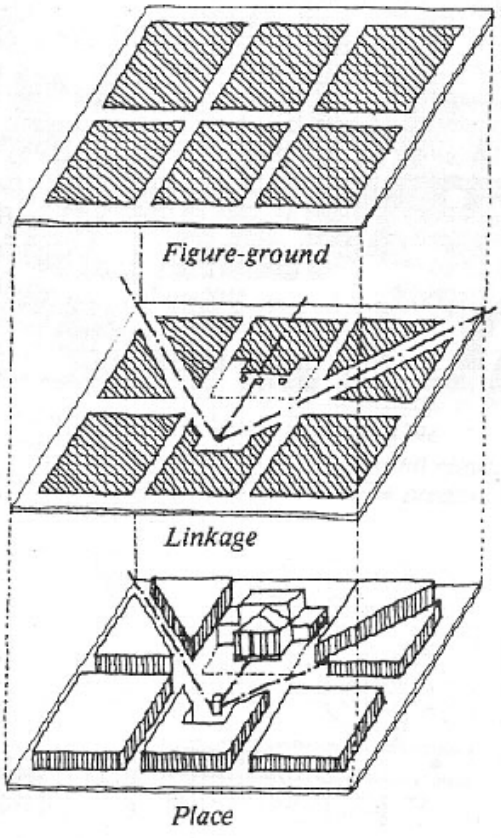


Figure 1.1: Diagram of Urban Design Theories (Source: Roger Trancik, 1986, p.98)

1.4. Structure of the Study

To answer the main question and related sub-questions, the research covers four main chapters. In the following chapter of the study, the description and content of urban form, its evolution by change in settlement needs and the factors shaping urban form are discussed. Furthermore, urban morphology theories are investigated, which provides us a basis for the case study analysis. At the end of this chapter, the effect of urban morphology on social space has been discussed.

In the third chapter of study, firstly the definition of squatter housing problem has been discussed under major approaches. Then the development processes of squatter housing in Turkey have been examined from the 1950s to present. The transformation policies towards squatter areas have been focused with a short review of the widely known negative social impacts. By narrowing down the study to Turkish case, the legal frame of urban transformation in squatter areas of Turkey is investigated.

In the fourth chapter of the study, the control case studies have been introduced. Firstly the general features of Dikmen Valley Urban Transformation Model which constitutes an example to large-scale urban transformation projects are explained. The aims, plans, stages, major strengths and weaknesses of the project are evaluated. Afterwards, the morphological analysis acquired from literature review is conducted for Dikmen Valley case study area. The general features, aims, and concept of Şentepe Urban Transformation Project which is an example of transformation areas, formed by implementation plans is discussed. Then, the morphological analysis of the case study areas is finalized.

In the fifth chapter of the study, the main case study has been evaluated as Antakya Bağrıyanık District. In this part of the study, firstly the main features of Antakya and historical evolution of the morphology of the city are discussed. Then, morphological typologies in Antakya are evaluated, including the case study area. The morphological

analysis of the urban transformation projects implemented in Antakya has been focused. At the end of this chapter, the morphological analysis of Bağrıyanık District including urban design values has been discussed.

In terms of data collection of the study, the redevelopment plans, projects, protocols and reports of transformation projects; analysis, articles, theses, satellite images, direct observations and physical artifacts are collected as a multi-aspect approach. In addition, as mentioned, multiple case study method is used in order to compare the morphology of transformed areas with squatter settlements.

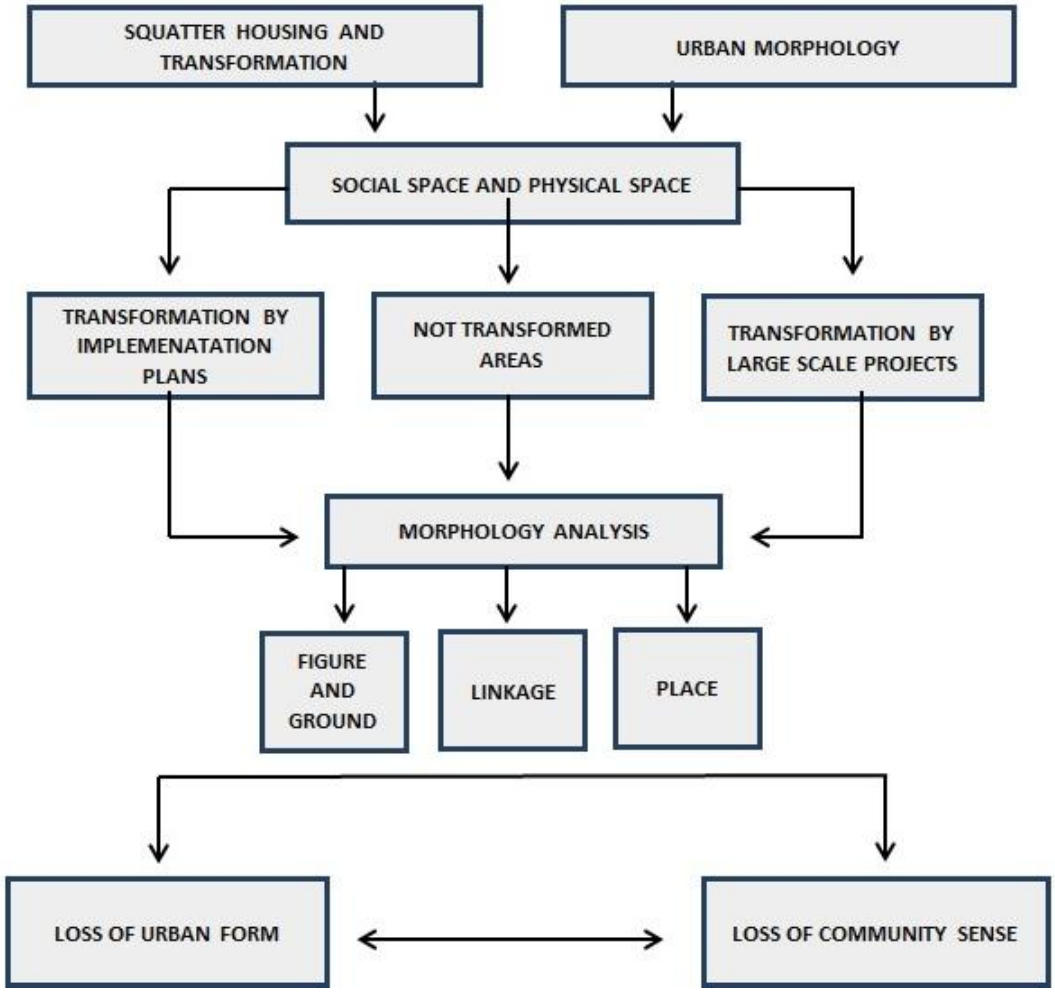


Figure 1.2: Structure of the Study

CHAPTER 2

URBAN FORM AND MORPHOLOGY

2.1. Analysis of Urban Form

Urban form refers to the physical layout and design of urban space. The design of cities takes into consideration building settings, block and street layout, transportation networks and structure of green areas and urban design issues. The historical transformation of urban form mainly regards to socio-political motives. The setout of urban form, social interaction and their relations in space are important aspects in analyzing residential areas in cities since both the community and space are inter-related in many aspects. Therefore, in this chapter we will review different definitions and conceptions of urban form to understand the cases and relations in its production. Later, we will discuss urban morphology, the study of urban form and the process in the formation and transformation of cities. Additionally, the tools and theories for analysis urban morphology will be given.

Urban form, clearly, corresponds to the shape of urban space. However, it is much more complex. It refers to the form of highly complicated and dynamic social relations that is the city, which Lynch defines. As urban form is the subject of many areas like urban morphology, urban history, architecture and planning, it can be defined in several ways with different dimensions. The first dimension focuses on urbanism, the human life experience, activity patterns, and the pace of life of a city, as Milgram (1970) has called the “atmosphere” of a city. The second one can be told as qualitative aspects like images and identified in the earlier works of Lynch (1960) and Appleyard (1976), Sandercock

(1998) and Tajbaksh (2001). The third dimension covers the three aspects of urban form, i.e., spatial organization (radial, grid, etc.); density gradients and patterns (monocentric, polycentric, sprawl, compact city) and other macro form models like those in the works of Lynch (1954-1990).

While the fourth concerns the distribution of different population groups in space such as separation, exclusion, and segregation (Sennett 1971), the fifth dimension of urban form focuses on the distribution and configuration of public space in a neighborhood or city and elements of public spaces and the relationship between public and private spaces, which was stated by Banerjee (2001). The sixth dimension relates the grain, texture and scale of new developments and additions to an existing structure. Finally, the last dimension is the vernacular architecture helping to define the visual form of the townscape, which was examined in the works of Kostof (1991).

2.2. Evaluation of Urban Form

2.2.1. Classical Times

Cities were originated in many shapes, ranging from organic forms to rigid regular forms. Unlike the emergence of the early cities expanding with the articulation of unplanned residential areas around the religious spaces, the cities that were developed by rational order represents the basic characteristics of the classical. The term, classical is used to refer the Greek and Roman period. There were many underlying reasons of these changes in the formation of urban space. The cosmic system, religion, rituals and political power are main determinants of urban form. The rationality of the grid in the street layout comes from the climate conditions of the site. On the other hand, grid-iron system was used for military purposes in the Roman Empire. In accordance with the colonial regime, the settlements were subject to the control in a rigid way so the colonial

cities were established on a grid-iron plan in the simplicity of high level order. The general form aspects of an ancient city are described as;

"It is the agora that makes the town a polis. As originated by the Greeks, the polis introduced an entirely new element into the civilization of the West and the Near East. This new element, represented by the agora [which was new from the sociological as well as the architectural viewpoint] . . . was based on the potentialities of a gradually growing democracy and may be contrasted with the principle of the axis. The latter, whether in Mesopotamia or in Egypt or during the last Roman centuries, always represents the architecturally crystallized form of a dictatorial concept of society." (Zucker, 1959 pp.33 cited in Crawford, 2005)

Bacon also analyzes the meaning of the pattern of the Roman colonial town as;

"The repetitive module of the regular rectangular blocks which constitute the residential part of the city sets up a rhythm which is the basis for the composition of the public parts of the city, the temples, the gymnasia, and the stoats facing inward onto the agoras and out toward the harbors." (Bacon, pp75 cited in Crawford, 2005).

2.2.2. Medieval Times

Traditional urbanism corresponds to the medieval age. There is not enough information about what shape the cities during this long period following the enduring tradition of the Roman order. Disasters, such as earthquakes in Middle East and the bubonic plague in Europe caused in decrease in overall population as well as the citizens of the early cities. These resulted in the development of rational thinking, implying the modern. The modern became the traditional. Only a few cities were established in Europe until the end of this medieval age and the growth of existing cities was limited. However, the roles of cities and hierarchy between them were significantly changed. The lack of central authority invalidated the idea of hierarchy in the city structure. The planned

urban settlements and control in the formation would not be valid anymore. After some towns had been abandoned for centuries, they were eventually rebuilt. Many cities would have burned at least once or destructed by earthquakes (Crawford, 2005). Medieval cities without any control have been the first model of 'ordered complexity' in urban context (Caliskan, 2013).

The newly established cities were not created for trade purposes. They were developed around the garrison towns, built in the 13th and 14th centuries (Crawford, 2005). In addition to the military purposes the feudal economic division of land also caused in the new form of the cities. In any case, the unplanned and irregular form of these cities preserved the aesthetic values in their creation whether it was consciously or not. In this period, streets were arranged by those who used them so the streets developed according to the needs of the citizens. The focal point of the city was central square, where the city hall, principal church, and market, often still be found today were located.

The Roman towns faced to lose their regular morphology. The street alignments didn't change much in short terms; however changes over a span of centuries were more common. Many Roman colonial towns saw major changes in their street plans after their establishment, sometimes following the centuries of abandonment. Therefore, some of the main streets, built during the colonial period have been still keeping their original forms roughly while some has highly irregular forms (Crawford, 2005). Zucker explains the logic of the form in the medieval times as;

"Towns that grew up around existing fortifications, churches, or villages tended to be less regular; towns that were newly founded or based on earlier Roman towns tended to be more regular."(Zucker, 1959 pp.67-74 cited in Crawford, 2005)

The irregularity continued as a major urban form till 19th Century when the first suburbs had started to develop. However; it is still possible to meet an organic urban pattern of

the early times and a regular one, adjacent to each other in urban areas, especially in the quarters having a long urban history (Kostof, 1991).

2.2.3. Renaissance and Baroque

Renaissance put symmetry, balanced axial compositions into urban form. Morris emphasized that the primary axial street and direct streets were the basis of Renaissance urbanism (Crawford, 2005). The other important and significant effect of the Renaissance in the formation of urban space is the revival of urban square and plaza. In Renaissance period a few cities were founded, but existing cities grew in a rapid manner due to the increase in population. The Enlightenment Period, dissolution of the feudal system and its mono-power, affects the urban form since the social –economic and political aspects shaped physical space and vice versa.

Investigating an ideal city was an important discourse of this age and exploring principles for designing conscious data structures was critical. These principles adopted in the construction of monumental plazas, streets and buildings of Renaissance towns in Italy, France and Germany (Rosenau, 1983; cited in Akkerman). Ideal physical layouts of new towns, ideal harmonious communities were envisaged by social and religious men of the Renaissance. Sir Thomas More's *Utopia*, published in 1516, was accepted as a starting point and it became a milestone to all notions of ideal communities. Although the extent to which More was aware of the works on ideal cities of European contemporaries remains unclear, their overall cultural context was not lost on him (Akkerman, 2010).

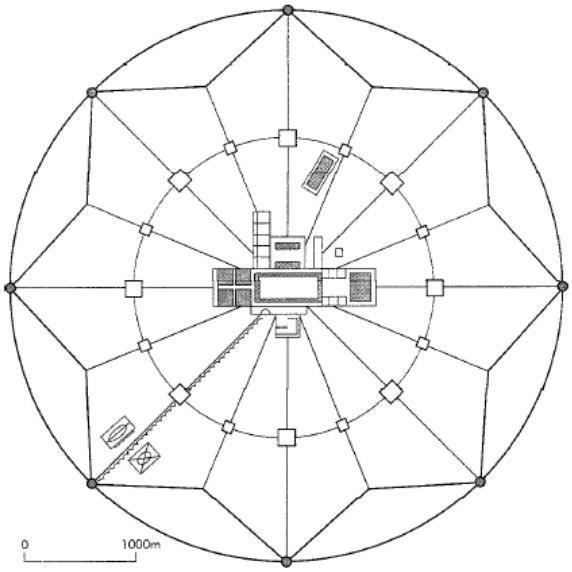


Figure 2.1: The Ideal city; Filarete's plan of Sforzinda (after his Trattato d'architettura, c. 1464 cited in Akkerman, 2010:276).

Renaissance can be regarded as a distinct era however; Baroque notions had deep influence on the urban form of 20th century. Renaissance responded to the increasing population pressure to the old cities with the redefinition of cities with ideal city approach, on the other hand, the Baroque period introduced an open spatial system defining the city and its periphery. René Descartes's ideas and philosophy influenced the way of thinking during the Baroque period and later. Even though the changes in the urban form of this period were not as significant as those came about after the medieval and Renaissance times, this period with the reference to the revival of the classical was continuity in spatial design. Planned settlements and straight streets continued to dominate the urban form, as a reflection of Cartesian logic. The axial streets were common expression of the state's power in urban formation so the strong boulevards were visible in Baroque period. The importance of axial streets can be explained as;

"The avenue is the most important symbol and the main fact about the baroque city, but in the layout of half a dozen new avenues, or in a new quarter, its character could be re-defined. In the linear evolution of the city plan, the movement of wheeled vehicles played a critical part: and the general geometrizing of space, so characteristic of the period, would have been altogether functionless had it not facilitated the movement of traffic and transport, at the same time that it served as an expression of the dominant sense of life." (Morris, 107 cited in Crawford, 2005).

The changes in transportation system also affected the form of the city as Kostof explains *"The railroad, streetcar, and automobile city made a coherent system out of radial traffic arteries and girdle streets*." (Kostof, 1991 pp. 192 cited in Crawford, 2005). Such a system created a strong downtown center from which the traffic arteries radiated or added diagonal streets to regular grid as a product of the movement of city-beautiful movement early in 20th century. The main difference between the cities in this period and Renaissance is the sense of direction (Crawford, 2005). Ideal principles of design to create aesthetic uniformity in urban space were the basis of form control in the neoclassical period.

2.2.4. Industrialization

Industrialization is one of the main turn points of urbanism as many scholars accept that industrial revolution is the second urban revolution while sedentarization is the first. The industrialization put its significant impacts on urban arena rapidly, which resulted in the decline of urban centers and rise of suburban areas. "Modern" architecture was arising after the standardization of the construction materials, which was about a century later than the industrialization. The standardization resulted in the popularity of rectangularity

and regular forms in city design again. Thus the streets became more dominant and important than the square (Crawford, 2005).

"In modern city planning the ratio between the built-up and open spaces is exactly reversed. Formerly the empty spaces (streets and plazas) were a unified entity of shapes calculated for their impact; today building lots are laid out as regularly-shaped closed forms, and what are left over between them become streets or plazas." (Sitte, pp.87 cited in Crawford, 2005).

Garden city movement, a method of urban planning that was initiated in 1898 by Sir Ebenezer Howard in the United Kingdom, was born as a reaction to the poor conditions of industrial development. Garden cities were intended to be self-contained communities surrounded by "greenbelts". In addition to the garden city movement, Raymond Unwin who had a deep appreciation to the medieval forms reflected his ideas in his work, *Town Planning in Practice.* Single-family housing was the best contemporary solution according to him. His thoughts about cities were opposite to Renaissance thinking.

2.2.5. Modernism

Modernism was the era in which the mass production of standardized products started to affect the urban form all over the world. This was a time of great optimism. It was expected that technology would end hunger, clean up squalor and eliminate ugliness. Architects would lead the charge, the Bauhaus, "starting from zero," would reinvent architecture. Modernism relied upon designs that developed with large numbers of cheap, identical, machine-made parts. Given the imperative of standardized parts, it was necessary to seek an uplifting style based on endlessly repeated elements. Modernism cut the close-relation between the building, block and street.

Modernism took up the automobile as an icon for the era. Corbusier (.. ...) reportedly specified that a car was to be parked in front of his buildings when completion photographs were taken. Modern architecture and city design were wedded to the automobile, which was to bring freedom to all. This led directly to Corbusier's towers-in-a-park scheme, with broad highways connecting different parts of the city. Corbusier proposed to demolish vast swathes of central Paris to impose his broad highways and towers-in-a-park. This alienating concept was adopted with disastrous results in the post-war era.

2.2.6. The New Urbanism

The new urbanism was born as a reaction to the shifts to contemporary architecture and urban planning in an increasing level. It revisited the early 20th century urban forms, typified by the streetcar suburbs built in the USA in the 1920s. This suburban development was comparatively dense and close-in residential suburbs built on a grid plan and connected to downtown by new light-rail lines. The urban design standards that were prominent until the rise of the automobile in the mid-20th century influenced the new urbanism. It encompassed principles such as traditional neighborhood design and transit-oriented development. The automobile was a fact but has not dominated cities yet; it takes another decade after cars became cheap, convenient, fast, and reliable enough that city dwellers would build their lives around them. In short, the new urbanism might be called as the old suburbanism.

The 1920s' suburbs that new urbanism tends to rebuild were formed in a basis of suburban grid. This was emerged not from idealizing the straight streets but from recognizing the need for a fully-interconnected network of streets. New urbanism projects are always developed with relatively small blocks and close-knit street network.

New urbanism would arise as an organized movement. However, a number of activists and thinkers were criticizing the modernist planning techniques. Lewis Mumford criticized the "anti-urban" development of post-war America while Jane Jacobs, writer of *The Death and Life of Great American Cities* in the early 1960s, reviewed and commented the single-use housing projects, large car-dependent neighborhood, and segregated commercial centers. Post-modernists often criticize new urbanism by calling it "nostalgic" or "pastiche" of historical styles. Unlike the post-modernists, however, new urbanists are part of a powerful movement to reform society. New urbanism and smart growth oppose to suburban sprawl due to the increase in air pollution and energy consumption.

The new urbanism movement covers contemporary forms of architecture such as the "New Classicism" or "Traditional Architecture" and historical urban forms, including the curved streets and pedestrian-oriented neighborhood.

2.3. The Effects of Urban Formation

The form of cities is shaped by the structure of transport network; distribution of public places in the space and mass produced building units. However, in any case, urban fabrics are a kind of collective product. As collective city form is a production of different groups in a long term and distributed process, city form has changed continuously through the ages. The historical transformation of urban form is related to actors, instruments and social and political motives. In the formation of urban spaces, many issues such as social values, philosophy, population size, systems of government, artistic sensibility, design techniques, building methods, paving techniques, transport technology, sewage and waste disposal, and energy supply, have a direct or indirect effect (Crawford, 2005).

Military Power: In the formation of cities, the influence of military power on physical layout has often been large. Military command has sometimes preferred the grid-iron system or sometimes radial arrangements. For example, the radial form came to be favored by Renaissance military strategists. On the other hand, straight streets of Roman grid-iron colonial cities were also preferred for military purposes. Although it is often noted that irregular streets are easier to defend once the enemy has invaded. In all cases, wide streets seem to be preferred for the maintenance of civil order (Crawford, 2005).

Property Ownership: The ownership of the land usually exerts a large influence on decisions regarding how streets are arranged. Major Baroque projects relied on centralized authority to reassemble land and drive straight boulevards through the existing urban fabric. Simplified land division favors rectilinear street patterns, but irrigation is often important and usually related to land ownership patterns and topography (Kostof (1991) cited in Crawford, 2005).

The organic forms can be regarded as a product of complex and long-handed property relations. If the people that had the right of usage owned the land before a governmental institution divided and distributed it (Kostof, 1991) as in the case of Roman colony towns, an organic form was structured.

Religion and Rituals: In all periods, religious beliefs have often influenced city design (Crawford, 2005) because social relations are directly linked to religion and rituals. The sense of privacy and role of public space are related to religion and rituals.

For example, the city of Aosta, a Roman colonial town, originally was laid out on a rigid grid system. By medieval times it entirely lost its regularity while maintaining some of its original topology due to depopulation, reduced circumstances, and a social revolution. The monotheistic religions affected the city as a way that there was no place in the social structure for theaters, amphitheaters, temples, or (in the Christian case) baths (Crawford, 2005).

Social Relations: The grid-iron system is inflexible in terms of human movement and people dislike it so shortcuts are created through the partially-occupied grid. This system decreases the value of public place and its monumental meaning. Moreover, the meaning of strong patterns and axial streets also diminish. Public foci always affect urban fabric (Crawford, 2005).

Technology and Circulation: It is can be easily seen that even 500 years ago, traffic had a major influence on the design of cities. Renaissance urban spaces were grouped under three broad headings: first, traffic space, forming part of the main urban route system and used by both pedestrians and horse drawn vehicles; second, residential space, intended for local access only and with a predominantly pedestrian recreational purpose; third, pedestrian space, from which wheeled traffic was normally excluded (Crawford, 2005).

The growth and macro-form of cities are mainly dependent on the growth of circulation systems. The invention of railway and car created the suburbanization movements. Transportation improvements are products of technological intervention. In addition, the technology itself affects the urban form such that information technologies also led to decline of urban centers and creation of world cities.

2.4. Types of Urban Form

Kostof simply identifies the urban form as geometric and non-geometric. Cities can grow organically out of a village like the growth of a tree. Non-geometric forms are the result of the incremental changes parallel to life in a slow manner in general (Kostof, 1991). Non-geometric organic form and patterns are generally characterized by medieval cities and Islamic cities in the same time period. Kostof identifies the unplanned city as a spontaneous one in a basic manner such as “grown”, “generated” or geomorphic”. The

overall layout is produced without any intervention of designers but under the effects of daily life of citizens. The basic characteristics of irregular, non-geometric and organic structure can be listed as;

1. Curved streets
2. Random open spaces
3. Random angles.

However, the organic pattern does not only imply an unconscious way of land acquisition without design matters. Since the organic form reveals high level of community spirit and social cohesion, it can also be an urban design approach.

The first Mesopotamian towns are thought to be grown in inorganic structure. They grew around a social agglomeration or an institutional core and expanded by natural or biological rhythms (Kostof, 1991). On the other hand, early cities did not only expand in an organic pattern. El Lahun in Egypt, for example, was a dormitory community which was designed for workers including residential hierarchy, street order with serial housing units. Moreover, Kostof states that *"...cities can have a schematic orthogonal plan which blocks are roughly equal size and rational distinction was made between main street and alleys that separated the houses*" (1991, pp34).

In addition to the Kostof's main division of urban form, Lynch offers normative model in categorizing the shape of cities (Lynch, 1984). The normative models are defined as,

1. Cosmic Model
2. Practical Model
3. Organic Model

Cosmic model has a holy meaning as it defines the interpretation of universe and the gods. The cosmic city is characterized by a monumental axis, enclosure, protected gates,

dominant landmarks and generally a regular grid. The city is a representation of psychological power. Lynch illustrates the cosmic cities as the Chinese and Indian cities.

The Chinese model can be seen in China, Japan, Korea and Southeast Asia and the best prototypes can be found in Beijing, Kyoto and Seoul. While the north symbolized the dark and unpropitious, the city was divided into regular boxes. The urban space was divided into two parts; west and east, to figure the government structure. With colors, shapes, locations and materials the power and religious concerns were symbolized. Moreover, enclosures, gateways and approaches supported the magical power of order.

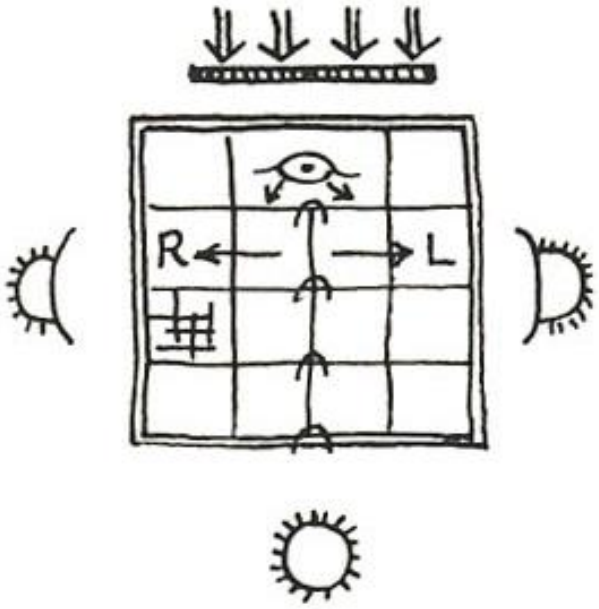


Figure 2.2: Chinese Theory (Lynch, 1984, pp 74: Meyer, Wheatley, Wright)

The form of Indian cities was also shaped by spiritual power. However, the examples are less in number with respect to Chinese model examples. The Silpasastras, the Hindu architecture, indicates the order of the earth and includes the chaos of evil power which is symbolized by the figure of Mandala. The most powerful point is the center.

In addition, Kostof categorizes the urban form under three main sub-topics as,

1. Organic Pattern
2. The Grid
3. The Diagram City

Organic pattern is generally formed according to users' choices, property relations, irrigation systems and it is the characteristic of the medieval era. The grid is also another urban pattern in ancient world and Roman colonial towns and modernism towns, especially U.S. towns after 19th century, were developed in the grid form. The grid iron system, as mentioned before, has great defensive benefits in addition to the easy control of property rights. It is a democratic way in land sub-division, which leads to equal division in spatial manner. After the defensive advantage of grid-iron system was recognized; it was used to control restless population. Moreover, the grid-iron pattern helps to organize the community and in ancient Egyptian towns workers were practiced in this pattern. In addition, it is flexible for development and internal and external subdivisions are possible in the changing conditions of social and economic environment. The urban grid can expand easily in all dimensions.

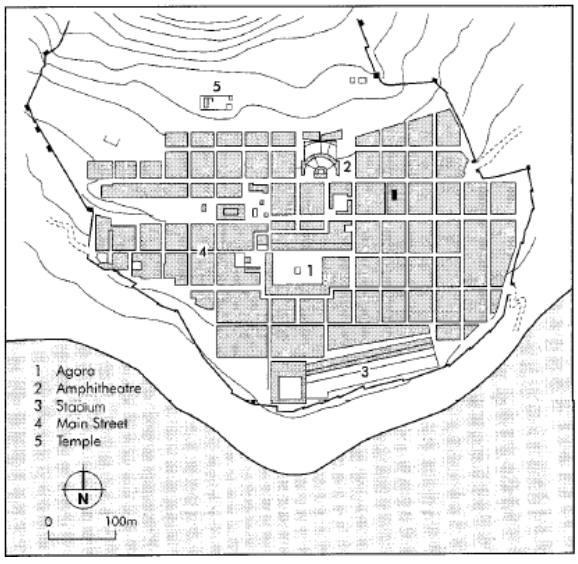


Figure 2.3: Plan of Priene, 450 BC (Akkerman, 2010)

The City as Diagram is a different type of urban form consisting of geometric shapes, circles and focused squares. It provides a distinct centrality which is generally supported with radiating avenues. Although, the city as diagram is always thought to be an attempt to achieve the ideal city, there are other purposes in using geometrical lay outs like the establishment of military camps, monasteries and industrial towns (Kostof, 1991). The concentration camp in Hamburg, Germany and Saltaire in England and Angkor Wat in Cambodia developed the diagrams responding to its militaristic, industrial and religious needs, respectively.

Kostof (1991) also divides the diagram cities into two main categories as,

- Linear Systems
- Centralized Systems

Diagram systems are generally used to define the overall macro-form diagrams of the urban area. Linear city systems were generally emerged with the effects of cosmology and topography. Chinese cities are obvious examples of the linear cities, developed under cosmic power. In these cities, north-south axis was emphasized to show main ruling powers of the east and west. On the other hand, topography may lead to this linear system, as in some coastal towns and narrow ridges. The Roman port cities were mainly linear cities. In addition to these factors, the linearity was chosen on purpose after industrialization due to the linear development of public transport systems.

Centralized systems, on the other hand, implies high level of concentricity with a circular and radial pattern. The centralized power began to be represented in cities in non-geometric manner firstly in 16^{th}, 17^{th} century towns after the decline in the power of feudal aristocracy. Baghdad in the 18^{th} century was a famous example of centralized urban forms (Kostof, 1991). Most cities develop in a centralized form, depending on the

thresholds and planning decisions. One of the points that are criticized in concentric form is about its growth characteristic, which is impractical for too much growth.

2.5. Urban Morphology

Urban morphology is the study of the spatial structure and character of cities as well as villages by examining the patterns of its components and its development processes. Literature of urban form is a topic under urban morphology. As discussed above, social, economic and political relations have important effects on the formation of cities but there is cyclical relationship. Urban form also affects social, economic and political issues. Urban morphology literature in architecture and planning theory is abundant. The first discussion was started by urban utopias that were also emerged as the solutions to socio-economic problems of urban life. The ideal cities of urban utopias are the Garden Cities of Howard, 1898, Le Corbusier's Ville Radieuse, 1929, and Wright's Broadacre, 1945. The 1960s' orthodoxy planning was subjected to criticism and more analytical approaches to urban form were emerged. The most prominent exponents were Lynch (1960), Jacobs (1961; 1994) and Alexander (1964, 1965). Alexander's work introduced formal mathematical concepts and observations into the urban form debate for the first time (Gauthier & Gilliland, 2005).

The entry of mathematical tools into urban morphology increased with the graph theory and set theory and Q analysis that focuses on graph representations of urban form. Another mathematical practice, more often applied is space syntax (Hillier & Hanson 1984). Space syntax is based on a graph representation of cities according to the systems of open spaces. Measures from the simplified graphs of a city allow us understand the structure of the city (Gauthier & Gilliland, 2005). For example, spatial configuration of a

city can be analyzed with space syntax to understand the differences of immigrant quarters in spatial forms.

The tools in the analyses of Urban Morphology have some theories like: Space syntax and Three Theories of Urban Spatial Design:

1. Figure-ground theory

2. Linkage theory

3. Place theory

Each of these theories differs significantly from the other. However, integrating them to analyze an urban form can provide us a comprehensive understanding of the integrated spatial design of a built environment (Gauthier & Gilliland, 2005). In total, the three theories give a comprehensive evaluation of the urban space in terms of the mass-void relationship, organization pattern, and its sensitivity to human needs.

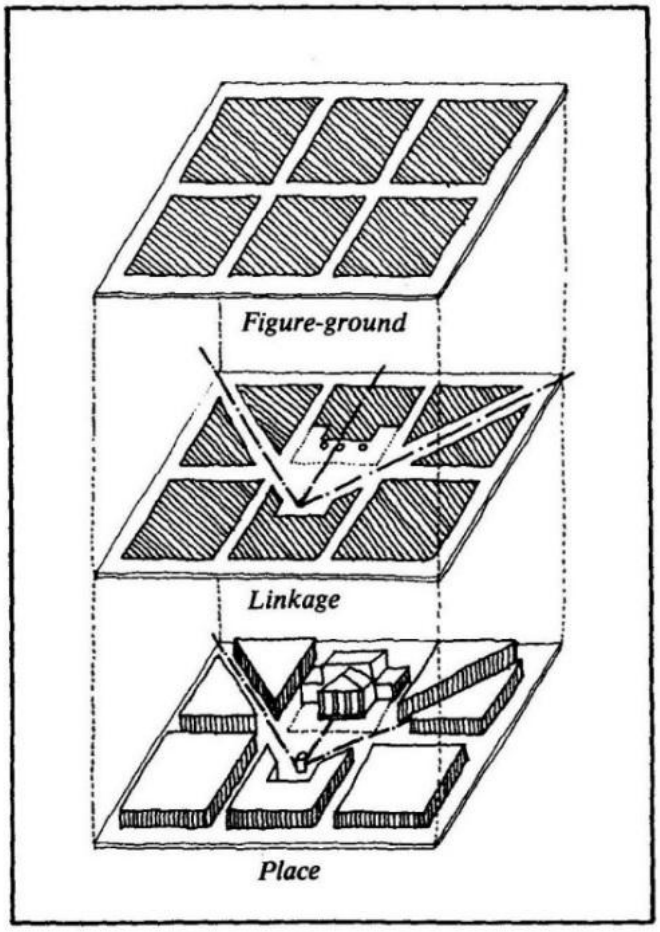


Figure 2.4: Urban Morphology Theories (Roger, 1986, Chapter 4 Summary)

2.5.1. The Figure-ground Theory

Roger defined the theory is that "*The figure-ground theory is founded on the study of the relative land coverage of buildings as solid mass (figure) to open voids (ground)... Each urban environment has an existing pattern of solids and voids, and the figure-ground approach to spatial design is an attempt to clarify the structure of urban spaces and the generic patterns of mass and voids in a city or district ...*" He also added that*, "The*

figure-ground drawing, a two-dimensional abstraction in plan view, is a graphic tool in revealing these relationships" (T. Roger, 1986, Finding Lost Space: Theories of Urban Design p.97 cited in Gauthier & Gilliland, 2005).

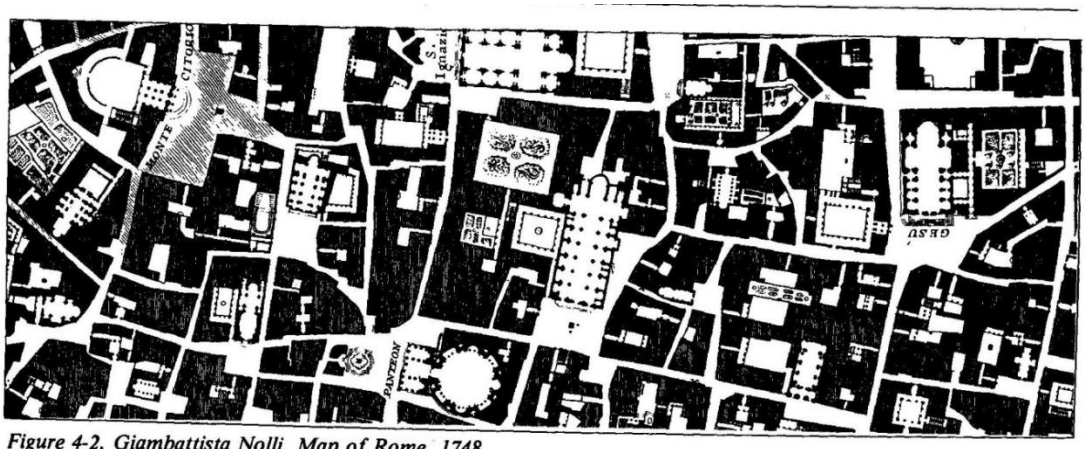


Figure 4-2. Giambattista Nolli. Map of Rome. 1748.
Nolli's map graphically illustrates the figure-ground relationship of a traditional city where public civic space is carved out of the private tissue. (See also fig. 3-2.) The predominant field is a dense continuous mass, allowing open space to become a figural void.

Figure 2.5: Example of Figure and Ground Theory Representation (Roger, 1986, Chapter 4 Summary)

Figure ground theory is basically a two dimensional concept that allied to the idea of *Gestalt* where black and white, positive and negative, solid and void or Yin and Yang, in Taoist terminology, are formed by opposites of the other (Chubert, 2005).

The figure-ground theory constitutes an urban fabric in a harmony that balances the spatial relationships. However, great variety in spatial relations causes difficulty in simplifying the space into two dimensions. Thus, in this theory, space is regarded as a positive entity having integration with surrounding solids. This is ultimately opposite of the general concept of space where the buildings are seen as solids and open spaces are regarded as a void (Chubert, 2005).

2.5.2. The Linkage Theory

Roger explained about Linkage Theory as "*Unlike the figure-ground theory, which is primarily based on patterns of solid and void, the linkage theory tries to organize a system of connections, or a network, that establishes a structure for ordering spaces"* (Roger, 1986 p.97). These linking elements are streets, pedestrian ways and linear open space, which physically connect the parts of a city. However, these linking elements can be much more concentrated on an urban space due to the relational manner of circulation. Thus, linkage theory implies a more rigid spatial aspect (Gauthier & Gilliland, 2005).

Linkage Theory is described as "*the organization of lines that connect the parts of the city and the design of a spatial datum from these lines that relate buildings to spaces*." (Chubert, 2005). Gian Battista Nolli's 1748 map of Rome and Rowe and Koetter's ideas throughout the Collage City are the examples of the theory. Moreover; Candilis, Josic and Woods famous project for Toulouse-le-Mirail in France, or Kenzo Tange's unrealized project for Tokyo Bay are also the classical implementations of the linkage theory (Chubert, 2005).

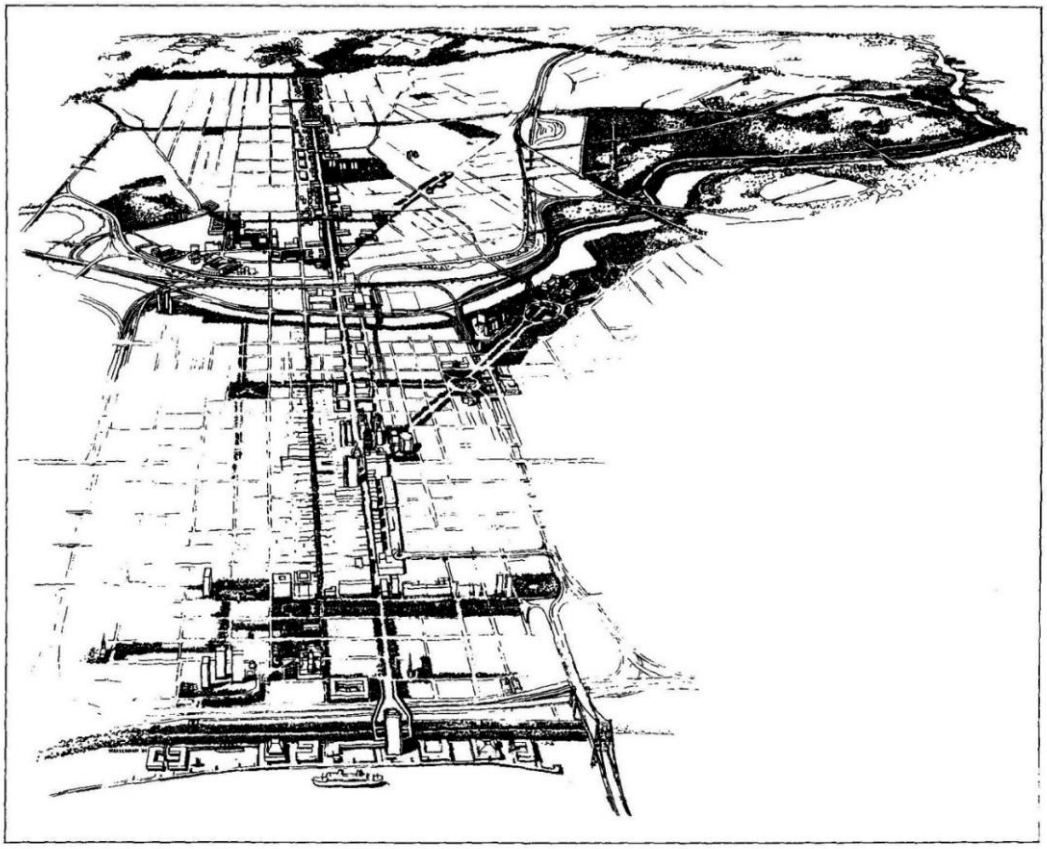


Figure 4-20. Ed Bacon. Downtown Philadelphia Redevelopment Plan. 1964.

Figure 2.6: Representation of Linkage Theory (Roger, 1986, Chapter 4 Summary)

2.5.3. The Place Theory

"The place theory goes one step beyond figure-ground and linkage theories in that it adds the components of human needs and cultural, historical and natural contexts" (Roger, 1986, p.98). It deals with not only the solid-void spaces or circulation relations, but also the unique forms and details indigenous to its setting. Thus; it can be claimed that social and cultural values, visual perceptions of users, and individual control over the surrounding public places are important principles of place theory (Gauthier & Gilliland, 2005).

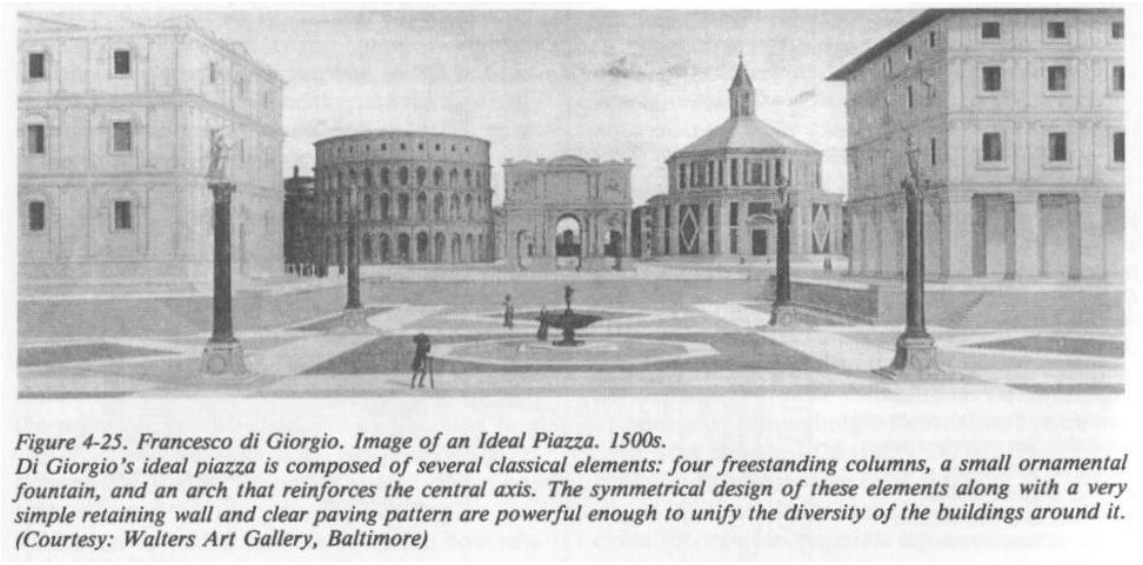


Figure 4-25. Francesco di Giorgio. Image of an Ideal Piazza. 1500s.
Di Giorgio's ideal piazza is composed of several classical elements: four freestanding columns, a small ornamental fountain, and an arch that reinforces the central axis. The symmetrical design of these elements along with a very simple retaining wall and clear paving pattern are powerful enough to unify the diversity of the buildings around it. (Courtesy: Walters Art Gallery, Baltimore)

Figure 2.7: Representation of Place Theory (Roger, 1986, Chapter 4 Summary)

Trancik describes the *Place Theory* in perspective of designers that '*For designers to create truly unique contextual places, they must more than superficially explore the local history, the feelings and needs of the populace, the traditions of craftsmanship and indigenous materials and the political and economic realities of the community'* (Trancik 1987:114 cited in Chubert, 2005). There are no subgroups in this theory but various examples can be identified with the works of Alison and Peter Smithson, Herman Herzberger, Kevin Lynch, Leon Krier, Hans Hollein, Lucien Kroll, and Donald Appleyard (Chubert, 2005).

2.5.4. Main Approaches in Urban Morphology

One of the schools of urban morphology is Italian. As the founder of Italian school, Muratori originally introduced morphological analyses into his architectural profession and academia. He constituted a strong entry into urban morphology with creating

building typology, which then provided the basis for the integration of architectural works in the urban fabric.

Many of the seminal works of urban morphology and urban design can be traced to the early 1960s. M.R.G. Conzen's town-plan analysis of Alnwick (1960), Kevin Lynch's *The image of the city* (1960) and Gordon Cullen's *Townscape* (1961) are still influential and important works about urban design and urban morphology (Chapman, 2005).

The British school develops around the work of M.R.G. Conzen, who had a technique called 'town-plan analysis.' The key aspects for analysis according to Conzen are town plan; pattern of building forms and land use.

The town plan is divided into three basic morphological elements,

1. Streets and their structure; a street-system

2. Plots (or lots) and their integration; street-blocks

3. Buildings; block-plans.

Perceptual school of morphology concerns the built environment in regard to the sensational experience of human beings. Gordon Cullen, a prominent author in perceptual morphology, incorporated with direct observations in the analysis of urban form. Cullen's spatial sequence as serial vision is one of the important works of the place theory, which is defined as a visionary catchment of the urban space. Roger describes the serial vision approach as; *"To walk from one end of the plan to another, at a sequence of revelations which are suggested in the serial drawings."* (Roger, 1986). Sudden contrasts and their captures with eyes are the main point of the theory because it covers the third dimension and the details of urban space.

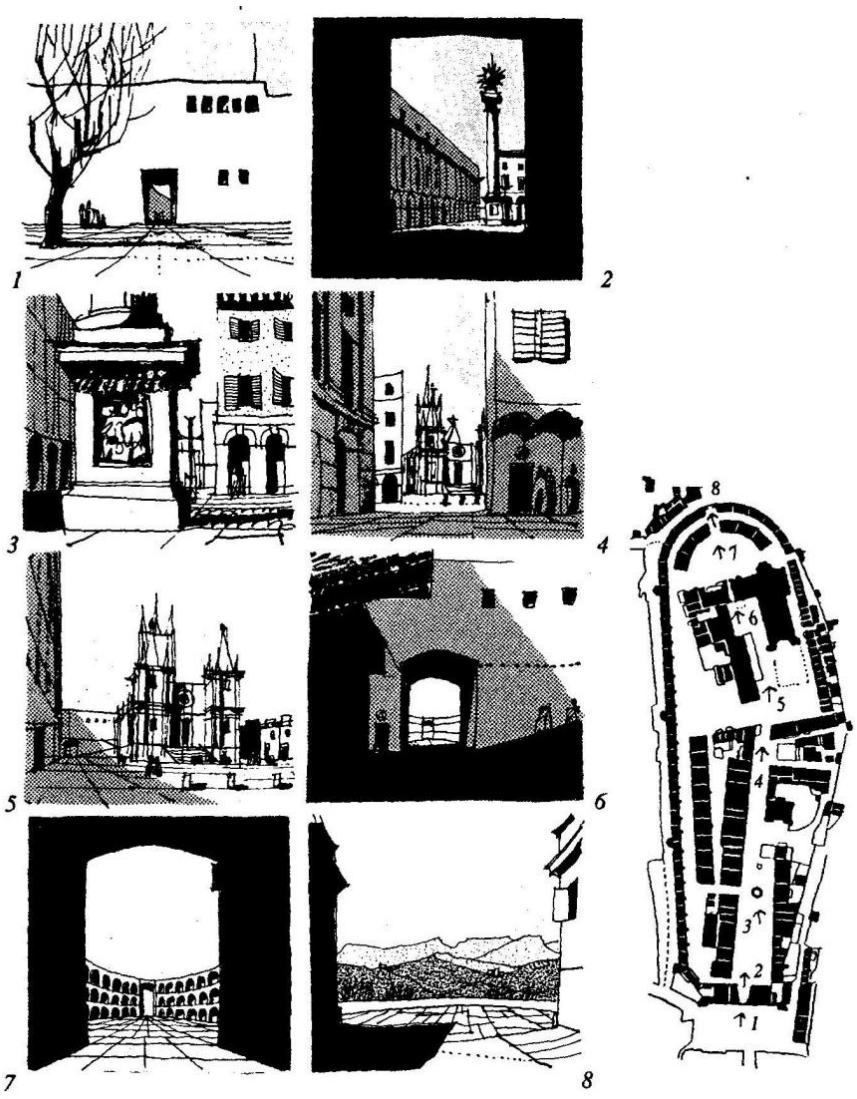


Figure 2.8: Cullen's Serial View (Cullen, 1971, p. 23)

The integration of the third dimension into urban morphology discipline is a breaking point that the impacts of physical space on the socialization of people were interpreted more. Smailes (1955, p. 101cited in Chapman, 2005) explains urban morphology as *"... is not merely two dimensional in scope. On the contrary, it is through the special*

importance which the third dimension assumes in the urban scene that much of its distinctiveness and variety arise".

The reflective approach of Kevin Lynch is also an important contribution to the place theory. Image theory of Lynch emphasizes the three dimensions of space with different concepts. According to Lynch, physical forms of the cities are composed of five elements, 'paths, edges, districts, nodes and landmarks', which constitutes the image of the city (Lynch, 1960, p.46). First, paths are defined as channels, in which inhabitants move, such as streets, roads, walkways, railroads etc. They are dominant city elements and by the assistance of which the cities are formed. Second, edges are defined as boundaries between two conditions such as walls, shores and railroad cuts etc. According to Lynch, edges, not dominant as paths, are important features in organizing the form of the cities (Lynch, 1960). Lang describes the concept of edge in an integrated manner as,

"*Edges are linear and continuous (in Gestalt psychology) elements that isolate one place to another. Edges can be a façade or a line of trees or even a path. In mental maps and visual representations they generally refer to a continuous line and symbolize a boundary. "Edges are boundaries that break or contain or run parallel to the form; they are not used by the observer as paths but they may well be so used by others*" (Lang, 1987: 137).

District is a two dimensional aspect that makes inhabitants feel in a common identify. This creates the feeling of belongings and 'inside' and 'outside' for people. Districts are defined according to the socio-spatial characteristics of the region. For instance, Lynch stresses the ethnic and class based districts. Another element, nodes can be described as strategic points, such as junction points, crossing of the paths or points with special uses.

In this respect, social nature of the activity is important determinant in the composition of nodes and subway stations, civic centers are the example of nodes (Gauthier & Gilliland, 2005). The last element of Lynch is landmark, which is defined as a point reference such as building, sign, store, shopping mall or mountain. According to Lynch, these components of the city are interrelated elements, which may help to simplify the understanding of a total system (Gauthier & Gilliland, 2005).

The place, space and relations are all included in urban morphology as important aspects of place theory. Thus, the relationship between social interaction and physical space is described under the approaches of urban morphology. In terms of understanding the socio-physical organization of an urban area, image analyses of the city, the quarter and the district are very important in terms of understanding social interaction both in the city and in the community.

Lynch concentrated on the clarity and legibility of a city while Cullen concentrated on the perception of urban environment. In addition to the mathematical approaches in urban morphology, different viewpoints have been occurred in literature of urban form. For example, Krier (1979) defines the typologies of urban space based on place-specific analysis. Moudon (2002) puts the scale issue into the urban form that he extended the perspectives of the analysis from micro to macro scale and Hall (1996) concentrates on how development plans can be shaped through urban form in a contextual manner (Chapman, 2005).

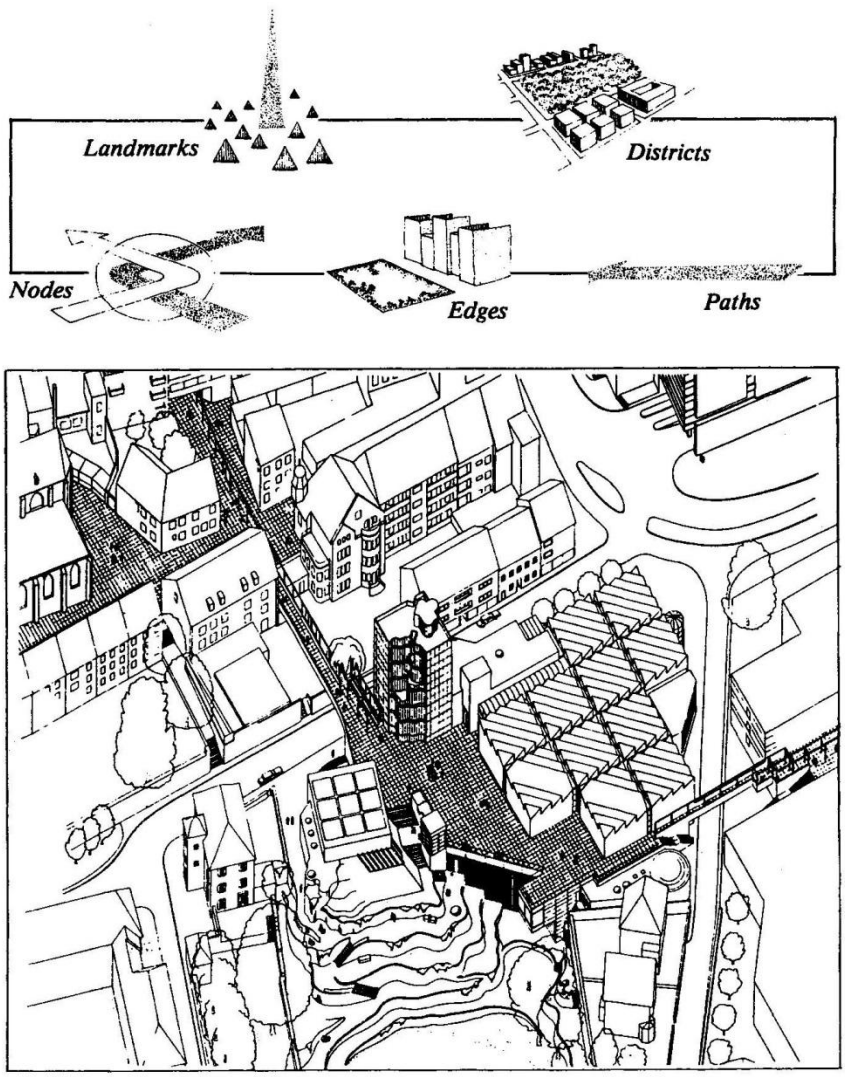


Figure 2.9: The City Image (Lynch, 1959, p. 47-48)

Gestalt principles in urban morphology have been applied for the recognition of spatial distribution patterns in a general manner. These principles are to describe how people organize visual elements into groups or unified wholes. These are,

1. Proximity: closeness.
2. Similarity: likeness.

3. Common fate: uniform destiny.
4. Common region: objects in same region are more easily grouped together.
5. Closure: an object group with a closed tendency is easily regarded as being perceptually closed.
6. Continuity: the regularity or tendency cannot be easily disturbed, for example, two crossed curves keep their continuity respectively.
7. Element connectedness: connected elements can easily form a group.
8. Common orientation: distribution along a similar direction. (Li & Yani & Chen, 2003)

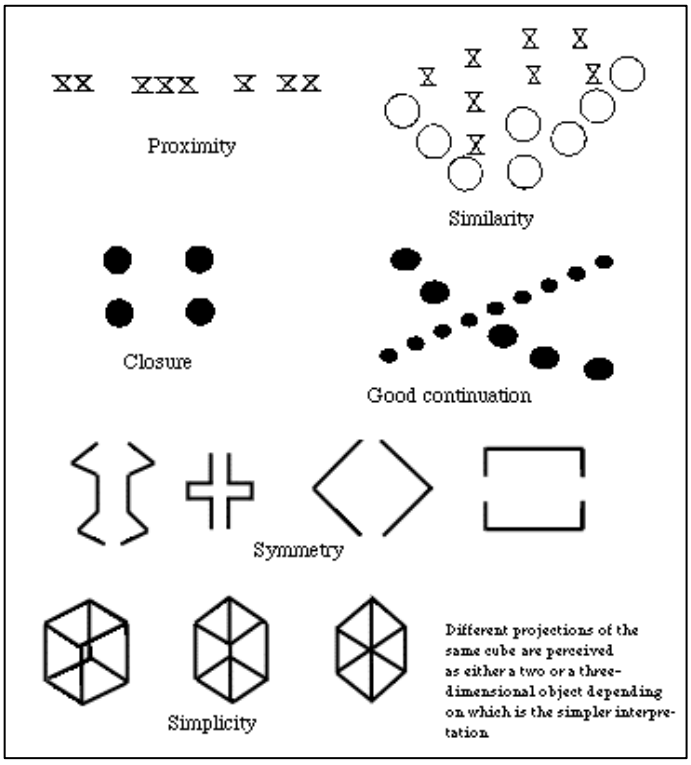


Figure 2.10: Gestalt Laws of Form (Fischler and Firshein, 1987, retrieved from; https://www.siggraph.org/education/materials/HyperVis/vision/percorg.htm)

Urban morphology, since it deals with urban form, also analyzes the space how people perceive in sub-totals of the parts and whole uniformity. Urban morphology searches

city in a hierarchical manner so observes different layers of the parts in different scales. Patricios (2002 cited in Li & Yani & Chen, 2003) explains the hierarchical elements as,

- Enclave
- Block
- Superblock
- Neighborhood

Except the mathematical approaches, urban morphology approaches, discussed above, are developed from the theory of Gestalt. The city is a fabric or connection when it is studies partially and a macro-form when analyzed in total. Thus, review of urban form is in one sense parallel to the review of the Gestalt elements.

2.6. Social Aspects of Urban Morphology

The physical space that be experienced by everyone as a spatial entity of defined volumes is defined as absolute space. Aristotle perceived space as a phenomenon in absolute manner and defined the space as a container of all objects (Wiener, 1975: 297 cited in Madinapour, 2003). The absolute space concept was firstly developed by Isaac Newton by, *"Places as well of themselves as of all other things"* (Speake, 1979: 308 cited in Madinapour, 2003). However, taking the space only as a physical entity has been subjected to many criticisms that Leibniz recognized the relations between non-spatial and mental items (Speake, 1979; cited in Madinapour, 2003). In addition, Kant saw the space as a constitution of human mind in subjective manner rather than empirical concept and Einstein saw the space as a positional quality of the objects. The relational and relative aspects of space have been discoursed by scientists and philosophers. Different aspects of urban space, including symbolic, social, physical, economic and cultural have been addressed in many disciplines in time. Recently, the

post-modern attitude of urban planning is to concentrate the physical aspect of urban space more than the others.

2.6.1. Issues of Urban Morphology in Social Space

In the main theories of urban morphology, streets and open spaces are the main elements of urban form. While they create the voids of urban fabric, connections are the paths or edges. On one hand, a boulevard or a street is a connection between the elements of urban form; on the other hand, it is also a location for collective activities. A block is a part of social life and characterized by urban quality (Panerai, P. & Castex, J. & Depaule, 2004). As stated before, social and physical patterns are related to each other. Both of the urban morphologists and sociologists agree that social space is an extension of the physical space. As stated by Panerai, Castex and Depaule (2004), urban space is the necessary condition of the reproduction of urban social life.

The Chicago School sociologists attempted to analyze the urban form of Chicago but mainly focused on the urban space in a macro scale. Members of the Chicago School, such as Robert Park, Ernest Burgess, Louis Wirth and Roderick McKenzie concentrated on homogeneity and heterogeneity, using biological factors in establishing a concentric-zonal theory. In their empirical research, they analyzed the case of Chicago in terms of urban interaction and social order (Panerai, P. & Castex, J. & Depaule, 2004). Jacobs (1961) claims that the small street shops, grocers, cafes, pubs are the contact points that enrich the city life. Lack of the contact points can destruct the publicity and cause in isolation. Thus, urban space without these contact points may turn to a domesticated social arena, in which there is no interaction and affection the every activity.

All those arguments make to rethink the importance of urban fabric, public space, and privacy with social interaction concepts. Alexandre in his great work, Pattern Language, describes this interaction as follows;

"... No pattern is an isolated entity. Each pattern can exist in the world only to the extent that it is supported by other patterns: the larger patterns in which it is embedded, the patterns of the same size that surround it, and the smaller patterns which are embedded in it. This is a fundamental view of the world. It says that when you build a thing you cannot merely build the thing in isolation, but must also repair the world around it, and within it, so that the larger world at that one place becomes more coherent, and more whole; and the thing which you make takes its place in the web of nature, as you make it." (Alexander, 1977 cited in Collins, 1965, pp.16)

The relation between human beings and the built environment is accepted as one of the complex relations. Many disciplines and sub-disciplines such as human geography, environmental psychology, analyze this relation in their disciplines and conduct their own methodologies. Urban space is explained as a social product, rising from purposeful social practice, which is not independent in its own laws. However, it has a complex, interconnected structure organized by socio-spatial dialectic (Scott & Soja, 1997).

The degradation of social interaction and cultural symbols in a segregated urban habitat affects the community hierarchies in a city. The degradation of morphological hierarchy also affects the social hierarchy of urban space. For example, urban elites, escaping to rural villas, are no longer living in an urban area so they don't vote anymore for urban administration and thereby, lose their power in urban arena. The role of urban design can be now defined by Lozano in his famous work *"Cultures of Cities",*

"Clearly "better" design is no panacea for the ills of modern society…But design can, and must, be a tool of change, reorienting physical solutions toward more humane goals

and challenging programmatic assumptions that would be at odds with urbanity and better communities." (Lozano, 1990 p.7)

2.6.2. Social Roles in Space

Human beings interact within a spatial hierarchy in an urban space. The spatial hierarchy has an important role in social integration, community relations and social coherence. All those relations can be successfully constructed by the activities that take place in different spaces if optimum social and personal distances in relations are kept. Social and physical distance should not be overlapped. The idea of social distance has a long history, how to measure it is another important concern. Bogardus created a ranked scale of social relationships, the further up to scale gives us the closer the distance between people (Cited in Lownsbrough & Beunderman, 2007). A very basic ranking scheme, based on social interaction is listed as,

1. To admit to close kinship by marriage
2. To have as a friend
3. To have as a neighbor on the same street
4. To admit as a member of one's occupation within one's city
5. To admit as a citizen of country
6. To admit only a visitor to one's country
7. To exclude entirely from one's country

Although the scheme is very basic, it is crucial to understand the social polarization, especially the discrimination based on ethnicity in a community.

Spatial hierarchy is constructed by personal and social space. Personal space is determined by personal distances depending on the activities that a person can share

with the others. In housing unit scale, a bedroom or a bathroom is the most private area, requiring greater personal space than a living room. Those spaces can even be closed to close relatives. On the other hand, a living room or a kitchen is open to everyone, living in the house including the visitors. In city scale, the most private unit can be, thus, condemned to be "the living unit" as the house or apartment. The yard, courtyard and the garden can be regarded as semi-public or semi-private space. The communication channels such as streets, boulevards, the meeting points as squares and plazas, the common areas of the community such as parks, community centers are all regarded as public spaces of the city.

The definitions of public and private spaces seem to be clear; however, in urban arena the relationships between the public and private spaces are generally fluid. The main differences of public and private spaces are given below.

Public space, according to Lofland (1973; 20) refers to "those areas of a city to which in then main, all persons have legal access". Public space may be distinguished from private space in that access the latter may be legally restricted. But the line between a public and private space is not clear. In other words, as mentioned by Rappoport (1977; 289) these two basic domains of urban space, that is, public and private domains are not static. They are delineated by the help of various rules and symbols, defining the level of interaction. The rules and symbols are differentiated according to the user groups because there are differences in the tolerance levels and preferences of each interaction level. In other words, if privacy is defined broadly, the control level of unwanted interaction is also loose. Therefore, the degree of control levels is also variable, depending on the personal differences and affordances of the environment.

As exampled before, private spaces can be defined as well defended areas. They are very personalized spaces that its definition is clear and its physical borders are visible. Semi-

private and semi-public spaces are much more fluid concepts that both are similar in terms of physical experiences. However, in general, it can be said that semi-public spaces are generally private properties having a limited public access like front-gardens of the apartments. Thus, the weighted average between the private and public feeling includes privacy than the publicity. On the other hand, semi-private spaces generate more legal public access since the land is generally owned by associations which have less felling of possession.

Rappoport (1977: 89) categorized the space in detail;

1. Urban Public – open to all
2. Urban semi - public places for public use but with some limitations for some purposes and uses (e.g. post offices).
3. Group public – the meeting ground between the public and private realms managed by the community.
4. Group private – community gardens or storage areas managed by some group.
5. Family private – the dwelling and garden under control of the family.
6. Individual private – the innermost sanctum of the individual

Lang states that (1987; 160 cited in Baş, 2003) "social interaction occurs more easily when people's social needs are balanced by the sense of individual autonomy that comes with privacy." Thus, to provide an integrated community structure, well defined hierarchy of space is important. However, in urban arena, generally the role of public space is not well defined with respect to private space so designing well-defined and functioned public spaces has a key role to sustain good social relations. Moreover, the public space, coming from its name, public, should be open to public, available to multi-use of every citizen, legible and accessible to everyone and should be safe and welcoming because they are the main places to create a civil society. More than

constituting a physical entity, it is about coming together and doing things together (Lownsbrough & Beunderman, 2007; cited in Baş, 2003).

2.7. Regenerative Role of Community Design

Coleman & Neugarten (1971) indicate that analyses of the neighborhoods are important to indicate the social class positions. Urban social space with its different neighborhoods produces its own images representing the identities of the users.

The term urban design which is also called by "community design" does not only aim to create better urban spaces bot also better communities. The term "community" is widely used by sociologists, neighborhood workers, and others, but often with widely divergent meanings, to make relative distinctions. In the literature of the subject there is a growing disposition to emphasize as one of the fundamental aspects of the community its geographical setting. Whatever else the community may be, it signifies individuals, families groups or institutions located upon an area and some or all of the relationships which grow out of this common location." "Community" is the term which is applied to societies and social groups where they are considered from the point of view of the geographical distribution of the individuals and institutions which they are composed." (Park & Burgess, 1967)

In recent years urban design has been defined as an important tool and power during the process of regeneration. (Aldaous, 1998 cited in Ayataç, 2003) Urban design is an effective tool to attain economic targets, social requirements, to create effective and attractive places and to provide a qualified urban environment. (Colquhoun, 1995 cited in Ayataç, 2003)

In recent years in America, some European countries and foremost in England urban renewal projects has been conducted in all economic, social and spatial manner including urban design as a key policy tool to increase urban quality, sense of belonging and socio-spatial interaction. (Ayataç, 2003)

Regeneration and the integration of the aesthetic-dimension quality understanding has been developed in mid 1990s in England. Guidance also has been prepared as The Urban Task Force Report claiming that a successful urban regeneration can only be realized under urban design. This Report also implies that investments in unemployment and social policy should be integrated with buildings, streets, parks and squares as a melting pot in urban regeneration schemes.

Pocok & Hudson (1978) argue that, physical, social and psychological qualities of space influence the concept of sense of place. Thus; good design can contribute to good quality of life and community integration. Ayataç (2003) explains the benefits of urban design in regeneration urban spaces and contribute to social regeneration of communities as;

-Creating an urban image

-Facilitating access to inhabitable urban spaces

-Supporting effective use of urban development

-Creating accessible and secure places

- Creating well qualified attractive spaces

-Contributing to cultural environment

-Changing role of the cities within the country and the region

-Encouraging mix use

-Ensuring an integrity between the old and new urban patttern

-Encouring creativity

-Ensuring economic liveliness

-Encouraging investment

CHAPTER 3

SQUATTER HOUSING IN TURKEY

3.1. Definition of Squatter Housing

Squatter housing is a residential area in an urban quarter inhabited by the poor who have no afford to buy a tenured land of their own and therefore, "squat" on vacant land. The vacant land can be either privately or publicly owned. A squatter housing area has developed without legal possess to the land and/or permission from the authorities to build. Squatter housing is emerged in developing countries due to inadequate demand in the formal housing markets of the rapidly growing cities. As urban areas have always provided opportunities and chances people to improve their quality of living and environment, besides get better education, jobs and incomes, people have migrated from rural to urban. Having limited resources and skills to access a formal job and housing, urban migrants had to occupy a vacant piece of land illegally to build a temporary shelter.

Squatter housing is a world-wide phenomenon. Karpat defines this situation as “One cannot easily find another world-wide social phenomenon of which structural and functional similarities greatly surpass their local, regional and even cultural differences” (Karpat, 1979, pp 9 cited in Türel, 1979). In Turkey, the local name for a squatter is ““gecekondu””, a one-night built self-help housing. After World War II, rural to urban migration accelerated in Turkey so “gecekondu”s has started to be built in large cities. The early phase of rapid urbanization could be observed after 1945 and throughout the

1950s in Turkey so "gecekondu" problem became an important issue in urban policy after 1950s. As squatter settlements have illegal or semi-legal status, infrastructure and services are usually inadequate in these areas.

There are a number of attitudes and approaches towards squatter settlements, ranging from a positive to neutral or negative outlook. While some of the researchers and politicians describe squatter settlements as informal or low-income settlements, some call them as unauthorized or unplanned settlements. There are two main approaches in defining squatter housing. The first is Turner approach, focusing on the use-value of squatters while the second is Burgess Approach, focusing on commodity value. On the other hand, there is another view, accepting "gecekondu" as only a shelter to be improved in the long run for gaining a better living place.

3.1.1. Turner Approach

In the approach of Turner (1968), the squatter housing settlement is explained in a relational manner with social, demographic and economic aspects of the population. Turner emphasizes the socio-spatial relations in squatter areas and defines squatters in terms of dwelling environment instead of dwelling structures.

In Turner approach, the dwelling environment is assumed to have three basic functions as;

- Location
- Tenure
- Amenity

The squatter tenure's priority differs according to his social, economic and demographic status in the society so his choice in squatter depends on these three functions of the

dwelling environment. A new migrant of the city is assumed to concern his priority as location in Turner's approach since he will seek a centrally located house in a squatter neighborhood in order to be close to job opportunities. These neighborhoods are characterized with their poor housing amenities and over population. Tenancy is viewed as a temporary form of tenure since in the long run the main aim of the resident is to be the owner of a house. With the consolidation of the tenure's economic status in time; his priority shifts from location to tenure and he will move to a peripheral district and build a squatter to become a house owner. These new settlements will be consolidated in time and become working class suburbs of the city, and then the priorities of the inhabitants shift to feature of amenity (Türel, 1979).

3.1.2. Burgess Approach

Burgess criticizes Turner's approach since the approach concentrates on "use value" of the squatter and develops according to the tenants' consumer choices. Burgess emphasizes the "commodity value" of the squatter and indicates that self-help built housing transforms into a commodity by producer himself when the house is rented or sold in the market (Türel, 1979). Burgess also recognizes the different interest groups and actors in squatter housing and considers it as a market beyond the shelter.

The other characteristic of squatter housing is that generally the producer of the house is also the consumer (Türel, 1979). Burgess defines this type of production as "artisanal" or "self-built" form of petty commodity production, the first cycle of production. The second cycle of house production is defined as the industrial form of the capitalist mode of production.

3.1.3. Other Approaches

Similar to Burgess Approach, Adam (1973, cited in Türel, 1979) uses the categories to define the form of squatter house production. He defines rural housing as pre-capitalist mode of production whereas urban housing as industrial capitalist mode of production. While pre-industrial production depends on craft technologies, capitalist production depends on machine industries, assembly line industries or continuous process techniques. However; Adam considers only the stage of production and use value of squatter housing as Turner did. He does not consider the subsequent development of the squatter and exchange relationship. As in rural areas, craft technologies are used to build houses for their own use, this form has been brought into the urban areas to produce squatter housing (Türel, 1979).

In scrutinizing the Turkish case, Tekeli recognizes the different interest groups as Burgess Approach and does not underestimate the use value of the squatter. Tekeli argues that the initial build of the squatter housing is not a commercial fact but it could subsequently become the subject of exchange (Tekeli, 1971). Tekeli identifies eight different interest groups in squatter housing environment in Turkish case. The first group is related to the users and the second group is the outside bodies. They are;

1) Owner occupiers
2) More than one squatter owners
3) Speculators and intermediaries
4) Squatter tenants
5) The people running commercial and professional services in squatter neighborhoods
6) The owners of land on which the squatter is established

7) The owners and managers of the industrial and financial establishments benefit from the cheap labor since the squatter lifestyle reduces the cost of living of the families
8) The politicians of national and local decision makers

The interests of different actors in the squatter housing market vary. The differentiation of the tenancy actors can be summarized as follows.

1. **Owner occupiers:** This is the largest group of the squatter housing residents; they produce their own houses and use them for their own consumption. They concern generally the immediate satisfaction of their housing need and economize rent. They try to obtain title deed to feel secure under insecure job opportunities. The families rent a part of their dwellings to have incomes, which is also considered in this section.
2. **More than one squatter owner:** Those are likely to be the relatively long-term residents of squatter settlements, having chance to establish a new dwelling. They move to another squatter settlement area lack of amenities and property rights after they get title deeds of their previous houses and rent these houses. Tekeli also indicates that some of these owners also may move to planned district as they are consolidating their economic status by these rents that become additional income.
3. **Speculators and intermediaries:** This group produces squatter houses for the market with immediate exchanges. It is common in large metropolis where the production body is not a family or relatives but it is an organized body that has power, networks and illegal relations. Some of speculators also concentrate on illegal transactions of the land on which the house is built. Even some papers are used as the documents of exchange and families can sell their house or land to another family in an illegal manner.

4. **Squatter tenants:** Those groups are not involved in the production stage of the housing. However, their locational preferences are important to determine the tendency of squatter production. The locational preferences are mainly related to the proximity to job sites and the relatives.

3.2. Development Process of Squatter Housing

For the construction of squatters, there is not a housing finance system in most of the developing countries; thus, the finance of the capital is generally derived from the family itself or from relatives or from local money lenders. Building the house is the largest share of the costs but the cost of land is relatively small or without charge. However, in large cities both the squatter land and building have an exchange value and its own market.

In cities, squatter neighborhoods locate in specific areas. As a squatter is built on a plot that is generally publicly owned land, squatter housing is concentrated on a large publicly owned land. Karpat (1976, cited in Türel, 1979) indicates that "A new squatter settlement is established by a group of families in order to defend themselves against eviction and demolition of the houses by officials." Therefore, the agglomeration of houses also creates an image of collective defense.

The other character of the squatter neighborhoods is that temporarily structures are built at first by the family members and relatives without any pays. The risk of demolition forces them to use cheap and re-cycled materials. The first immigrants of large cities have chance to establish their own squatters; however, the latter immigrants can only become squatter tenants. Therefore, the number of rental squatters in a squatter district shows the level of commodity and exchange value of squatters in the city. In relatively small cities the immigration and competition levels are lower, thus, the use value of "gecekondu" is more significant than its commodity value. In large cities it is vice versa.

When the temporarily built structure is consolidated, the risk of demolish of the structure reduces and new squatters are built. With the supply of public services, official intervention to demolish the squatter reduces. When title deeds are obtained, the risk of demolish significantly reduces.

On the consolidation stage of squatter housing, cheap labor can be waged in building process in addition to the family members and relatives. This stage may span long period of time due to the sequential process of the enlargement of the neighborhood and infrastructure provision with the consolidation of the economic status of the family. The exchange value of the squatter housing is limited since it lacks property rights and has the risk of demolition (Türel, 1979). The legal title deeds are significant turnpoint in terms of commodity value of squatter housing.

3.3. Historical Background of Squatter Housing in Turkey

3.3.1. 1950-1960 Period

The majority of the population has rural character and modernization was the prior target of the new Republic before the mass migration movements started in the 1950s. Many laws and regulations were enacted for the creation of ideal cities for the young country. The Law 2290 was enacted with an aim to build the new districts without renewing the existing ones since there was no difference between renewing and rebuilding in terms of the cost (Yavuz, 1952). As stated in Jansen's Development Report (1937), the new urban development caused the destruction of the traditional tissue of the Ottoman cities and even loss of the cultural heritage elements in city centers. This also resulted in the dual structure in cities as Ankara experienced that "Ulus" was the traditional center

regarded as the rural, old and non-preferred district while “Yenişehir” was the center of newly created urban elite and the ideal structure of the new republic (Tankut, 1991).

Squatter housing development was not an urban phenomenon in Turkish cities till 1950s; however, the poorly developed urban policies caused the rise of squatter housing in an indirect casual manner. After the World War II rural to urban migration has started to be a case in modern cities since the initiate changes of cultivation in rural and ownership patterns in urban could be observed. American financial aid, Marshall Plan to Turkey led to the import of agricultural machinery; however, rapid pace of migration from rural to urban areas could not be met by industrialization. The new comers were perceived as an alarm and threat by urban elites and the government saw the invaders as an obstacle on the way to the modernization and westernization.

In 1950s a multiparty political system adopted then the Democrat Party came into power possessing liberal economic policies given priority to rapid industrialization. The recommendation of the capitalist societies to developing countries is the promotion of agriculture. The economic capital has influenced in a way on export of consumer and agriculture based foods with foreign technology in production changed the agrarian pattern of production and society in to cheap labor oriented production leading to creating strong ties with hegemonic power US, in the world economy. This leaded to political and economic transformation into capitalist world economy firstly after the Ottoman Empire and etatism of new republic (Boratav, 2003).

The political and economic transformation led to the changes in spatial component of the society as rapid urbanization came into the agenda. The Marshall plan for adopting the economy into the openness and uniformity of Fordism caused to the migration under the effects of technological improvements in agriculture and road network expansion in the country. Nevertheless, since the economic resources were directed to the industrialization, the capital flow to the urban amenities was restricted and the housing

provision could not be sustained. An important point to be realized in here is that the availability of housing was not the case in that context, people coming from the rural with economic difficulties; on the contrary, availability of affordable housing was the problem since there was no social housing policy defined in that liberal economy imposed era. There are two reasons under this inefficiency is one; the scarcity of budget the state has and the more importantly two, inefficient distribution of the resources by the government.

The housing stock of the cities lagged far behind the housing needs of the newcomers. Thus, first generation of the "gecekondu" was built. They were joined by their families in growing numbers, by their kin and fellow villagers coming to city via those contact. In this process "gecekondu"s turned to squatter settlement neighborhoods surrounding the central city. The urban elites condemned those immigrants as a threat for them so they became unwanted in social space, 'marginal' in economic space and therefore failed to receive 'acceptance' in physical space (Şenyapılı, 2004).

After this period a more positive attitude was emerged towards these new comers since they were regarding as a cheap labor force to the newly growing industries in cities and became an actor in urban administration. Therefore, title deeds and infrastructure promises were given by the politicians. Although this led to the recognition of this new working class, the distribution of the amenities did not gain a win to this stratum in the long run and the ""gecekondu"" problem has remained unsolved.

3.3.2. 1960-1980 Period

The previous liberalization model had failed to achieve equal distribution of benefits of development and resulted in serious unemployment problems due to slow industrialization. Many developing countries transformed their economies from export

oriented to import substitution. Thus, the squatter population was wanted to integrate to urban life as three process components, i.e., a steady urban job, proper shelter and integrated life-style with middle and upper classes. In 1960-1970 periods, squatter population was participated in secondary production cycles as cheap service sector and informal market. In 1966, the first ""gecekondu" Act" took place, implying the legal recognition of the situation at the first time. This new act aimed to increase the use value of the squatter settlements with the provision of infrastructure and services, which is similar to the Turner approach. The act did not require demolishing or preventing the "gecekondu" so many squatter areas continued to grow and turned to low-density residential neighborhoods with infrastructure and some services. However, they remained as alien and negative attitude of political spheres of urban elites insisted on their attitudes (Şenyapılı, 2004).

In 1970s in addition to the economic crisis, a political polarization caused to a chaos in the society. The optimism of 1950s was completely lost that radical leftist groups organized themselves more consciously around universities and ""gecekondu"" settlements. Then those settlements became the sites of politicians as rescued regions. A specific culture was born with a music type revealing the disappointment and extreme poverty in the settlements as a reaction. This reaction even did not welcome by the state and it was prohibited in legal media channels. Meanwhile, the commodity value of squatters was recognized in this period and decreasing availability of land for new comers sharpened the situation and the structural approaches and interpretations appeared especially in the second decade of 1970s (Şenyapılı,2004).

In 1970s the increase in the value of the land inner parts of cities and in car ownership accelerated the move of the upper classes out of the city centers. Moreover, the commodity value of "gecekondu"s, located in or around the city centers, took into consideration in that period with political and economic understanding of capital change.

Speculation on urban land started. “gecekondu” areas were tolerated by the governing political parties, who probably saw them as a means of ‘bribing’ the “gecekondu” population in order to keep them from political activism against the state. In that time the informal speculators and rent value of “gecekondu” were emerged and the commodity value reached to the peak point. After the weakness in economic and political collusions in the society, military intervention took place in September 1980 and a new period opened in Turkish modernization.

3.3.3. 1980-1990 Period

A radical break point occurred in the 1980s and three important impacts were observed. New privatization-based, export-oriented economic model and disrupting impacts on the urban labor markets; the slowing and finally closing down of worker migration channels to Europe; and the forced migration from the east and south-east regions of Turkey due to political unrest. The global reorganization of production recommended developing countries to make changes in their development policies and approaches. Since the site and services approach was fell down in 1970s with the collapse of import substitution economy, World Bank adopted a liberal program and comprehensive approach to housing sector aiming to increase the housing stock. Thus new policies about governance, participation, strategic planning and the Mass Housing Law and institutions were implemented (Şenyapılı, 2004).

After three years of military government, the coup was dissolved in 1983 with a new constitution creating a more conservative even restrictive attitude towards urban social movements and political thoughts. A new government was chosen by the public even make to be chosen since all the candidates were from the ground of cope, a more civil looking one, but sharing the same ideology. Özal, the prime minister of government was the financial consultant of the military government. The main idea remained the same as

adopting the right-wing politics via opening-up the country against communism and invisibility of the disadvantaged classes. The main reason to this policy changes was to open the country to be more Western as appreciated to the public (Şengül, 2009).

In 1984-85 several "gecekondu" laws passed, at the same time the mass housing fund and Housing Development Administration (HAD) were established. New laws allowed the construction of buildings up to four-storey on the same plot of "gecekondu" land. This widened the commercialization of squatters, which could be interpreted again as the government's 'bribing' those who suffered the most from their liberal policies. This resulted in silencing them by giving the hope of becoming rich. The tendency of the 1970s to regard "gecekondu" land as a commodity rather than its use or social capital was backed up by its legal approval in the 1980s; the apartmentalisation of "gecekondu"s became a widespread phenomenon both by formal and informal speculators contracting with the landlords with rent-share (Şengül, 2009). This led to a division of "gecekondu" inhabitant's utility as gaining a profit, better-off and the losers as the majority gaining no value even lost what they had.

The 1980s and 1990s were the years when society realized that rural migrants and "gecekondu" inhabitants rapidly jumped up to a higher economic stratum as social mobility was high in that periods rather than before. However this so-called social mobility did not involve a class shift as even some moved to apartments they remain the other and could not integrate to the middle and upper classes, rather created an inferior sub-culture as remained as "the others".

3.3.4. After 1990 Period

With the effect of the fall of Berlin wall in 1989, as the end of Cold War, legitimized the neo-liberal economic policies of the government. This further neo-liberalism increased

the migration to the large cities, resulting in unemployment and social polarization. Public and private sector job opportunities became very competitive, even the informal sector favored by "gecekondu" settlements has become hard to manage and get. This competition makes the small firms reduce their work force. This new face of the capitalism was globalization. That era also reduced the communal thought and the political issues were forgotten, as a result a new generation of "happy consumption" has created.

Moreover, with the new phase of capitalism, ethnic identities and localities were focused and ethnic politicizing of identities increased. The rise of political Islam and the 'Kurdish problem' in southeastern Turkey followed the military coup of 1980, thereby, the state emphasized on its Turkish–Sunni character. The increasing migration from the south-east in the 1990s, to escape terrorism, also created cleavages in cities (Şenayapılı, 2004 & Şengül, 2009). The newcomers to large cities, many of whom are people of Kurdish origin, have not been easily accepted into the existing migrant networks and they have been experiencing social and political discrimination against both the squatter population and urban middle-class. Therefore the squatter population was dissolved from one homogeneous to more heterogeneous pattern as Alevi-Sunni or Kurd-Turk to capture the resources.

The social polarization has increased the gap between the distributions of the resources. In that period there was a shift from modernism to post-modernism. A new defined hegemony and politics grew with the new concepts of governance, global cities and local identity focus. The "other" concept turned to "varoş" when the increasing commodity value occurred at the same time with the decreasing socio-cultural values of "gecekondu".

The general policies and approaches on squatter housing phenomenon is well defined by Şenyapılı (2004) that how external forces, planning approaches, economic policies and housing policies have a strong linkage (Table 1).

Table 3.1: Framework of transformation of squatter housing problem in Turkey (Şenyapılı, 2004)

	1950-60	1960-70	1970-80	Post 1980
Government Model	Nation state, welfare state	Nation state	Nation state questioned, rise of the local	Nation state narrows down,increasing dominancy of the local, governance concept
Economic Policy	Liberal development model, Keynesian policy, rapid development, government intervension for full employment and stability, industry led growth, foreign aid, eradication of poverty and equity in distribution of income to be achieved in time in development, growth poles, spillover effect	Planned development, import substitution model, internal market protected by customs, quotas, only factors of production imported, neo-classic economic approach	Impact of oil crisis, urban problems hinder national development, solution of these will lead to general development, World Bank enters the poverty agenda, collaboration with IMF, criticisms of import substitution models, reorganization of production towards flexibility	Foreign debt crisis and transition to neo-liberal, export-oriented, privatization model, flexibilization of markets, social policies structured by market forces
World Bank Policy	Conducts research especially in Latin America and Asia to clarify the squatter problem	Research continues, culture of poverty, poverty is 'fate' therefore it is the problem of the poor	Restructuring of policy after Turner approach, financial support to project based 'site and services'	Restructuring of policy, enabling, general urban policy, housing and urbanization finance organizations
Type of Urban Planning	Comprehensive	Comprehensive	Incremental, project level approaches, strategic planning, Infrastructure development	Structure planning Strategic planning
Dominant Urban Land Supply Model	Illegal invasion	Shared ownership	Housing cooperatives	Mass housing, cooperatives, transformation of squatter housing,
Public Approach to Squatter Housing Problem	Squatting is an illegal and dilapidated housing problem, elementary measures to stop or to re-direct migrant flow, the problem is temporary, public housing, multi-party system starts political patronage	Housing sector is unproductive, squatting is a housing problem, central government intervenes through Law 775, legalizing and classifying existing stock, prohibiting new stock, political patronage expands, worker migration to Europe eases migration pressure on cities	Populist subsidies to rural area, credit flow and subsidy to prices of agricultural products slows down rate of migration flow, politization of squatter housing areas between nationalist and radical left groups cooperative organization in housing sector, squatter problem more and more identified with poverty, starts to lose its 'housing' connotation.	The problem is now poverty, rent allocation provided through Law 2981, commercialization of squatter areas, transformation, forced migration from the east, increased migration to especially coastal cities, internal fragmentation and rising conflicts in squatter communities due to decreasing opportunities

3.4. Policies in Urban Built-Up Areas

3.4.1. Policies towards Squatter Housing

When the size of the housing deficit and the lack of an action or inadequate response of government bodies are considered, the positive role of squatter housing is important in housing poor families. However, ambiguous and complicated ownership rights of the occupied land and over utilized infrastructure and services will always remain problem. Politicians have recognized this problem and a number of policies have been adopted in finding a solution. Settlement up gradation or sites-and-services is one of the popular approaches used by the public authorities. The first has been an option when a compromise has been reached by the land owner. The squatter has not been demolished and on a sharing basis, a significant up gradation of the settlement's infrastructure and services has been provided. In some cases, land leases or ownerships were also given. When such land compromises or sharing has not been possible, the owners of squatters have been moved to another location. Varying levels of sites-and-services have been provided.

Land sharing is another popular approach that has brought about considerable neighborhood improvement by the tenures themselves. The tenures of squatters have organized themselves into a voluntary organization and initiated negotiations with the land owner to share the land. When the prime locations of the land are given to the owner, the remaining is used by the tenures. In this approach, the role of non-governmental and voluntary organizations is important in mobilization of the tenures, in training and educating them, in providing a link with the authorities. In addition to this, the participation of the squatter community in improving the quality of their neighborhood is also important. Commonly, community financial programs are used as a rallying point for improving the squatters.

In Turkey, the squatter housing policies can be established in three categories as;

1) Demolition of the established dwellings
2) Improvement of squatter houses and settlements
3) Controlling the establishment of self-help housing within predetermined plans and policies.

The general policies of the above can be explained as follows;

1. **Demolition of the established dwellings:** It generally occurs in early stages before the tenants defend themselves in terms of political and physical manner. The houses invaded privately or publicly owned land which is determined to use for a particular purpose have the risk to be demolished. Turkish cases show that families usually built their houses again after the demolition of first ones (Tekeli, 1976).

2. **Improvement of squatter houses and settlements:** Improvement policies have many aspects as the most widely implemented policy is the provision of basic infrastructure to squatter neighborhoods. As the settlement expands enough to put political pressure, the inhabitants request public services not only due to rise their life standards but also due to legalize their shelters and increase the exchange value of their houses. The other improvement policy involves the distribution of title deeds of squatter houses located on public land. It is practiced with a free charge in more populist applications. Legalization of ownership also has an aim to motivate the inhabitants to improve their houses and environment.
3. **Controlling the establishment of self-help housing within predetermined plans and policies:** The site and services program is an activity aiming to channel self-help house building to organize sites. Small plots which are serviced with essential services are given to families to build houses in certain forms and

standards. The cost of land, basic infrastructure and services is recovered by long-term financial arrangements (Türel, 1979). However, in many developing countries this approach has failed for low income groups since the inhabitants are marginal and unskilled workers and have no opportunity to gain regular jobs and pay the credits. Moreover, the rent gap cannot be sustained and the legal housing market puts pressure to those sites. In Turkish case, selling the property in ten years was forbidden in order to minimize the market pressure; thus, this led to some illegal transfers of land and government policies could not reversed the market forces.

3.4.2. Urban Transformation Policies

Following the 1980s squatter settlements, especially the ones located in inner-city areas have become the focus of attention under the effects of neo-liberal urban policies of the governments and the new global economy. Squatter housing areas are now the preliminary concern of the municipalities to take the advantage of the market changes. Involvements of local governments with the rules of the market and public-private partnerships in regeneration/transformation projects have increased (Dündar, Ö, 2003). Municipalities use urban transformation projects to improve the living standards of these squatter areas while transforming these areas into prestige zones by benefiting from the economic potentials of centrality on space.

To understand the frame and extent of the urban transformation projects in squatter settlement areas, the processes of urban transformation will be described and analyzed. The concept can be defined as '*a comprehensive and integrated vision and action that leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change*' (Egercioglu and Ozdemir, 2006). Urban transformation

projects varied according to the problems and characteristics of the application areas. While some aimed to revitalize a declining economic or social activity and to encourage social integration, some aimed to regularize squatter settlements and illegal urban developments and to redevelop these areas to upgrade the standards of quality of life.

The key concepts about urban transformation can be listed as reproduction, revival and renewal. Reproduction is not a repeated reproduction but a complete recreation of an urban space. Urban revival, on the other hand, has a deeper meaning including the phenomena of memory that it can be described as the recurrence of the area together with the identification of it as belonging to earlier experience (Baldwin, 1960). Urban renewal is a more pronounced term in regenerative policies of urban slums and squatter areas and it can be defined as a physical change or the change of the intensity of physical form or land uses. It is an inevitable process of economic and social forces (Couch, 1990).

The slum clearance has become to be practiced at the beginning of 20th Century in American cities, the scale of the projects was so large that the existing fabric totally erased and cleared and many people displaced from their houses. On the other hand, in Europe social housing projects were implemented with a governmental subsidy in the redevelopment process of the poorly fabricated slums (Fainstein, 1994).

The intensity, level of importance and the tools used have been altered in time with respect to social, economic and political forces as well as public policy agendas. After the Second World War II, the regenerative policies mainly focused on a physical structure under the effects of comprehensive planning (Ward, 1994). In the 1960s, the concept of squatters began to be discussed in a different manner and social aspects have been recognized. Moreover, in the 1960s, “privately initiated redevelopment” started since national programs could not solve the squatter problem properly. Generally urban

renewal projects aimed to reduce the density in city centers and clear industry from residential areas including creating new centers far from downtowns create greenbelts and improve pedestrian networks in the center (Grebler, 1964). In the late 1960s, the protection of European tradition and cultural heritage recognized and gained importance. Even though the level of the unique role of the governments has been diversified, local authorities, landowners and private partners have also roles in urban renewal processes (Gottdiener, 1985).

In the 1970s, the economic aspect of the renewal projects has been dominated and self-renewal polices also have been encouraged. The centralized mechanism of 1950s has been changed to a more decentralized structure. In the 1980s; as experienced in American cities in 1970s; European renewal policy also shifted to private public partnerships and the focus was turned to attract business, high-income residences with profit expectations. Parallel to these, the comprehensive intervention of the government reduced and the new role of the government was to minimize interventions to private resolutions (Bianchini, Parkinson; 1994). Moreover, the important role of the central government in urban renewal projects was replaced by the role of local governments. Marketing of the urban space has also introduced. The position of public places in urban space has also increased at this time. In addition, traffic calming measurements, pedestrianization and public transport improvements has become the key issues of urban renewal projects (Bianchini and Parkinson, 1993). The general shifts and tendencies in urban renewal can be summarized by the table of Lichfield, 1984:110.

Table 3.2: Urban Transformation Process Reproduced by Lichfield, 1984; pp.10

	1950s	1960s	1970s	1980s
Focus	Physical	Social	Economical	Integrative
Physical Intervention	Redevelopment	Rehabilitation	Self-renewal	Prevention
Economic Intervention	Government Investment	Incentive Schemes		Informal Economy
Governmental Intervention	Centralism	Power sharing		Small wards
The Role of the Public	Information	Consultation		Do-it-yourself

3.4.3. Negative Social Impacts of Urban Transformation Policies

The main problem in urban transformation policies is to control the rapid increase in property values with the start of projects. As squatter houses are generally located near central areas due to the job opportunities in the central areas, many renewal and redevelopment projects for squatter housing areas are proposed and implemented. Therefore, the rapid increase in property values of the shelters as well as the land is inevitable. Moreover, in developing countries the government could not support the tenants of the squatter houses to develop their own redevelopment or rehabilitation projects and could not provide public housing to move them during the project implementation so the private firms cause in the displacement of the residents (Ward, P. & Macoloo, C., 1992).

The term gentrification derives from the word “genterise”, denoting “gentle birth” in the 14th Century. In 1964 it is defined by Ruth Glass as the influx of middle-class people to cities and neighborhoods, displacing the lower-class worker residents. Gentrification is a result of the new economy of centralized, high-level services like banking, culture and service activities that replaced the older, typically manufacturing-oriented works. Smith and Marxist sociologists explain gentrification as a structural economic process while Ley explains gentrification as a natural outgrowth of increased professional employment in the central business district and creation of relative-culture classes. The Marxist sociologists of 1950-60s see this trend as a bohemian practice.

Gentrification is the rehabilitation of the decaying housing by middle-class outsiders in central areas of cities. In the late 1970s, a broader conceptualization was emerged as linking the process with social spatial and economic re-structuring. Smith and Williams (1986) note that up to late 1970s, the notion of gentrification as residential rehabilitation is sufficient to understand the mechanism but with early 1980s, it was becoming an evident that residential rehabilitation was only one face of the transformation in the advanced structure of capitalism. Gentrification was emerged as a visible spatial component of this transformation. It was evident in the redevelopment of water-fronts, the rise of hotel and convention complexes in central cities, large-scale luxury offices and residential developments, and fashionable, high priced shopping district.

After 1980s, the gentrification has changed dramatically both in capitalist countries and in developing countries. Due to the rise of the concept of global cities, internationalization of property, emergence of new middle class as professional elite and the changed focus of planning ideology on public private corporations led to more gentrification processes in the world. In Turkey, the whole process was accelerated and then, slowed down in the last 30 years in the city centers. In the 1970s, with the improvement of “gecekondu” settlement areas took place with the legalization of

squatter areas, a commodity value also occurred with the use value. This resulted in the generation of rent and selling value of "gecekondu"s. Many families living in central "gecekondu" areas have benefited from this rent by selling or renting their "gecekondu"s and moved to the periphery of the city after building a new "gecekondu". In this new "gecekondu" area, infrastructure and public services were not provided; however, to gain financial profit, they started to live in this new neighborhood. Thereby, they became the member of a relatively higher income class. (Türel, n.d.)

After 1980, with the apartmentalisation of "gecekondu" areas, many speculative builders even did not wait the improvement plans in central areas and built unauthorized apartments with lower price levels. As a result, the many "gecekondu" owners did not gain much to success their aims of class shifts and moved to other areas of the city. Middle or higher income groups moved to these newly built apartments, which is a kind of gentrification process. The results of the projects that designed and implemented in the "gecekondu" areas of Ankara showed that gentrification is an action of state-led urban regeneration policies as a reflection of global urban restructuring with the incentive of land and property capital more than being a result of a class-led invasion of urban land.

3.5. Policies for Squatter Housing in Turkey

3.5.1. Policies until the 2000s

Different policies to solve housing shortage problem by providing housing for low and middle income groups and to prevent squatter housing development have been implemented in Turkey. Nevertheless, the informal housing constructions like "gecekondu"s have continued. The central governments have enacted several legal arrangements since the 1940s (**Table 2**). The continuous increase in the number of

squatter settlements forced the governments enact several amnesty laws for squatter settlements. The first one was enacted in 1948. This one covered the amnesties of "gecekondu"s located in only Ankara; however, another law was enacted in the same year to extend the legal power of the former one throughout the country. Title deeds for buildings were distributed and financial credits for housing were provided. In both amnesty laws, the squatter settlements were accepted to be temporary. In 1949, an attempt to prevent squatters was the enactment of the Demolition of Illegally Built Structures Law No. 5431. The aim of this law was to demolish slums and avoid the construction of new ones. However, these laws, intended to prevent the construction of new "gecekondu"s could not been supported by the provision of affordable housing. Therefore, this resulted in an increase in squatter settlements.

Table 3.3: Targets and results of Improvement Laws (Sat, 2007)

ACT NO	DATE OF APPROVAL	TARGET	RESULT
5218	14.06.1948	*empower the Municipality to undertake improvements in gecekondu areas *allot parcels of land to potential gecekondu builders	*dense *gecekondu* areas were reserved for housing development *areas where gecekondu were not exist were transferred to the Municipality
5228	28. 06. 1948	*extend the act 5218 throughout the country *supply financial credits for housing	*financial credit provisions helped middle income groups instead of low income groups
5431	06.06.1949	*avoid illegal housing problem *demolish the houses which had been constructed up to that time	*could not be achieved perfectly
6188	24. 07. 1953	*produce land for housing *legalize the illegal houses built up to that time	*state owned land was transferred to the municipality to be used as housing sites *demolition of squatter houses was never carried out fully
775	20. 07. 1966	*improvement, clearance and prevention of squatter houses	*although 1.3% of squatter housing areas had been cleaned, this aim could not be achieved perfectly
2805	16. 03. 1983	*preservation, improvement and demolishment of squatter houses	*Ankara Municipality determined 22 improvement plan areas
2981	24. 02. 1984	* preservation and improvement of squatter houses	*Tapu tahsis belgesi and title-deed were given to squatter owner
3290	22. 05. 1986	*enlargement of illegal housing concept	*offices and houses transformed from houses were included in the definition of illegal housing

Although there are several legal arrangements, those are enforced to solve the squatter housing problem in Turkey, two of which have been accepted as turning points in the transformation of squatter housing areas. The first was the Squatter Law No. 775 in 1966 and the second, the Amnesty Law No. 2981 in 1984 (Sat, 2007). While the first focused on the use value of "gecekondu"s and partially increased the social and physical capital of "gecekondu"s, the second law focused on the commodity value and entrepreneurships of "gecekondu"s.

3.5.1.1. Squatter Law No. 775

The Squatter Law No. 775 was enacted in 1966 and the aim of the law was to provide improvements and clearance of the squatter areas in the cities. With the introduction of this law, "gecekondu"s was legally accepted, which was different from the previous squatter laws that ignored their existence. However, this law also did not offer solutions to "gecekondu"s and their inhabitants. In the 1960s, governments had a negative attitude to squatter housing areas and their inhabitants, seeing them as sources of social problems in cities (Dündar, 2001 cited in Sat, 2007). As the Law No. 775 was prepared in these years, this law brought about regulations to forbid new squatters as well as clean and upgrading the existing ones. Preparing the maps and improvement plans by local governments was necessary.

This squatter law proposed a regulation for urban transformation activities including the legal, structural and financial aspects. It differentiated the squatter areas into three as,

-Clearance zones

-Improvement zones

-Prevention zones

The clearance zones, defined as the poorly structured squatter areas, would be demolished completely and regenerated for public use. The residents were moved to squatter housing prevention zones. The improvement zones are renewal areas rather than clearance areas. Upgrading the standards of buildings was the main purpose. As a result "Improvement plans" were prepared for the provision of public services. These plans also resulted in the property value changes of the squatters and increased the legalization of them (Türksoy, 1996). Prevention zones were created to provide affordable housing to poor income groups both for the inhabitants and newcomers of the cities. In order to prevent the establishment of new squatter settlements, different models were developed such as social housing, core-housing, self-help housing and low-cost housing cooperatives. A central fund system was also established to provide credit and subsidy for the inhabitants (Türksoy, 1996).

Although the general frame of this law was well defined, it could not be successfully implemented as clearance zones could not be demolished due to the insufficiencies in prevention zones and political wills. In addition, improvement and prevention zones caused the displacement of the inhabitants due to the increase in the property value of the squatters. Thus, rentier and profit making of income groups were emerged in squatter neighborhoods of Turkey. Furthermore, only the location of squatter housing changed and new squatter areas have continued to be built on the periphery of the cities.

3.5.1.2. Amnesty Law No. 2981

The social, economic and political transformation after the 1980s made a great impact on squatter housing as well. The squatter housing stock was commercialized through new amnesty laws and this building stock became an important source of rent and was opened to different models of urban transformation (Şenyapılı, 2004).

The Amnesty Laws no. 2805 and 2981 were issued in 1983 and 1984 respectively. These laws are different from the previous ones. These were a general building amnesty

for all unauthorized buildings in Turkey. With these laws, improvement plans were required. It was believed that if squatter settlements are legalized, the living conditions in these settlements were improved after the gain of ownership rights. In addition, local real estate taxes would be collected after the legalization of these settlements and housing sector development would be pushed with the reconstruction in squatter areas.

The concept of "improvement" was introduced by the Law No. 2805 and the unauthorized housing problem not only in the periphery of cities but also in the center has been firstly announced. According to the Law, improvement plan is defined as a reconstruction plan aimed to upgrade squatter settlement areas, which were formed irregularly. The aim of planning is to mitigate unsanitary living conditions. The Amnesty Law no. 2981 aimed to accelerate the process of legalization of unauthorized buildings. The improvement plans were prepared to protect the existing structures as much as possible. However, if redevelopment would be necessary, density could be increased by these plans. These laws started the urban transformation process in Turkey. Firstly, the legalized squatter settlement areas in the city centers were transformed, then the areas in the periphery of cities were transformed. New 4-5 floor detached apartment buildings were constructed on the parcels of single independent squatters. Building densities increased without any improvement in social and technical infrastructure. Speculative income and political interest in the transformation process of squatter housing have increased.

3.6. Urban Transformation Process

The starting point of urban transformation in Turkey was the market-based transformation of squatter settlement areas. The instrument in this transformation process was the improvement plans that were applied after the 1980s. Individual constructors with small capitals were the developers of these squatter areas. The raise in

construction rights of each individual parcel resulted in a development all over the country. New policies and instruments causing another form of urban transformation have been conducted in the 2000s. New legislations and legal provisions were applied. Then urban transformation projects for larger urban areas in Turkish cities are adopted by local governments and implemented in collaboration with HDA or the private sector (Bayraktar, 2006).

In the 2000s many laws and decrees that were directly or indirectly related to urban transformation issues were enacted. These are

- Law on Metropolitan Municipalities, No. 5216 in 2004,
- The Law concerning the Urban Regeneration Project of Northern Ankara Entrance, No. 5104 in 2004,
- Municipality Law, No. 5393 in 2005,
- Law on Amendments on the Law on the Protection of Cultural and Natural Heritage and on Various Laws, No. 5226 in 2004,
- Law on Renovating, Conserving and Actively Using Dilapidated Historical And Cultural Immovable Assets, No. 5366 in 2005,
- Law on Redevelopment of Areas under Disaster Risk, No. 6306 in 2012.

3.6.1. Law on Metropolitan Municipalities No. 5216

Law on Metropolitan Municipalities No. 5216 has been approved in 2004 with many revisions in the responsibilities and authority of the metropolitan municipalities. The previous law that stated the responsibilities and authority of metropolitan municipalities were defined by the Law No. 3030 in 1984. The purpose of this new Law is to ensure that services of metropolitan municipality are provided in a planned, effective and efficient way. According to this Law, where the total population of the settlements

located within the boundaries of a provincial municipality exceeds 750,000, that provincial municipality may become a metropolitan municipality.

The duties and responsibilities of metropolitan municipalities in relation to planning are preparing of strategic plan, investment programs and budget; preparing, approving and implementing the master plans in 1/5000 scale or 1/25000 scale; drawing up provincial territorial development plan in 1/50.000 scale or 1/100.000 scale; and exercising the powers determined municipalities by the Squatter Law No. 775. Besides, metropolitan municipalities can evacuate and demolish buildings that are vulnerable to disasters and located on high risk areas. With the Law No. 5216, the authority and power in declaring urban transformation areas and conducting projects by founding companies and forming associations by HDA or private companies were given to the metropolitan municipalities. However, metropolitan municipalities misused their authority in the development of new housing areas by the demolition of squatter areas that could not been transformed by market-mechanism. Not only the areas that constitute risk to life and building but also the historical areas in the city centers as well as squatter settlement areas were subject to urban transformation project development. Municipalities formed joint companies and developed these housing areas with a speculative incentive. The rights of owners and socio-economic development in these areas were not focused in these urban transformation projects.

3.6.2. Municipality Law No. 5393

This Law is to regulate establishment, organs and management of municipalities as well as working procedures and principles, functions, powers and responsibilities of the municipalities (Ministry of Interior, 2011). Municipality can be established in the settlements where the population is 5,000 and above. Municipalities are to prepare and

approve the development plans of the municipality and to approve the territorial development plan for the metropolitan municipality and provincial municipalities. In addition, municipalities with populations of 50,000 and more have to prepare strategic plans according to the Law No. 5393. With this law, participation in strategic planning process became compulsory. Moreover, municipalities have the right and authority to declare areas that are defined as urban transformation areas. The aim in developing urban transformation areas is to decrease the vulnerability and risks. However, these projects were prepared for redevelopment or sometimes reproduction of squatter areas or historical areas whether they are subject to disaster risks or not.

3.6.3. Law concerning the Urban Transformation Project of Northern Ankara Entrance No. 5104

With the Law No.5104 enacted in 2004, HDA and the Metropolitan Municipality of Ankara are authorized to improve the physical structures and environment of Northern Ankara Entrance. This corridor is named as "Protocol Road". To beautify this corridor and its surrounding areas and to provide a healthier housing, this new law is enacted. However, more than 5.000 squatters were demolished and their inhabitants forced to move to other areas. In this project, described by this Law, urban design, housing, social infrastructure, landscape and the technical infrastructure projects as well as constructions were given to both the Metropolitan Municipality of Ankara and HDA in coordination. However, the properties and characteristics of the locality were ignored.

Figure 3.1: Urban Transformation Project of Northern Ankara Entrance (Emlak Kulisi, 2014)

3.6.4. Law on Redevelopment of Areas under Disaster Risk No. 6306

This law has been passed and put into force in 2012. The governing authority of this law is the newly established Ministry of Environment and Urbanism. The main purpose of the Redevelopment Law is to determine the principles, methods and processes related with rehabilitation, demolition and reconstruction at areas under disaster risk and at other areas with the aim of providing the requirements of technical, environmental and zoning plans. The areas where there are structures under risk can be planned. According to Article 9 preventive provisions of other laws contrary to the implementation of this law shall not be applicable. Due to these items of the Law, some protests from professional chambers and current residents of transformation areas were organized. As

the Law brings new means of maximum use of land at centrally located urban areas with higher floor area ratios, social, cultural and environmental agencies bring up the discussions on the inefficiency use of public land and inequality between citizens on the agenda. Central institutions of HDA as well as local institutions are authorized to decide which structures are under risk (MIGM, 2013). With this Law, the authority about the declaration of urban transformation areas shifts from the local governments to the central government.

Table 3.4: Summary of Squatter Housing Phenomenon

	1950s-1960s	1960s-1970	1970s-1980s	1980s-2000	After 2000
Government model	Nation state, welfare state	Nation state	Nation state questioned	Rise of local and governance	Extension of transformation
Economic Policy	Liberal development, Keynesian economics, industrial growth, foreign aid	Development plans, import substitution model, neo-classical economics	Impact of oil crisis, collaboration with IMF and World Bank, flexible production	Foreign debt crisis, neo-liberal export-oriented privatization, social policies structured by market forces	Privatization of public services, economic development based on construction sector after national financial crisis
Types of Urban Planning	Comprehensive	Comprehensive	Incremental, strategic planning	Structure planning, strategic planning	Structure planning, incremental planning, residence projects
International Focus	Physical	Social	Economic	Integrative	Sustainable and Integrated
International Intervention Tendency	Redevelopment	Rehabilitation	Self-renewal	Prevention	Rehabilitation
World Bank's Attitude	Focus on Latin America and Asia	Researches on poverty as a fate	Focus on Turner approach by site and services	General policies, finance organizations	Social and culture based policies
Public Approach	Stop migrant flow, ignorance	Squatter as a housing problem, government intervention	Populism and politization, cooperative organizations	Rent allocation and commercialization forced migration from the east	Rent sharing and displacement

Table 3.5: Summary of Squatter Housing Laws Enacted in Turkey

Act No	Approval Date	Target	Result
5218	1948	Empowerment of municipality to undertake improvements in "gecekondu" areas	Dense squatter zones were reserved for housing development and the vacant lands were transferred to municipality
5228	1948	Extension of 5218 throughout the country and financial credits for housing	Financial credit provisions helped to middle-income groups rather than low income groups
5431	1949	Demolish present squatters and avoid further construction	Could not be achieved perfectly
6188	1953	Produce land for housing and legalize present squatters	State owned land was transferred to municipality and demolitions never could be carried out fully
775	1966	Improvement, clearance and prevention of squatter houses	Only 1.3% of squatters could be cleaned
2805	1983	Preservation and improvement and demolishment	22 improvement plan areas were determined by Ankara Municipality
2981	1984	Preservation and improvement	"Tapu tahsis belgesi" and title deed were distributed to squatter owners
3290	1986	Enlargement of illegal housing concept	Offices and houses transformed from houses were included in the definition of illegal housing
5216	2004	Revision of the responsibilities of metropolitan municipalities to ensure that services of metropolitan municipality and HDA are provided in a planned and efficient way	Metropolitan municipalities misused their authority by the demolition of squatter areas that could not been transformed by market-mechanism. Areas having constitute risk to life and the historical areas were also subject to urban transformation.
5104	2004	HDA and the Metropolitan Municipality of Ankara are authorized to improve the physical structures and environment of Northern Ankara Entrance.	Displacement, ignorance of the properties and characteristics of the locality
6306	2012	Determine the principles, methods and processes related with rehabilitation, demolition and reconstruction under disaster risk and at other areas to provide technical, environmental and zoning plans.	Loss of the local extend in urban transformation, increase in urban density and inefficient use of public land

After the synthesis of the main laws and attitudes towards squatter housing in Turkey there gathered three main points as;

- The main targets and the motivations of the laws could not be satisfied properly,
- The general attitude towards squatter housing problem differentiates in Turkish practice especially after 1970s,
- The main route of the laws altered with respect to popular needs, attitudes and political wills,
- There is not any spatial reference in the laws with respect to urban design or community planning elements enacted to solve squatter housing problem although, the focus is on physical intervention.

CHAPTER 4

URBAN RENEWAL AND TRANSFORMATION EXAMPLES OF SQUATTER AREAS IN TURKEY

4.1. Dikmen Valley Housing and Environmental Development Project Area

Dikmen Valley is located between two densely populated housing quarters, Çankaya and Dikmen, which are in Ankara's southern urban development zones. The area is approximately 2,5 km far away from the city center. Çankaya is the most prestigious district of Ankara, where the presidential residence is located. The area stretches south along bottom of the valley for approximately 6 km and has a width of 300 m along the city centre, Kızılay, and reaches the unsettled areas in the south. (P. Türker-Devecigil. (2010). Urban Transformation Projects as a Model to Transform "gecekondu" Areas in Turkey: The Example of Dikmen Valley – Ankara)

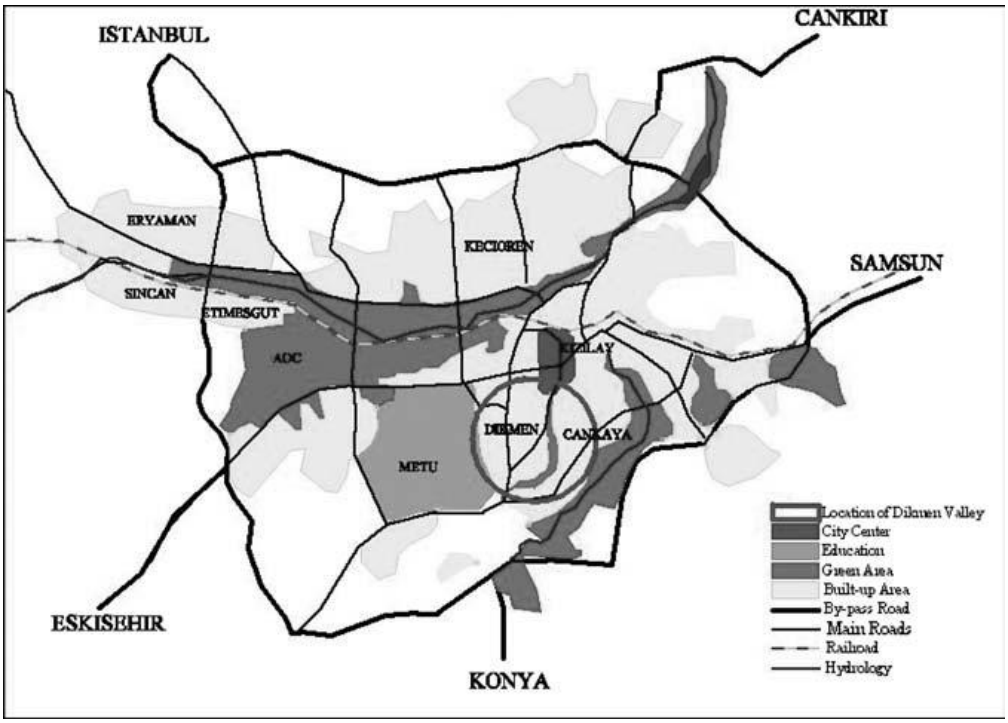


Figure 4.1: Location of Dikmen Valley in Ankara (Türker-Devecigil, 2010: cited in Metropol İmar, 1994)

The area was invaded by squatter houses until the end of 1980s. The aim of the project is to totally transform the valley to a recreation area on a city scale, to create a commercial, cultural and social urban node for the city and to provide housing for squatter housing people in the project area by using relocation model. (*Metropol İmar, 1994; Uzun; 2003 cited in Z.E. Kahraman. (2008). The Relationship Between Squatter Housing Transformation and Social Integration of Rural Migrants into Urban Life: A Case Study in Dikmen*)

Figure 4.2: View of the gececondus in Dikmen Valley; Federico Malusardi and Giuseppe Occhipinti - University of Rome "La Sapienza", DPTU Informal Settlements Upgrading: the Gececondus in Ankara, 39th ISoCaRP Congress 2003, Cairo.

The Ankara Greater Municipality and the Municipality of Çankaya proposed the Dikmen Valley Project in the master Plan of Ankara in 1989. The valley was included in the previous plans of Ankara but in the Jansen Plan (1932) it was out of the urban development area. *(Malusardi, 2003)*

Figure 4.3: The first City Development Plan of Ankara (1932), designed by the architect Hermann Jansen. Aside, the Proposed Open Space in the "Urban Development Strategy: Ankara 1970-1990".(Malusardi,2003)

In the Yucel-Uybadin Plan (1957), the Dikmen Valley was planned to be a green belt between residential areas. After the 1960s, parks and green areas were gradually developed within valleys in the city. The valley thought to be designed as a natural conservation area in all urban development plans since the valley is one of the most important air circulation corridors and the water basins of Ankara. (Türker-Devecigil, 2010)

However, the Dikmen Valley was left and so became an attractive site for *"gecekondu"s*. Piecemeal plans and projects implemented in and around the valley encouraged illegal buildings. (Malusardi, 2003) The "gecekondu" development process in the valley started after the 1960s and the number of "gecekondu" units reached 1,916 with nearly 10,000 inhabitants in 20 years (Turker-Devecigil, 2010; cited in Metropol Imar, 1991).

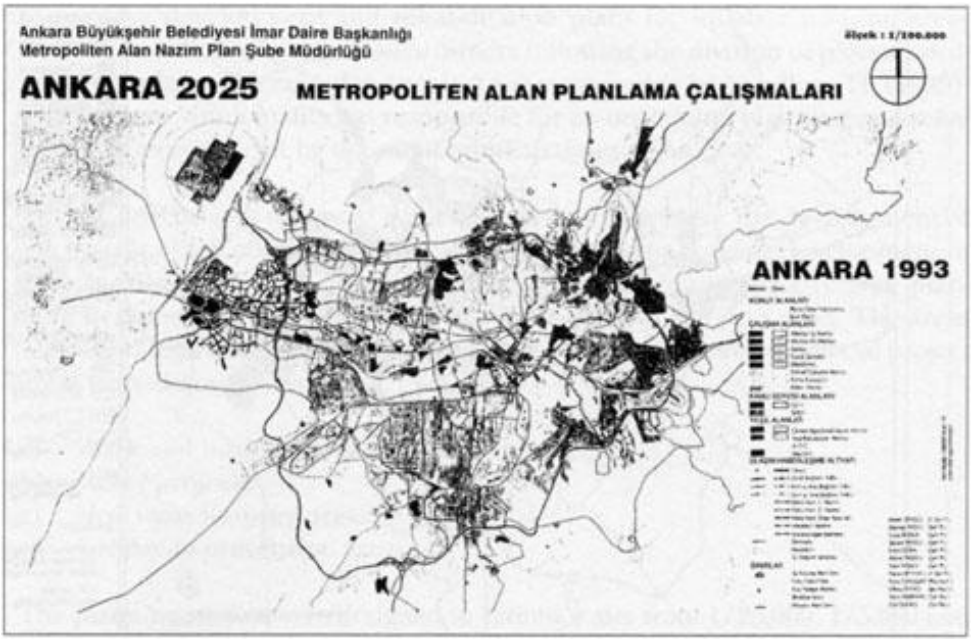


Figure 4.4: The"2025 Master Plan for the Metropolitan Area" (1993). (Malusardi, 2003)

In 1986 the Ankara Greater Municipality prepared a comprehensive plan to develop an urban park in the valley basin. The name of the project is Dikmen Stream Green Area Project, which aimed to relocate the "gecekondu" inhabitants to another part of the city by transforming the valley into an urban park. This project could not be implemented because of high expropriation costs and oppositions of the "gecekondu" but it was reconsidered and redesigned as a housing and recreational project in 1989. (*Turker-Devecigil, 2010*), (*Malusardi, 2003)*

To encover the planning, a semi-public company, Metropol Imar A. S., was established in partnership with the Çankaya Municipality (1990). Many surveys and investigations were done during the process such as maps, geological reports were done. Moreover; interviews were conducted with the residents, and five co-operatives were established in five neighborhoods. (*Malusardi, 2003)*

Since Dikmen Valley has been a physical threshold separating upper-income groups in the west and lower-income groups in the east, the project also aimed to integrate these two income groups in a public space area by socio-cultural activities in the valley. The residential areas were located skirts of the valley in order to allow resettlement of the squatter housing population and also to moderate-upper income groups by cross-subsidy. (Metropol İmar, 1991; Türker-Devecigil, 2003; Uzun, 2005). Moreover; commercial centers, municipal services and car parking facilities were also constructed under the name of Valley Gates for both as a social infrastructure and also for financial purposes (Türker-Devecigil, 2005 cited in Kahraman, 2008).

Figure 4.5: Left: Dikmen Valley Development Plan (*Malusardi, 2003), The 1991 approved project of the Dikmen Valley* (*Malusardi, 2003)and main infrastructure: the Yildiz-Oran Axis the study of the subdivision of the land ownership.* (*Malusardi, 2003)*

Project area covers 158 hectares containing 2300 squatter housings with 9809 residents. Five implementation zones were identified during that the total population of the area was increased by 183.50% after the completion of the first and second phases of the project. (Dündar, 2003) At the end of the meetings, 1080 squatters programmed to be settled in 500 houses. The squatter housing inhabitants were resettled to temporary

small, prefabricated apartments by rent subsidy supported by municipality. (Dündar, 2001; Türker-Devecigil, 2003; cited in Kahraman, 2008)

Different viewpoints produced by different stakeholders that Türker-Devecigil (2010) explains foru different perspectives to Dikmen Vally project as;

1. as a natural element to be preserved
2. as an invaded natural element to be rescued
3. as an urban area to be rehabilitated
4. as a value to be shared.

The significance is the Dikmen Valley Project is the role of public participation. An actor scheme was defined for assigning process of the project between local governments and squatter housing owner's face-to-face meetings and decision committees were programmed that face-to-face meetings took place at the beginning to provide participation and approval of squatter owners. To organize the community, housing cooperatives were encouraged to provide integration and communication between developers and inhabitants. (Metropol İmar, 1992; cited in Kahraman, 2008)

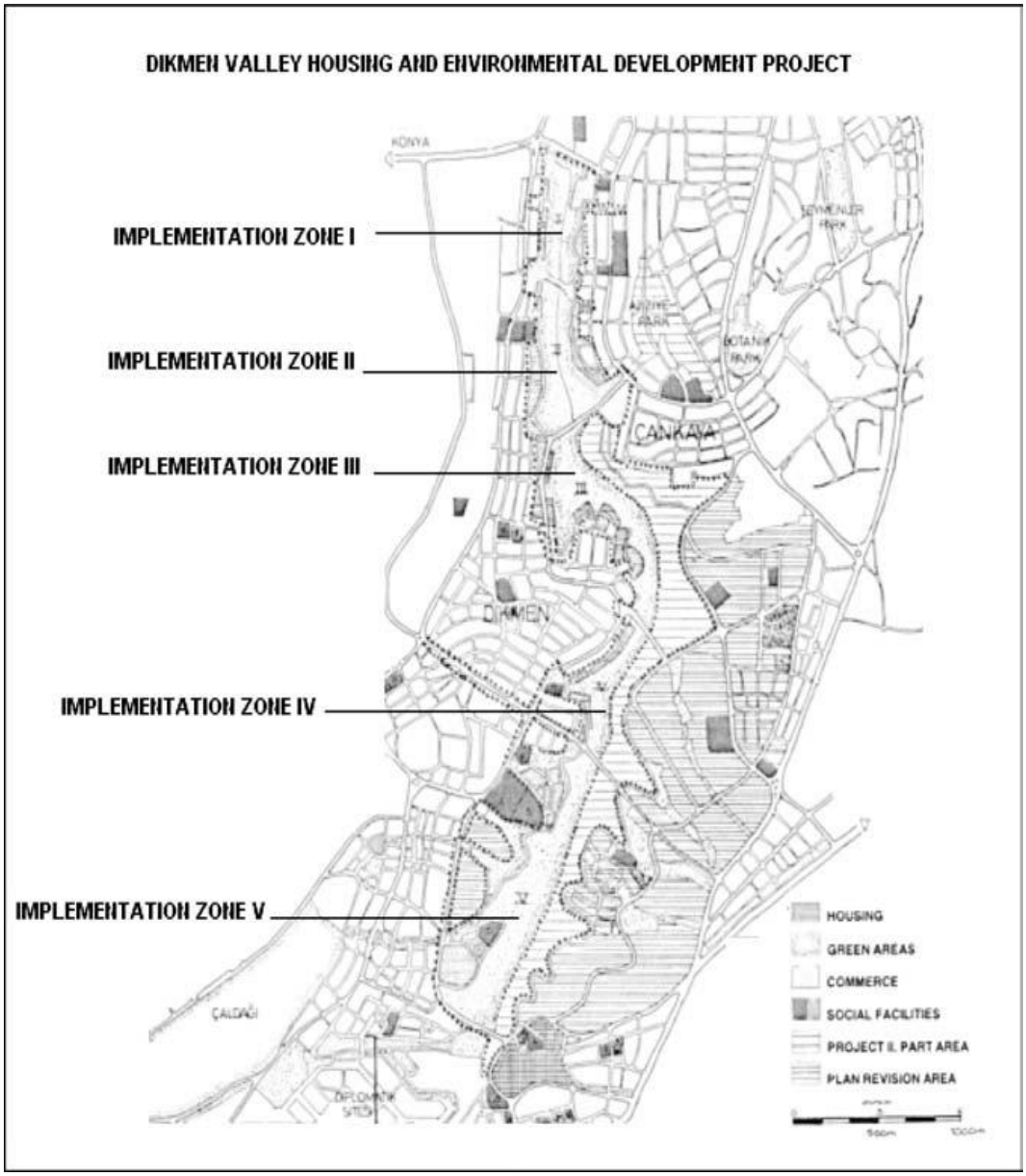


Figure 4.6: Implementation zones of the Project (*Turker-Devecigil, 2010; adapted from Metropol İmar, 1991)*

After the municipal elections of 1989, the new local administration introduced the Dikmen Valley Project as the biggest "gecekondu" transformation project of Turkey. The participants as the project bearers were the Greater Ankara Municipality (GAM),

the Çankaya District Municipality (C¸ DM) and Metropol Imar (a public project management company, whose capital holders were GAM and the district municipalities) (Turker-Devecigil, 2010; cited in Kuntasal, 1993).

This project can be condemned to be the first public participatory project since a degree of consensus was established between the squatter owners and local authorities. However, these participation mechanisms worked at the beginning but could not continue after the municipal elections of 1994. During the ten years of the implementation process, the project principles and terms of agreement were altered and the participatory character of the project was totally lost since the focus was turned into sharing the profit. (Türker-Devecigil, 2005; cited in Kahraman, 2008)

The right-holders are defined as those who have an average plot size of 300-350 square metres, and who applied to be legalized before 1985. Any household having these conditions is granted one new flat. Any plot size greater than the average was expropriated, and if it was less it was either expropriated or the owner paid for the rest of the land. Those who were not right holders had to leave the area. The Greater Ankara Municipality paid for the expropriation and many tenants left the area. (*Malusardi, 2003)*

In the first 13 years, only two-fifths of the project was completed, many modifications took place and many legal disputes occurred between the stakeholders. In addition to its debatable issue, it has both negative, (displacement of low income groups, high construction rates in the valley, the inadequate analysis for water systems, eco-basins, river-catchment areas and ecosystem approach, etc.), and positive impacts (participatory mechanism in urban management, new financial innovations, etc.). (Dundar, 1997; Gunay, 1993; Sahin, 1996)

4.1.1. Evaluation of the Project

4.1.1.1. Strengths

1- The financial model

One of the strengths of the Dikmen Valley model is its self-financing structure providing minimum financial burden to local governments. Financial costs were met by additional construction rights and marketable urban uses. Moreover; financial sources are also used to convince the "gecekondu" owners to take part in the project as shareholders.

2- *The participation process*

For the Dikmen Valley model, consensus building and trust creation between "gecekondu" owners and project bearers are the main issues that determine the success of the project. The participation process in Dikmen Valley was successful in terms of developing a consensus and the trust compared with many other transformation attempts that failed. However, it was limited in terms of the participant groups and the degree of participation. However; in time the participation process decreased especially after the second local elections.

4.1.1.2. Weaknesses

1) Participation

The main objective of the project was to transform the "gecekondu" houses in the valley to provide a better quality of life as well as to create and design an urban park as an air corridor and a green area for the whole city in addition to minimize the risk created by natural features of the area. In fact; the project had different objectives in various scales. However, there always occurred confusion and dilemmas in main objectives. The project

documents explain that the sole objectives were to preserve the natural characteristics of the valley by providing a green space for Ankara and to transform ““gecekondu” areas” by providing a participatory decision-making mechanism. However, the latter has become the only issue in question during the implementation. (Turker-Devecigil, 2010)

2) Displacement

1480 squatter housing inhabitants were identified as rightholders before the construction process of the project (Türker-Devecigil, 2003), the number of the rightholders significantly decreased in later processes. According to the field surveys, 22% of the title-holders sold their houses in the valley since 1997; in 2002, 37% of all titleholders rented their houses. In the year 2003, the number of right-holders settled in the valley decreased to 342 (Türker-Devecigil, 2003; cited in Kahraman, 2008).

Moreover; in the Dikmen Valley, in 1997, the right-holders occupied 49% of the total social housing units completed (Dündar, 1998). However; in 2003, this ratio decreased to 39% (Türker-Devecigil, 2003). The second problem encountered in such project areas is the social polarization created between the residents of the social houses and the luxury houses. In the first and the second implementation zones, 1047 luxury houses were built for high-income groups and 882 social houses for squatter owners. At the end; the squatter owners reflected their discomfort due to the high-rise luxury houses (Türker-Devecigil, 2005; cited in Kahraman, 2008).

Figure 4.7: Bridge of the Valley, (Malusardi, 2003)

3) Legislative Framework

The absence of a clear legislative framework for urban transformation is one of the weaknesses that resulted in unexpected problems during the implementation of the Dikmen Valley project. Therefore, the developments that took place in the Dikmen Valley case have been open to debate in legislative terms and they were mostly used by the opponents to the project that the "gecekondu" inhabitants and landowners in the valley started to expect to receive the same development rights for the valley (Metropol Imar, 1994 cited in Türker-Devecigil, 2005).

4) Social Exclusion

This model produced a potential for developing social inclusion strategies by means of urban design (such as more common areas, cultural activities, etc. besides the participation mechanisms. However, the integrative design strategies in spatial terms did

not solve the social segregation problem that arises due to the two different income-level groups using the same space. The process ended up with social exclusion of the low-income groups and their 'voluntary' dislocation. (Türker-Devecigil, 2005). This may be result of the use of luxury integration zone design instead of designing and planning more moderate and modest integrating land uses.

In sum; Dikmen Valley project can be regarded as successful model in terms sharing the financial values compared to the previous improvement plan regeneration models. Moreover; depending on the first phase, public participation was also succeeded in some level. However, the share targeted the squatter housing owners and disregarded the tenants (Türker-Devecigil, 2003; cited in Kahraman, 2008). Moreover; high displacement levels also occurred in Dikmen Valley Project and social integration of the poor and rich as one of the main purpose of the project did not suceeded. On the other hand; in deed the problem of squats in Dikmen Valley was erased as a result of all above discussions.

4.1.2. Morphological Evaluation of the Dikmen Valley Project

For morphological evaluation; implementation zone III is selected since the area has also non-implemented parts. Based on satellite image and site observations, the project are was analyzed in terms of three urban morphology theories of figure and ground theory, linkage theory and place theory.

Figure 4.8: Satellite Image of the Morphological Analysis Study drom Dikmen Valley Project

4.1.2.1. Figure and Ground Analysis

By figure and ground analysis, the relationship between building mass or solid and void has been investigated that the main urban grain and the spatial order it creates were identified. From figure and ground analysis, it is observed that the main reference of order which is the topography of the site has been diminished. Mainly in the south and partially in the north-west there still exist non-transformed areas that the squatter tissue fallows the topographical lines which provide an organic order, continuity and proximity?

In addition to horizontal rhythms of the small squatter structures still exist in the area, they provide a vertical rhythm. The valley creates a natural enclosure that low storey squatters do not disrupt the natural silhouette of the valley sue to their height and scale.

On the other hand, the majority of the area has been transformed into high-rise blocks that they dominate the natural silhouette of the valley. Due to geographic and geomorphological limitations, the blocks located on upper skirts of the valley that the natural power lines could not be observed any more.

In two-dimension, the new structures do not adopt and reflect the general appearance of the site. The existing squatters do not encompass a spatial hierarchy. However; the blocks cannot provide either. The orientation of the building blocks does not express a spatial system. In other words; without road pattern and other means of communication such as the green valley system, the order and system of the layout cannot be observed through figure and ground analysis.

Figure 4.9: Figure and Ground Analysis of Dikmen Valley Project

4.1.2.2. Linkage Analysis

By linkage analysis, the dynamics of circulation as generators of urban form; connection and movement is investigated that two main means of communication is identified in the area as the roads and the open green axis of the valley. By investigating the solid and voids with main communication channels, the means of order can be identified. Although the spatial hierarchy through public space to semi-public space cannot be identified through figure and ground analysis, the main logic of the spatial hiearachy can be identified by linkage analysis. The valley basin acts as a green collector and has a role of public space of the area. On the other hand; the skirts are private zones in broader scale. However; in block or building scale the means of spatial hierarchy cannot be identified.

Figure4.10: Linkage Analysis of Dikmen Transformation Project Site

The other significant observation in addition to lack of spatial hierarchy is that there is not any road hierarchy in the area which means that the main communication channels cannot be clearly identified. On the other hand; the linear green system of valley laying from north to south has a strong natural reference. In addition; it creates a dominant communication channel. The roads serving and framing to valley creates an order and communication system in the north. However; they are sprawled in east and west that the end of valley, open system and spatial hierarchy is being lost.

4.1.2.3. Place Analysis

By place theory analysis, in addition to basic urban design elements the cultural, behavioral and human characteristics of the site is investigated. Since the features of urban form and morphology was investigated by figure–ground and linkage, the focus of the place analysis is determined as image analysis, the sense of place and the spatial order.

Firstly, although the traffic junctions exist, there is not a well-defined node in the site. Due to rehabilitation of the topography, there does not also exist a definite edge in the sire except the steep upper slopes creating panoramic viewpoints to valley basin. Thirdly there occur three landmarks in the site that they are social and cultural structures servicing to whole side in the valley recreational green spine. Fourthly, the valley in itself creates a clear district observed in a unity. Fifthly and lastly the pedestrian path lying through the middle of the valley can be regarded as the main path of the site.

In terms of urban design values, it can be observed that the sense of place can be observed in both transformed blocks and in non-transformed squatter sites squatters located in the south. Although some parts of the project provides and order and rhythm with respect to relations they create in themselves and with the natural topography, the human scale has been lost by transformed quarters. The high-rise blocks detoriate the

natural silhouette of the valley basin. However; in the development of star shaped blocks on the east side of the valley do not produce a spatial order. Furthermore, they netiher define neither the street nor the topographical lines. On the other hand the blocks located in the south east of the site, a spatial hierarchy from private to semi-public to public space can be visualized.

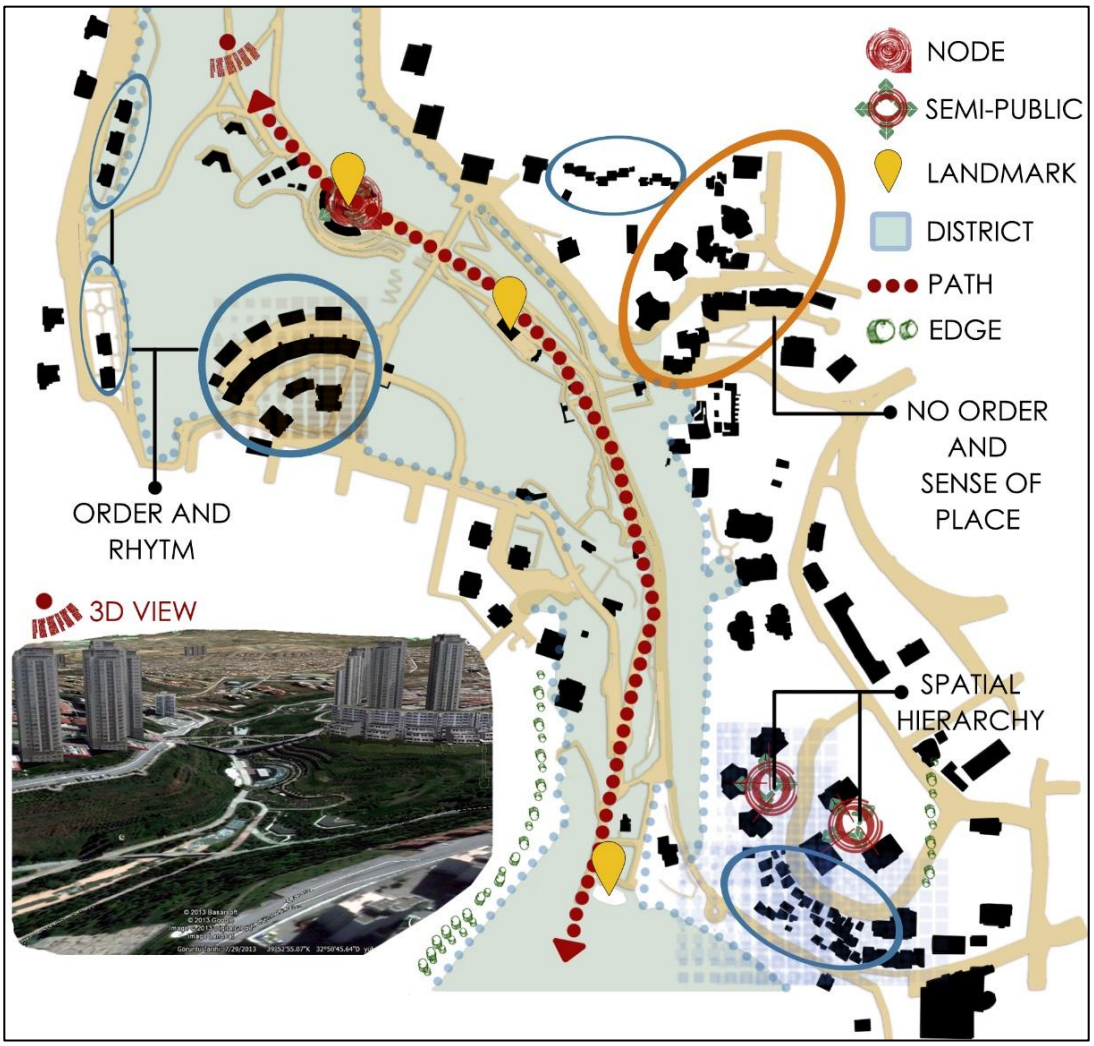


Figure 4.11: Place Analysis of Dikmen Transformation Project Site

4.2. Şentepe Urban Transformation Project

Şentepe District is one of the oldest squatter settlements in Ankara, within the borders of Yenimahalle Municipality. The neighborhoods were densified approximately in 1960's. Şentepe is consist of eleven neighborhoods as; Burç, Barıştepe, Çiğdemtepe, Kayalar, Kaletepe, Güventepe, Ergenekon, Avcılar, Güzelyaka, Anadolu, and Pamuklar. Karşıyaka graceyard is located in the north of Şentepe, Yenimahalle in the south, Demetevler in the west and Keçiören in the east. The neighborhood is approximately 10 km to central core.

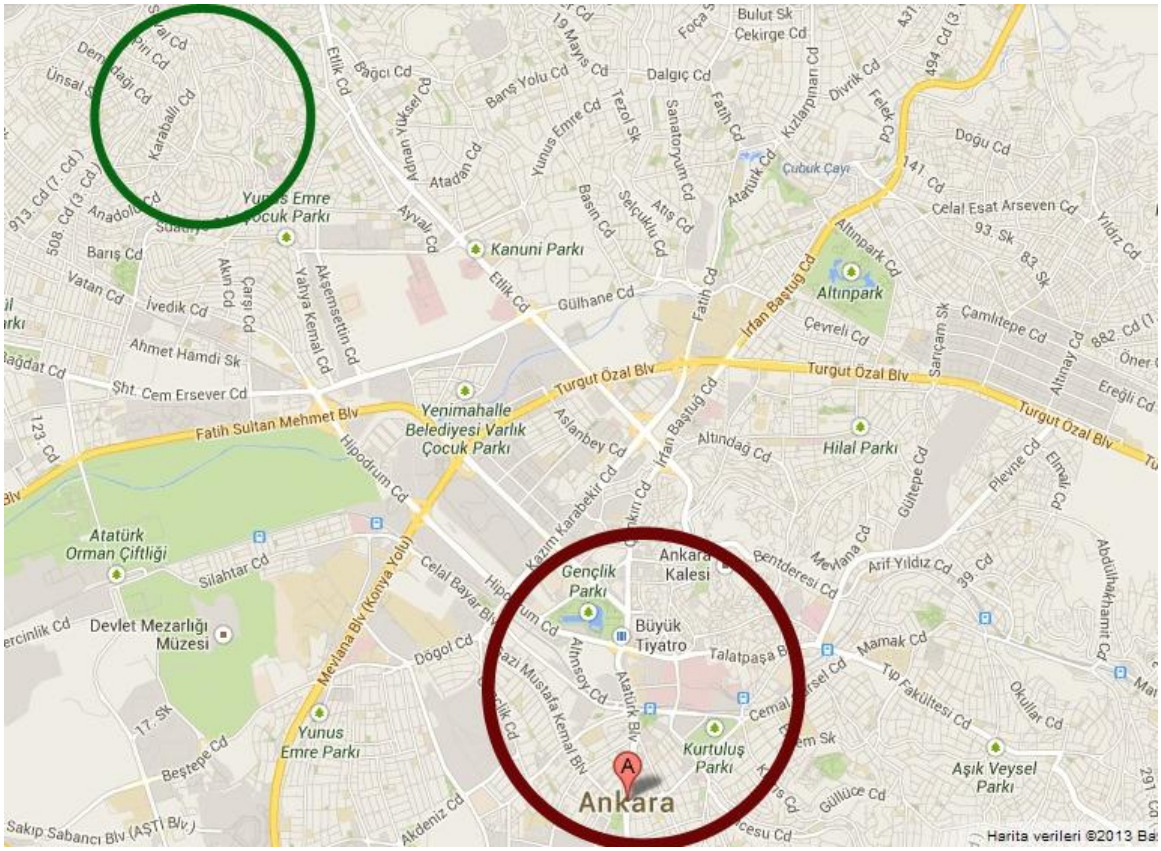


Figure 4.12: Location of Şentepe District with respect to Central Area (Image source: googlemaps.com)

In 1952, 66 ha of the Şentepe District were planned as Development Co-operative with a population capacity of 20580. (Kaba, 1995) However; the emergence of squatter settlements on the lands of Treasury after 1950s, prevented the implementation possibility of the co-operatives. In 1968, by the law of 775 which is enacted in 1966; Şentepe was designated as Squatter Prevention zone and some parts of the district were nationalized. In 1984, 1/5000 scaled Şentepe Squatter Settlement Development Plan was approved then by 1986, 1/1000 scaled implementation plans were began to be approved and be implemented in 1990s.

During the planning analysis period of 1/5000 scaled Development Plan, the population of Şentepe was calculated as 60.000 by the information taken by neighborhood officers. On the other hand; 20.000 title deeds had been recorded as distributed in the district. Kaba (1995) claims that the actual population of the district was about 84.000. Şentepe covering 580 hectares of the land is planned to be inhabited by 100.000 people in 1990 by Improvement Plans enacted between 1986 and 1990. (Kaba, 1995) Şentepe was planned as 4 storey apartments with a population density of 300 persons per hectare. On the other hand, the co-operative land is by 310 persons per ha with 3 to 8 storey apartments. (Kaba, 1995) However; majority of the area could not be transformed due to lack of the area's financial attraction to investors.

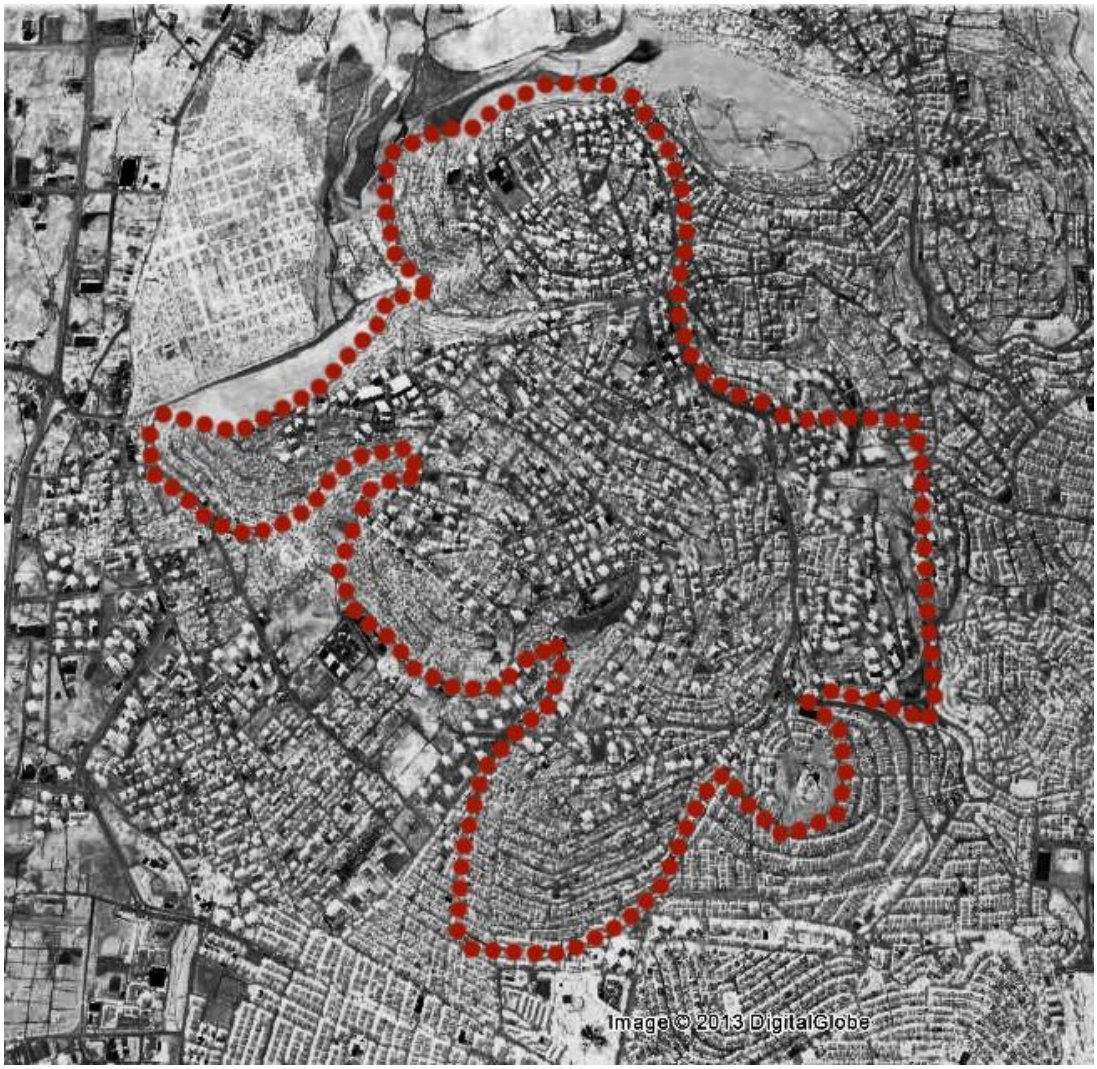


Figure 4.13: Tissue of Şentepe District (Source: googlemaps.com)

By improvement plans, the population of the district was planned to be doubled. However; the social infrastructure facilities, green areas and transportation system was not planned in a qualified manner. In 2004, the the implementation plans were finished. Construction right of each title holder parallel to their share registered in their deeds so the small parcels creating obstacles in apartment construction cause in difficulties for

transformation. Furthermore; the transformed parts did not bring economic attractiveness in the site that a central core could not be developed in the district.

Figure 4.14: The Transformation Process in Şentepe District (Retrieved from; http://wowturkey.com)

4.2.1. General Information of the Site

Çiğdemtepe Neighborhood is the third stage of Şentepe Urban Transformation Project. The aim the project is to protect the green areas of the site and increase the attractiveness of the site in terms of economic, social, and cultural aspects and increase the quality of

life. The third stage is located in the north of Şentepe district covering approximately 60ha area.

Figure 4.15: The Third Stage of Urban Transformation Project, Çiğdemtepe Neighborhood

The neighborhood has a circular shape that there is a ring road which acts as a main distributor of the district. Since the neighborhood is located on a sloppy hill, by transformation project some roads are closed. The insufficient green areas are increased. Furthermore; recreational activities were also supported in trading central area.

The Development Plan was enacted in 1989 and parcellation plan in 1990. Under the transformation project a neighborhood center is planned which is consisted of;

- a trade and a social center,
- a health center,
- a police station,

- a governmental institution,
- a municipal service area,
- enhancement of existing mosque

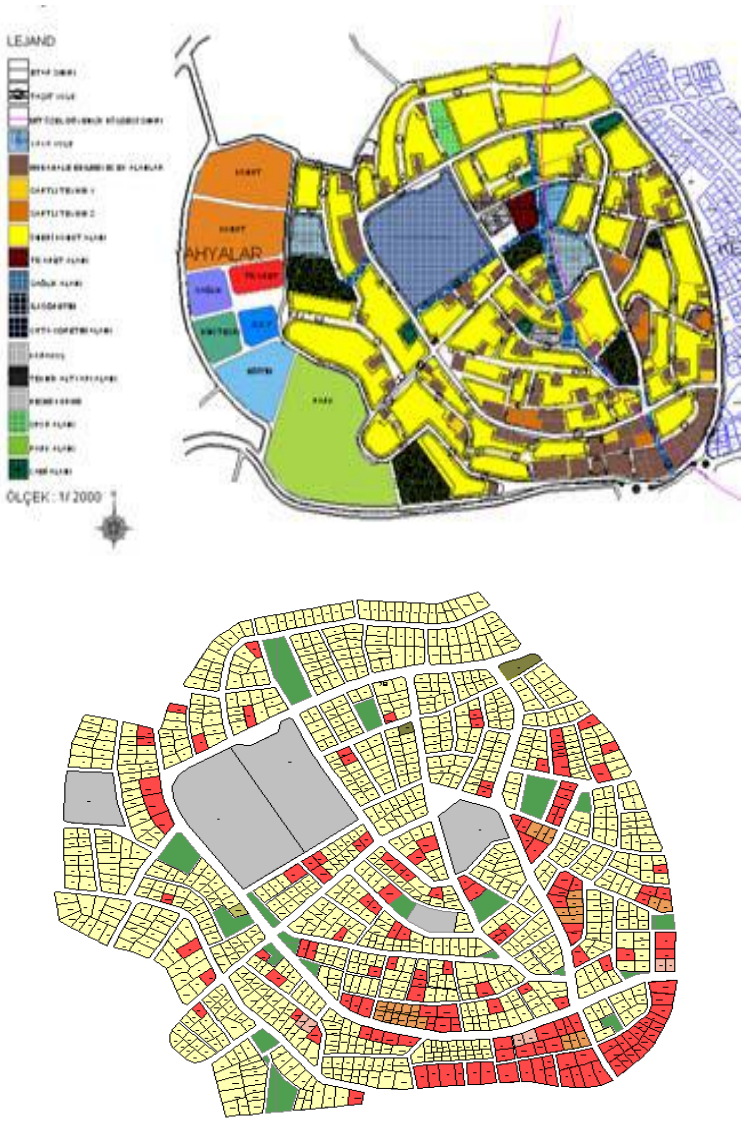


Figure 4.16: The Development Plan of the 3. Stage of the transformation project (Report of Şentepe Urban Transformation Project, Yenimahalle Municipality; cited in (İveynat, 2008)

There is no any financial support or funding incentives in urban transformation project that the transformation was designated to be funded by contractors. Both to attract contractors and preserve the right of share-holders construction rights were increased in the district. Furthermore, this plan offers free height for constructions by fixing the construction zone of a parcel which gives the opportunity to create flexible architectural design in the site. The provision of infrastructure is designated to be services by public institutions which can be listed as (İveynat; 2008: 127)

- Physical Infrastructure: Local Government, TELEKOM, BEDAŞ, ASKİ and EGO
- Social Infrastrucutre: MEB, Central Government, Local Government
- Housing and Trade Centers: Contractors
- TV Tower: Cooperation of TV Channels

Figure 4.17: Transformed Apartments in Şentepe (Özdemirli, 2012, p. 222)

Table 4.1: Distribution of Land Uses (Report of Şentepe Urban Transformation Project, Yenimahalle Municipality; cited in İveynat, 2008)

LANDUSE	EXISTING(m2)		OFFERED BY PLAN(m2)	
HOUSING	347.200		347.200	
	NUMBER	AREA	NUMBER	AREA
PRIMARY SCHOOL	2	13.307	2	14.000
HIGH SCHOOL	1	40.500	1	40.500
HEALTH FACILITY	0	0	1	3.650
RELIGIOUS FACILITY	4	2.455	4	4.160
GREEN AREA	23	16.030	5	25.832
SPORT FIELD	1	3.868	1	3.868
TRADE AREA	0	0	1	3.525
MUNICIPALTY SERVICE AREA	0	0	2	2.438
GOVERNMENTAL INSTITUTION	0	0	2	2.195
TECHNIC INFRASTRUCTURE	4	125	4	207
ROADS+SQUARES	171.840		148.472	
TOTAL	**594.324**		**594.324**	

4.2.2. Morphological Evaluation of the Şentepe Urban Transformation Project

By improvement plans as well as the infrastructure and social services, the physical pattern was also aimed to be rehabilitated. In Yeskep Report (1997) the current layout of the squatter housing was conceptualized. Moreover; the expected morphological pattern was also sketched which suggests to provide spatial order. In the conceptualized diagram, a system of spatial hierarchy, continuity or enclosure could not be offered except decreasing the number of structures and enlarging the structural scale. Moreover; the layout produced by layouts did not resembled to the conceptualized proposed urban pattern

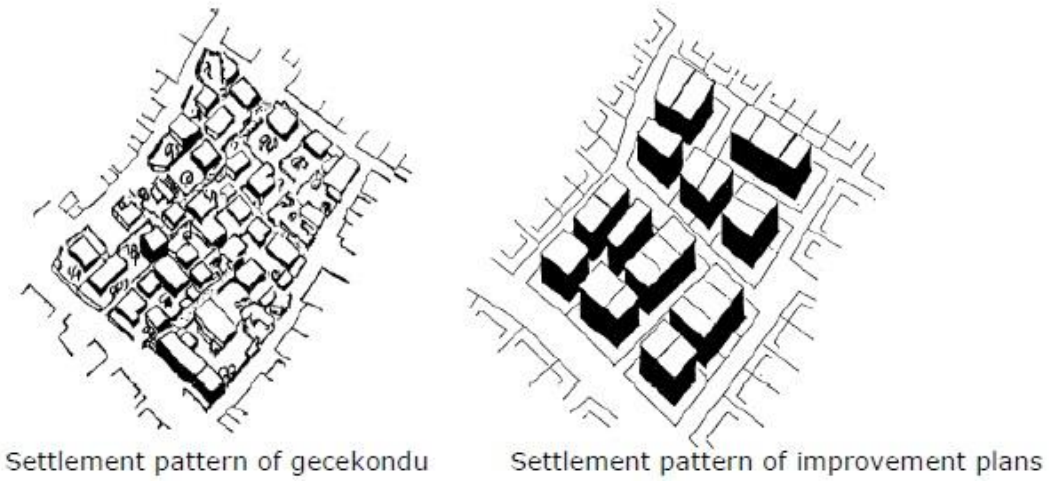


Figure 4.18: The Conceptualized Transformation of Urban Fabric Through Improvement Plans in Şentepe (YESKEP Report, 1997 Municipality of Yenimahalle)

For morphological evaluation; Çiğdemtepe Neighborhood which is the third stage of Şentepe Urban Transformation Project is selected since the area has also non-implemented parts and it has a clear frame of reference. Based on satellite image and site

observations, the project are was analyzed in terms of three urban morphology theories of figure and ground theory, linkage theory and place theory.

4.2.2.1. Figure and Ground Analysis

By figure and ground analysis, the relationship between building mass which is the solid and void has been investigated that the main urban grain and the spatial order it creates were identified. From figure and ground analysis, it is observed that the main reference of order which is the topography of the site has been altered and disrupted by large scale and scattered solids. However, in the south and east there still exists non-transformed areas that the squatter tissue follows the topographical lines which provide an organic order and continuity.

The majority of the area has been transformed into apartments which are scattered and coincidentally creates spaces. Although; the power lines derived from topography can be observed through figure and ground analysis there cannot be identified a spatial hierarchy. The relations between buildings do not display any system that the Gestalt principles of continuity, proximity, enclosure and similarity cannot be identified. Except main roads, the structures do not define the street line that the differentiation of public space and private cannot be read especially in northern quarter of the site.

On the other hand; the squatter belt laying from north to south on the east of the site, signifies a natural rhythms of topography which also reveals basic Gestalt principles as continuity, enclosure, proximity and similarity. From squatter tissue the public areas as the non-habited land which is left as green and the street layout can also be easily visualized from the solid and void analysis of the site.

Figure 4.19: Figure and Ground Analysis from Şentepe Urban Transformation Project

4.2.2.2. Linkage Analysis

By linkage analysis, the main system of circulation, connection and movement is investigated that two main means of communication is identified in the area as the roads and the open green belt on the north. The identification of the main connectors or communication spines of the site do not significantly alter the consequents identified by figure and ground analysis. However; the public spaces servicing to the site can be more easily identified by addition to road system to the scheme.

The hierarchy of the communication system as the paths and roads can be identified through linkage analysis. The ring toad framing the least steep top of the hill defines the

main collector road. Furthermore, the vertical roads lying from north to south also feeds the area as secondary collectors in transformed area. The change in the scale of development can also be identified by comparing the urban scale of the transformed quarter of the site non-transformed squatter zone.

In addition to structures; the connectors also enlarged extensively by improvement plans that the human scale created by organically developed self-help squatter housing was also hurt. In addition; the linear green system of north skirts of the hill provides a strong natural reference. Although it creates a linear system of communication in spatial manner; it could not worked as a public space and means of communication since the step vacant land has not been rehabilitated. Inside the side there occurs large open green areas like urban parks, however; they are scattered through the site and do not create any sense of continuity or order.

Figure 4.20: Linkage Analysis from Şentepe Urban Transformation Project

4.2.2.3. Place Analysis

By place theory analysis, in addition to basic urban design elements the cultural, behavioral and human characteristics of the site is investigated. Since the features of urban form and morphology was investigated by two preliminary analysis as the figure–ground and linkage, the focus of the place analysis is determined as image analysis.

Firstly, there is only one node investigated in the site which is at the center of the site and functioned as a traffic junction rather than a meeting point. Secondly, there exists a topographic edge at the north of the site defining the northern border of the site with the steep topography. Thirdly there occur three landmarks in the site that all three of them

are mosques. Fourthly the quarter of schools can be regarded as a district and lastly the ring road is the main path of the area although it is mainly functioned for traffic access.

In terms of urban design values, it can be observed that the sense of place cannot be observed in transformed and apartmanized blocks whereas it is identable in the eastern squatter belt. As mentioned, the apartments generally do not define the street except the fabric of the south-east of the site along the ring road. This results in the loss of harmony and commitment to place although they can be sensed in the nn-transformed squatter zone. In other words; it can be said that any form of order did not be considered via implementation plans in Şentepe district.

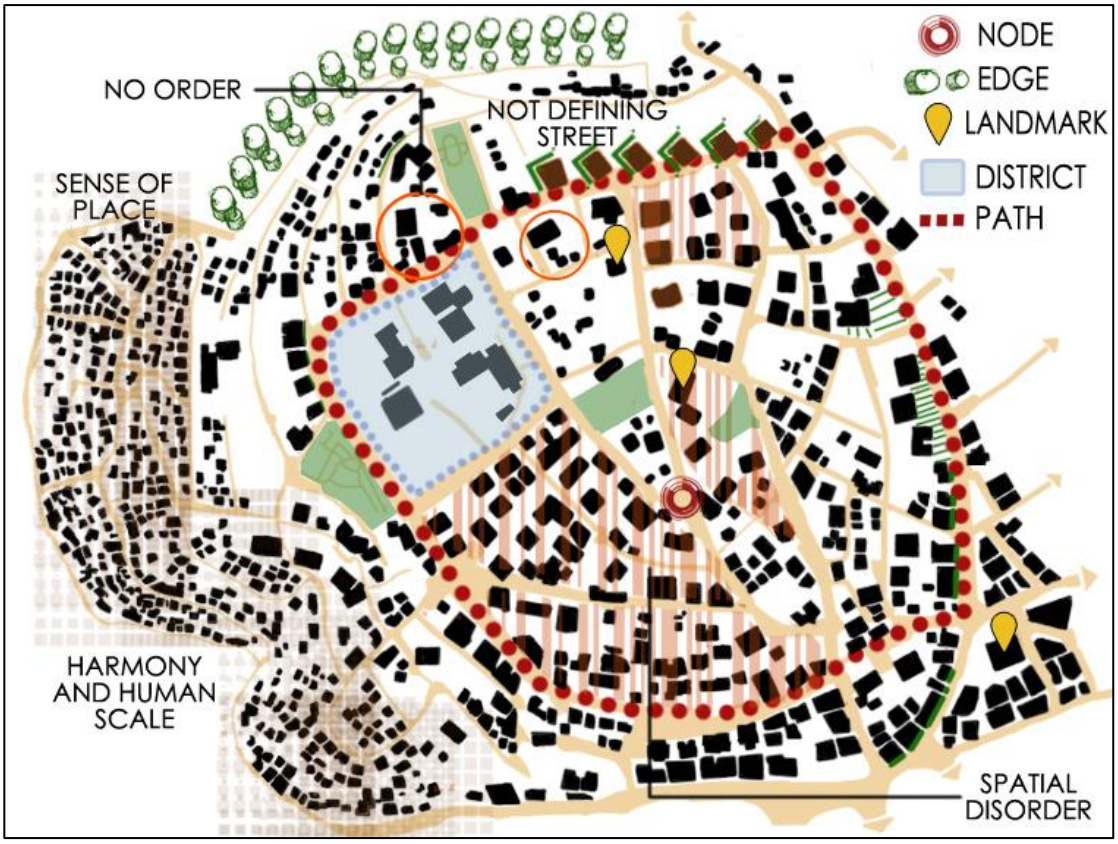


Figure 4.21: Place Analysis from Şentepe Urban Transformation Project

CHAPTER 5

ANTAKYA BAĞRIYNAIK DISTRICT

Bağrıyanık District is located in the southwestern part of Antakya as a squatter negihborhood which emerged after 1950s. The area was selected as the main case study to understand the morphological features of an existinf squatter settlement which has not been subjected to development pressure yet.

5.1. General Information of Antakya

Antakya is the eastern end of the Mediterrian coastal zone, and the southernmost city of Turkey. The city is edged by Amik Plain, skirts of Amanos Mountains and Habib-, Neccar Mountain. The city is tribute by two rivers as Hacı Kürtüş Deresi (Onoplikles), passing nearby St. Pierre Church & Iron gate and Asi with its ancient name, Orontes; dividing the city into two parts. The western pats as new city and the eastern part the old city. The city is mainly divided by Asi River. The eastern part can be called as Old city and the western is new, developed after 1960s. Old Antakya is located on the strip land measuring approximately 1 km by 1,5 km between Asi river and Habib-i Neccar Mountain. The Orontes is the main attribute leading to attract civilizations to the area throughout the history. (Ataman, 1996)

The population of Antioch was nearly 25.000 when it was established as a large settlement for Ancient Period. In the 5th Century A.D. the population of the city was nearly 200.000 according to the written resources. In Ancient period the population was

regarded to be increased to 500.000. After that period the city began to decrease in size and population. After Sassanid conquest the Roman Empire redeveloped the city in smaller size.

However, the city decreased till the Ottoman Empire, also in this period did not shine as much as did in the Ancient times. In 1908 the population was nearly 64.000 mostly as Muslims; the Christian minority was mainly worked in commercial activities. In 1914 the total population was around 90 500 with a significant ethnic groups of Orthodoxies (7352) and Gregorian Armenians (4773). (Ataman,1996). The current population is 213296. (TUIK, 2011)

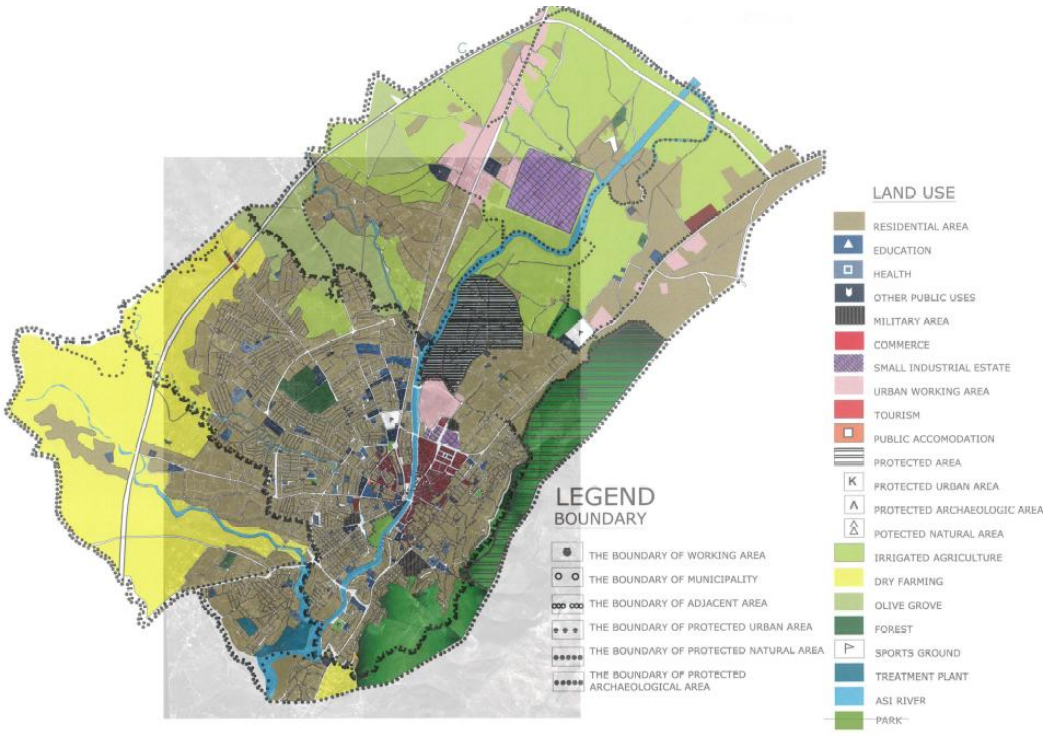


Figure 5.1: Land Use Pattern of Antakya (METU, 2010, Studio Work)

5.2.Historical Evolution of City and its Morphology

Antakya region as especially Amik plain was subjected to the conquest of many civilizations throughout the history due to its moderate climate, efficient agricultural capacity and being as a node for trade routes.

5.2.1. Early Times

The history of the Antioch region including the Amik plain extends to the Neolithic and Paleolithic periods. However, the information is limited for that remains since a systematic survey has not taken place yet. Antioch was founded by Seleucus 1 Nicator which settled between Silpius (Habib Neccar) Mountain and Orontes (Asi) River in 300 BC. and became Rifaioğlu, Mert Nezih; Şahin Güçhan, Neriman; Larkham, Peter J. a capital and court-city of east Seleucid Empire after 281 B.C. until the beginning of Roman Empire period in 64 BC. (Jacquot, 1931; p.218 cited in Rifaioğlu et al., 2010). After the death of the Great Alexander, (323 B.C.) the large lands of empire was shared by his generals as Selevkos Nikator was taken the region of Syria and he established four large cities as; Antiokheia, Selevkos Pieria, Apamea and Laodicea. The two of them as port cities and the general layout, road system are similar for all. (Ataman, 1996)

The agora of the city was established on the current Craftsmen zone and bus station of the city; although the building heights are inconsistent and high in some parts; the archeological remains are thought to be deep in depth son the potential is still exists. The ancient Antioch was established at the left side of the Orontes flowing to the south, on an island and some part of the plain. The main route Antioch to the port city Selevekia Pieria was leaving the city from the existing Municipality Square.

During the establishment period the ethnic structure of the city was heterogenic as the Jewish population was visible till those periods. (Ataman, 1996). After the conquest of

Rome, the city of Antioch was announced to be free to govern itself. This situation shows the high level of civilization till the conquest. In Roman period Antioch preserved its importance to be the largest city of the northern west region of Syria and became the capital of the Empire‟ s Syrian province. The earliest development activities were the building of a palace and circus on the Orontes River Island in 67 BC.

In the period of Augustus, a large development program took place as; enlargement of roads, construction of baths, theatre and stadium was accomplished. Moreover; the construction of colonaid road and monumental structures on the intersections of the main routes are the significant elements of that period. Antioch also experienced at least ten large earthquakes in 5th Century B.C. but the city was repaired every time.

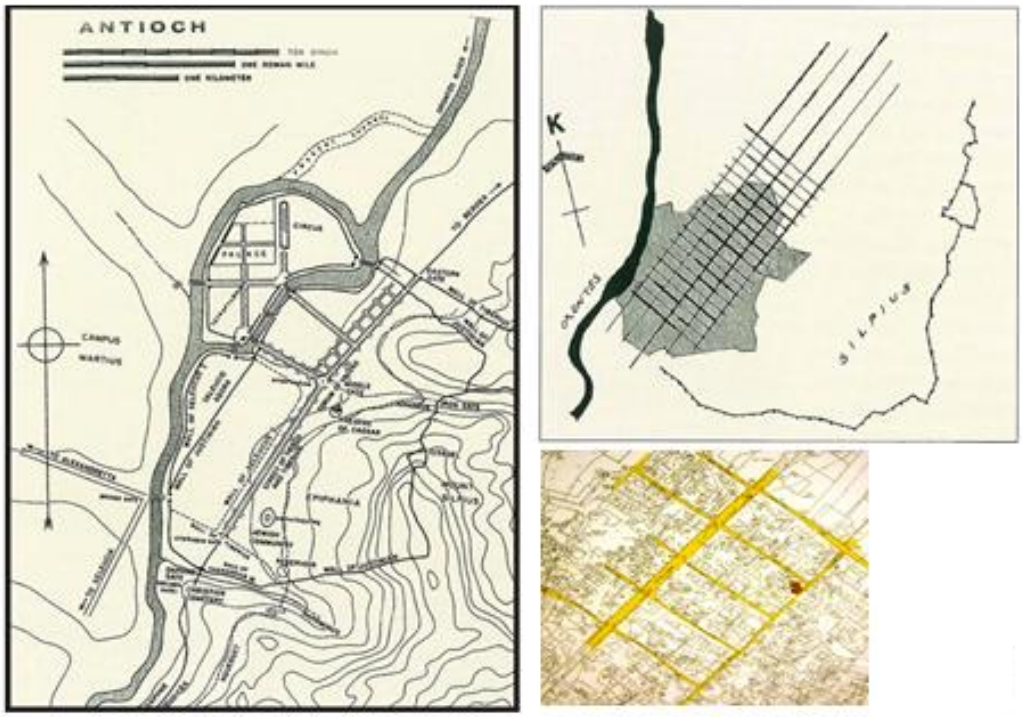


Figure 5.2: Plans of Ancient Antioch (Ataman, 1996)

The underground heritage layers are very deep in the plain areas due to the alluvial fill. However; in morphological pattern of Antioch some traces from the ancient road system can be read in the current road pattern. The city was designed as a Hippodamian plan with straight streets intersecting at right angles, applied by the architect Xenarius. The streets roughly parallel to the Orontes River were laid out 112 m. apart, and the streets intersecting at rights angles to the those streets were 56 m. apart. The 2:1 ratio in the street layout is typical in Seleucid cities in Syria and Mesopotamia. (Demir, 1996; Pinon, 2004 cited in Rifaioğlu et. al, 2010) The design and orientation of the streets were designed to minimize the microclimatic effects of hot summers. (Ataman, 1996)

The grid system of Orhanlı & Meydan neighborhoods and on the borders of cultivation gardens and agricultural land subdivisions are thought to be morphological features readable in present tissue of the city. (Ataman, 1996) Moreover; the Aleppo-Harbiye road which is the main traffic axis which both separates the historic core into two areas and – according to many sources (Downey, 1963; Demir, 1996; Pinnon, 2004, cited in Rifaioğlu et. al, 2010) its origin is as a Roman colonnaded street.

5.2.2. The Byzantium and Islamic Period

Antioch had a great role during the emergence period of Christianity. St Petros worked there as a patriarch for 7 years and 10 church meetings were organized during the period of 252-380 A.D. After the Sassanid Conquest the city began to decrease. The Byzantine emperor Justinianos rebuilt the city in 538 A.D. in a smaller scale. During 638-969 A.D. the city was subjected to Arab conquest but regained again by Byzantium and become an end city of Byzantine. In 1084 A.D. it was invaded by Mosul shah but invaded by the Crusaders in 1098 A.D and become an earldom for 170 years. In that period Antioch revitalized again and in 1268 A.D. it was added to Ottoman Empire by Yavuz Sultan Selim and become a sancak under Halep Province. (Ataman,1996).

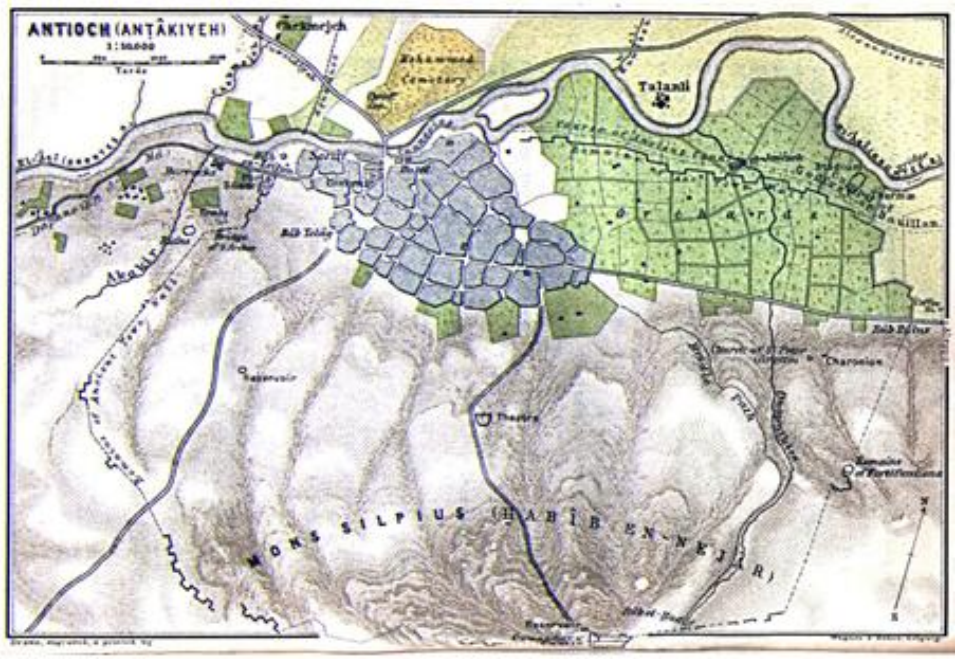


Figure 5.3: Map of Antioch in early 20th century (Retrieved from; http://www.google.com.tr/imgres?sa=X&biw=1517&bih=692&tbm=isch&tbnid=QkJXbdSccoOyMM:&imgrefurl=http://www.lib.utexas.edu/maps/historical/history_middle_east.html%3Fp%3Dprint&docid=knZyQhpfy7ow0M&imgurl=http://www.lib.utexas.edu/maps/historical/antioch_1912.jpg&w=1171&h=798&ei=sSmpUsyuJPOT0QX-0IDQDA&zoom=1)

The organic pattern of the Islamic city did not degenerate the tissue of ancient times totally since the Ottomans prefer to locate vacant land on the east side of the old ancient city. However; the growth and expansion then erased the ancient pattern. The traces of Ottoman period in urban pattern are visible in the southern rehion of Orontes except some partial interventions which took place in French period. Moreover; some individual structures of 19th Century Ottoman period have survived in the historical urban quarter. In the Ottoman Period the grid urban pattern became more organic in

form. Mosques, caravansaries and the Saray Avenue, parallel to Orontes River, were built which still persist in the current urban form.

5.2.3. French and Republican Period

After WWI the city experienced the French mandate that this period also gave significant value to the morphological character of the city. The main circular of the city, radiating roads and the axis of the old district, which is called the Kurtuluş Street were emerged after French mandate from the colonnaded street. Antakya museum, schools, hotels, cinema were built at this period.

Some elements of the earlier period persisted as the agora site lies in what is still the traditional commercial district in today's city (Downey, 1963; Demir, 1996 cited in). According to Bouchier (1921; p.5) the names of the quarters were Rhodion (likely rose gardens) and Hereclea. Today, one of the quarter names of the historic core is "Rose Gardens", located to its north-east. (Rifaioğlu et. al, 2010) The new road system affected the quarters of the city accessibility that urban growth concentrated along the radial roads.

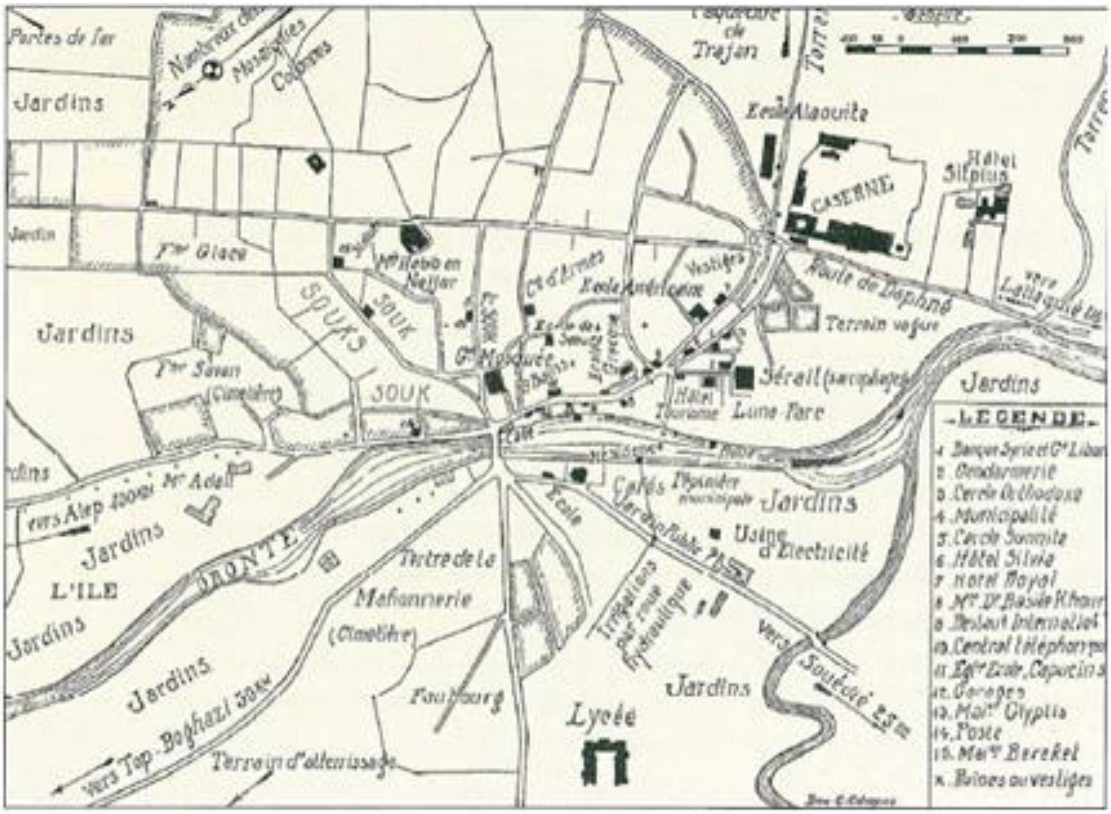


Figure 5.4: Map of Antakya in 1931 (Retrieved from; http://mehmet-urbanplanning.blogspot.com.tr/2009/12/antakya-tarihi-kent-dokusu-koruma.html)

5.2.4. Present Morphology of the City

The morphological pattern of Antakya can be analysed in two sub-city areas by the Asi River. The western part of the city has been formed since the mid-nineteenth century. It is linked to the eastern part across the river by seven vehicular and pedestrian bridges. The western part has main road access to the İskenderun and Samadağ. Additionally, the eastern part contains both the historic urban core of the city known as "Old Antakya"

and the new areas, developed especially after the first quarter of the twentieth century. It has road access to Reyhanlı, Aleppo and Harbiye. (Riafaioglu et al., 2010)

The urban morphology of the western part is characterized by the baroque layout of circular main square and radial roads. The inner partitions of the western parts are in forms of distorted grid system which reveals a high level of accessibility and order. The eastern part is a linear corridor between the Habib-i Neccar Mountain and the river. The central quarter of the eastern part of the city has the characteristic organic layout of medieval Islamic City. In the skirts of mountain till the sharp slopes, a squatter belt lays out with different morphological characteristics than the historical quarter. In the south of the eastern part of the city, on Harbiye road, new developments and transformed areas can be observed.

The current analysis on the historic urban street pattern shows that there is a persistence of the grid Hellenistic street pattern in the north-east of the historic urban core in 112 m. x 58 m (Sauvaget, 1935; Downey, 1961; Pinon, 2004 cited in Riafaioglu et al., 2010) in Orhanlı vicinity. The historical tissue of residential areas is characterized by cul-de-sac roads which creates a labyrinth system of roads. The ancient agora was observed at present as the grand covered bazaar area which is called “Uzun Çarşı” resembles with Ottoman Grand Bazaars like “Kapalıçarşı”.

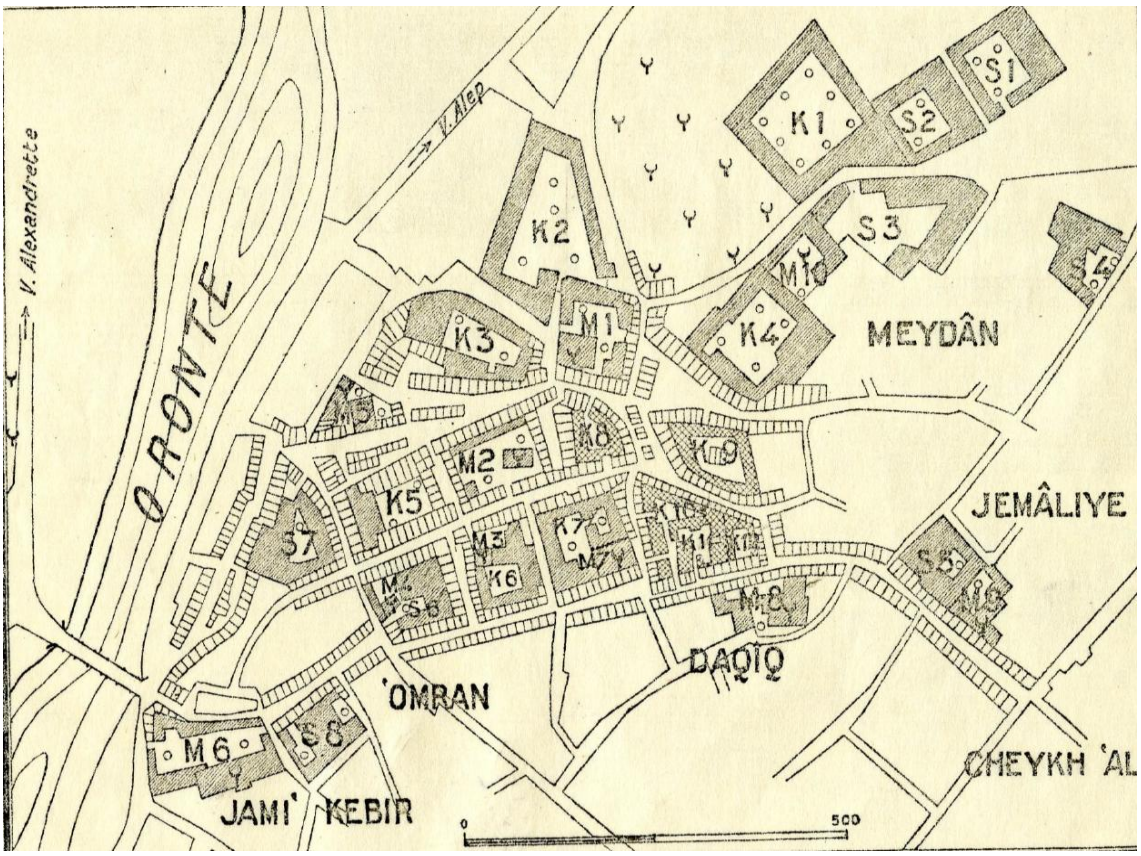


Figure 5.5: The urban pattern of "Uzun Çarşı" during French Mandate Period (ICOMOS, 2010)

The eastern part of the city has higher building density ratios with respect to west due to traditional character it has and the limited scape can be sedentarized. However; in the western part the difference between urban and rural diminished that the morphological pattern has become a more fringed layout. However; the connectivity is high due to radial system and the concentrating rings feeding them. The case study area is located in the southern part of the squatter belt. The area was very close to Central Square linked with a curvilinear road. The morphological layout of the district is harmonized with topographic and reflects its features.

Figure 5.6: The Urban Pattern of Antakya

5.3. Morphological Typology of Antakya

Antakya is characterized as a melting pot of different cultures. The richness in cultural mosaic is also visible in the morphological mosaic of the city similarly. In other words; there can be defined different patterns having different characteristics functioned by different uses of commercial and residential activity. Twelve different typologies of pattern and use can be identified in Antakya which can be defined as;

Irregular parcel development: The pattern is characterized by individual developments having an irregular, distort-grid pattern. The development can be legal or illegal in terms of construction. However; the land is officially owned by user.

Regular parcel development: The pattern is characterized by regular parcel development. The land is officially owned and parcelized by development plans. The fabric is produced by small constructors' in different environmental and structural quality which are generally medium or high.

Co-operative development: Those areas by developed through housing co-operatives after 1980s. The pattern of co-operative quarters is distinct from the general layout since the structures are not linked to street layout. The hierarchy of private, semi-public and public space can be observed in co-operative districts.

Row-house type development: The development is characterized by detached row houses and one storey retail services. This type of urban pattern produces a dense and regular morphology as well as housing facility to medium income families.

Luxury parcel development: The pattern is characterized by regular and standardized apartment development along or around the main roads. Those patterns are used as residential areas of upper income groups of Antakya. Those patterns are generally close or directly linked to central core.

Local parcel development: The local parcel development resembles or irregular parcel development in terms of figure ground analysis. However; they produce a more traditional and local spatial organization in and around the house like outdoor stairs, small courtyards and flat green roofs.

Historical area: The historical are is located at the central part of the eastern city. The urban pattern has an organic and Islamic layout.

Squatter development: The zone is emerged as a belt between the historical precinct and the mountain of Habib-i Neccar. The belt is located on uncontrolled land squeezed between historical and natural conservation sites. The land is generally owned by municipality, treasury or Waqf land. In some neighborhoods the private ownerships can also be observed gained by distribution of title-deeds during 1980s and 1990s. The squatter belt has an organic lay out having some values of the traditional quarter like the court-yards and front-yards.

Gated Communities: Gated communities are a new phenomenon in terms of land use and structural typology in Aktakya. The new gated enclave in the forest area began to be constructed in 2010 as luxury villas. The gated community is very close to study area as located in the south of Bağrıyanık district.

Workman house development: Those or low-density one or two storey irregular houses that the structures densify along the main streets and scattered through the countryside. Those pattern generally functioned as small production units and housing of workers.

Low density fringe development: This type of pattern is produced by urban sprawl that they are neither urban nor rural tissues. The pattern is used as the quarters of blue-collar workers and marginal sector employees

Semi-rural development: Those are more rural settlements rather than exposing the urban pattern and functions. However; they are linked to city by radial roads and the

inhabitants generally work in small jobs in Antakya. However; agricultural activity also continues that the urban morphology is very similar to the morphology of rural villages around Antakya. However; those are more scattered and sprawled.

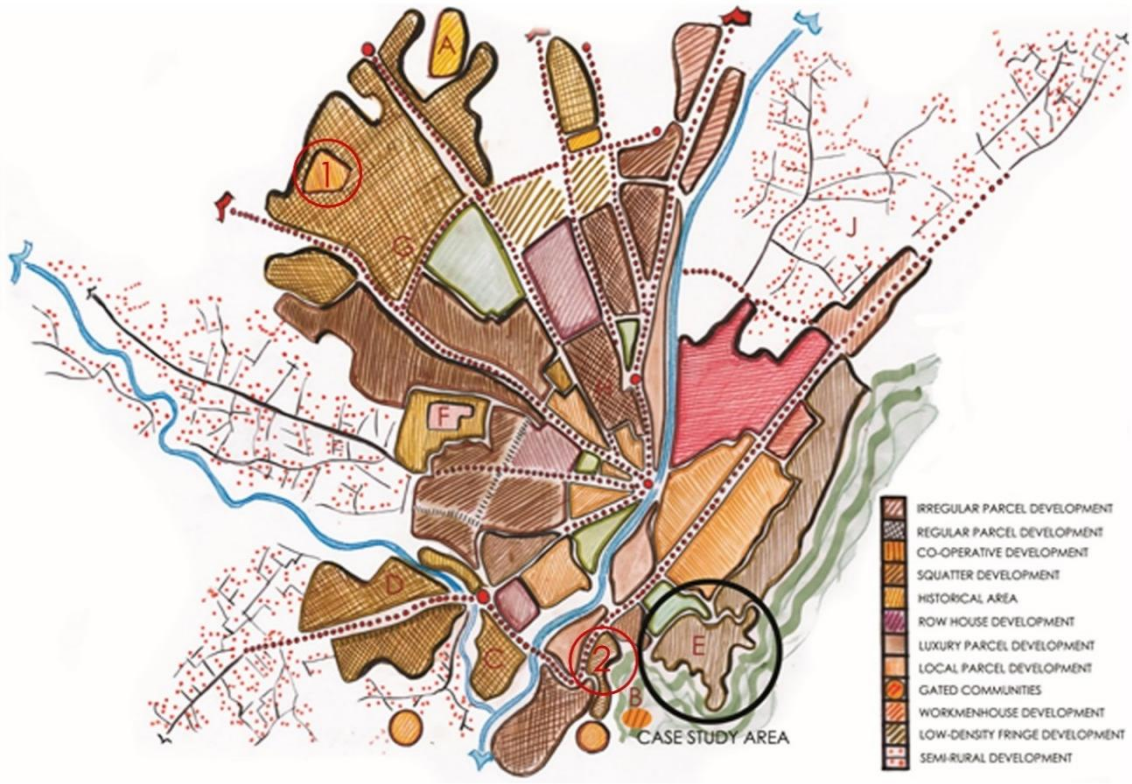


Figure 5.7: Urban Pattern Analysis of Antakya (Personal Drawing)

The case study area is located in the southern part of the squatter development morphological type. The site is also neighbor to other morphological types exist in Antakya such as; regular parcel development and gated community. From different types of morphology of present urban fabric of Antakya, 10 different points are picked up and analyzed in terms of urban fabric including the case study area which is marked as point E.

Table 5.1: Examples of Urban Patterns from Antakya

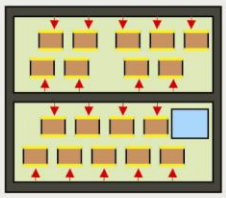
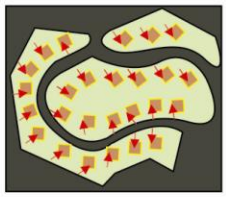
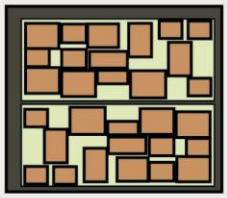
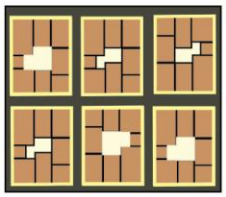
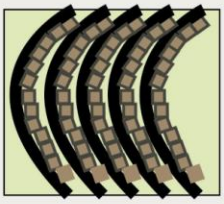
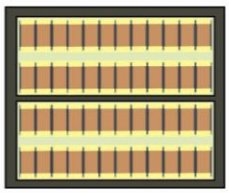
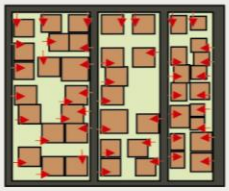
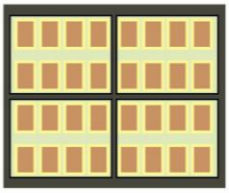
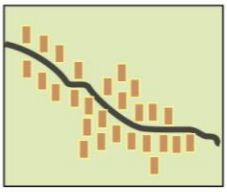
GENERAL INFORMATION		PHYSICAL CHARECTERISTICS	ECONOMICAL CHARECTERISTICS
History	Google Image	Diagram	Information
A BAHÇELİEVLER 20-25 Years Co-operative Production			Middle-High Income Group (White-Collar) House Unit Price: 250 000TL Development Index:14%
B SÜMERLER 0-5 Years Speculative Production			High-Income Group (Money&Brains) House Unit Price: 400 000TL Development Index:2%
C ORHANIYE 19th Century Self-Provision			Low-Moderate Income Group (Ethnic Minority) House Unit Price: 100 000TL Development Index:-2%
D ARMUTLU 25-30 Years Owner- Occupied Self-Provision			Low-Moderate Income Group (Blue-Collar) House Unit Price: 85 000TL Development Index:6%
E BAĞRIYANIK Mix Provision in Time Self Provision on Municipality›s Land			Low Income Group (Marginal Workers) House Unit Price: Personal Production Development Index:9%

Table 5.2: Examples of Urban Patterns from Antakya (Continued)

GENERAL INFORMATION		PHYSICAL CHARECTERISTICS	ECONOMICAL CHARECTERISTICS
History	Google Image	Diagram	Information
F ESENLİK 5-10 Years & 20-25 Years Co-operatıve Production& Self- Provision			Low-Moderate Income Group & Middle Income Group (Small Merchant- Public Officers) House Unit Price: 30000TL & 100000TL Development Index:29%
G ODABAŞI 10-15 Years Owner Occupied Self- Provision			Low-Moderate Income Group (Blue-Collar & Routine Assembly Plants) House Unit Price: 55000TL Development Index9%:
H KANATLI 20-40 Years Small Capital Speculative Production			Middle-High Income Group (White-Collar) House Unit Price: 20000TL Development Index:2%
I HARBİYE 10-50 Years Owner Occupied Self- Provision			Middle Income Group (Agriculture & Service Sector Workers) House Unit Price: 45000TL Development Index:-2%
J KÜÇÜK DALYAN 10-20 Years Owner Occupied and on Public Land Self- Provision			Low Income Group (Blue-Collar & Routine Assembly Plants) House Unit Price: 35000TL Development Index:6%

5.4. Morphological Analysis of the Transformation Projects in Antakya

In morphological typology analysis, two urban transformation projects also have been identified by numbers as “Area 1” and “Area 2”. The point A is the urban redevelopment is produced by the collaboration of HDA and Antakya Municipality. The area is located at the periphery of Antakya that before redevelopment very low density fringe development was existed on the site. In 2008, construction of 959 houses for middle and low income groups were finished. The point B is the urban transformation area developed by the urban development plan of Sümerler District in 1990s.

By development plan of Antakya Central Area 1/1000 scaled Development Plan, the quarter is planned by residential function by 1.3 FAR (Floor Area Ratio) rate and 21.50 meters maximum building height for Area 1.

Figure 5.8: Development Right Status of Area 1 (Retrieved from; http://ebldy.antakya.bel.tr:81/imardurumu/)

By development plan of Sümerler Vicinity 1/1000 scaled Development Plan, the quarter is planned by residential function. The developments rights differ in the area differ from 5 storey buildings to 7 storeys along the Harbiye Road. The illegal structures in the site are planned as green areas or 2 storeys residential.

Figure 5.9: Development Right Status of Area 2 (Retrieved from; http://ebldy.antakya.bel.tr:81/imardurumu/)

In terms of morphological analysis, it can be observed that by redevelopment of Area 1, healthier structures were built in the area however; the sense of place was reduced. Firstly the building heights do not suit to the low-storey and low density structure of the peripheral area. Secondly the horizontal rhythm and variety were also lost.

The authorized buildings around the area create richness of morphological values by spatial hierarchy of semi-private and semi-public areas, variety of spaces, structures in

human scale. Moreover; they contain socio-spatial values of Antakya houses by green hose terraces. Furthermore; the variety of spaces are also eradicated by the monotonous repetitions of the same value. Although; green open areas were planned including a square they are fragmented and discontinuous.

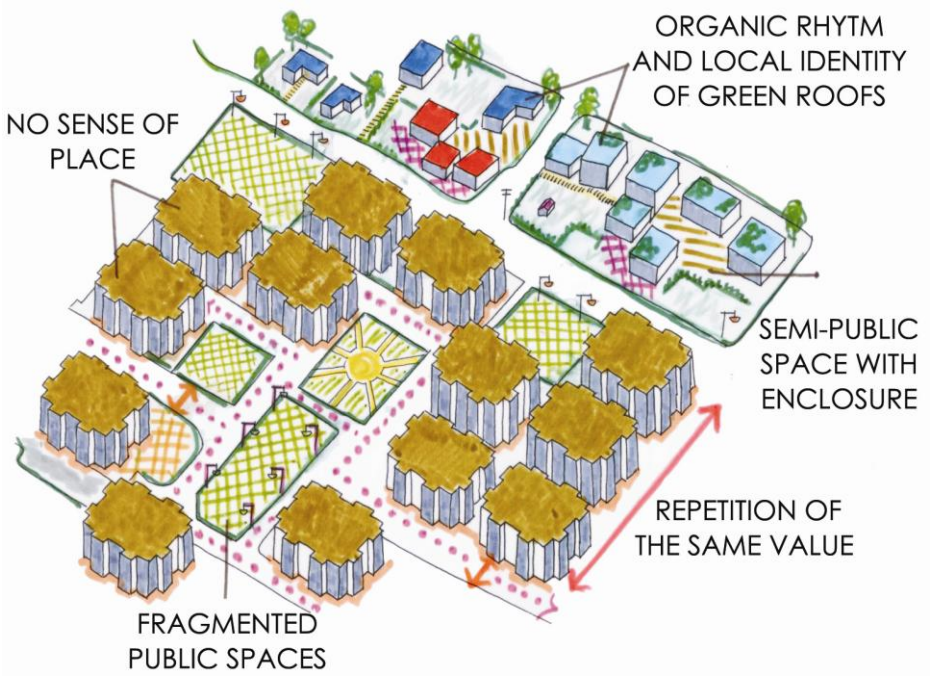


Figure 5.10: Morphological analysis of "Area 1" from Antakya (Personal Drawing)

By morphological analysis of "Area 2" a typical development pattern via development or improvement plans can be visualized. The area is selected from high-income residential area linearly developed along the Harbiye Road. The development was emerged via small scale constructors that only the two sides of the road was transformed and the outer parts remained as one or two storey small apartments or houses. The other weakness in terms of urban morphology is the insufficiency of enclosure.

The deterioration of human scale, variety and cultural typologies such as green roofs is also visible in the transformation of "Area B". Moreover; due to many changes in

development right, the vertical rhythm in both sides of the roads has been destructed that the variety of heights of buildings from three to seven. However; the positive aspect of urban transformation site is the prevention of the street line. The apartments located with fixed intervals by set of the distances of front yards and side yards that it also creates a spatial hierarchy of private space- semi-private space (yard) and the public space (street).

The other disparity observed in the "Area B" is the extreme variety of the facades that there is not any harmony between the openings such as windows. Moreover; the materials, styles and power lines of facades of the apartments do not give reference to each other.

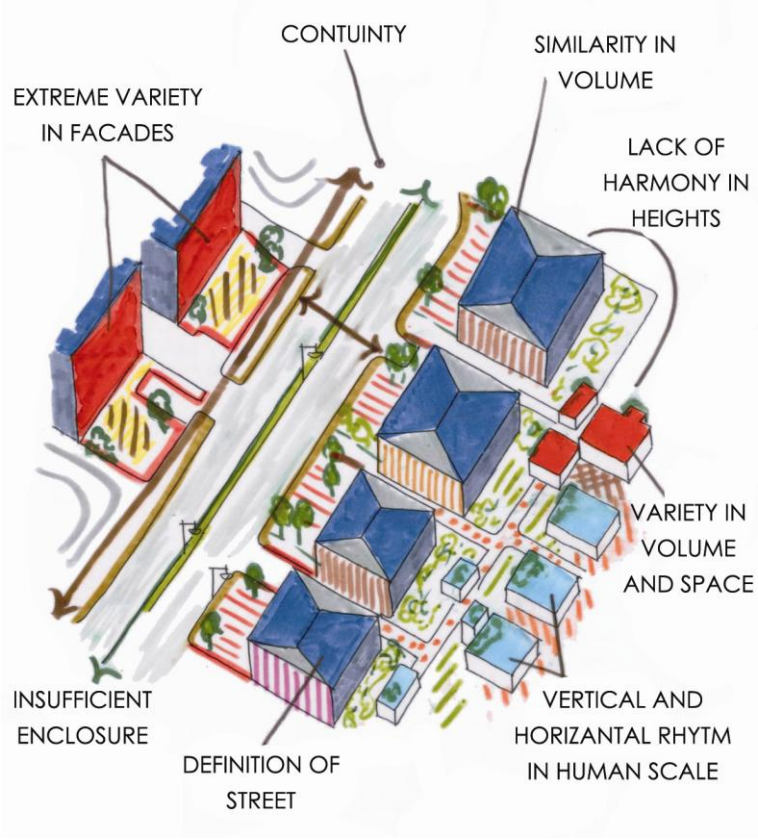


Figure 5.11: Morphological analysis of "Area 2" from Antakya (Personal Drawing)

5.5. General Information of the Case Study Area

The district is located on the southwestern part of Antakya at the end of the squatter belt on the top of a hill. A long squatter belt emerged in the city due to the state or Waqf land between two conservation sites as the Habib-i Neccar Natural Conservation Area and the urban historical quarter. Due to above mentioned reasons the control of the area is weak. The site is a special case that it is topographically segregated from the other regions of the city and largely situated on 2-B land in addition to small lands of treasury and municipality.

Figure 5.12: Case Study Area in the City (Personal Archieve)

Bağrıyanık Neighborhood is located on a ridge, expanding from the Mountain Habib-i Neccar. Before the 1950s the area was covered by forest except some steep sides. In the neighborhood there are nice viewpoints on the terraces of the Mountain. Some parts of Bağrıyanık are so steep that it is not appropriate to settle. There are two valleys,

surrounding the neighborhood; the first one is formed by Akakir River while the second is a dried waterway. Both create natural wind corridors for not only the neighborhood but also the whole city. Nevertheless; some structures were built into the valleys, which causes an increase in the flood risks as well as earthquake risks

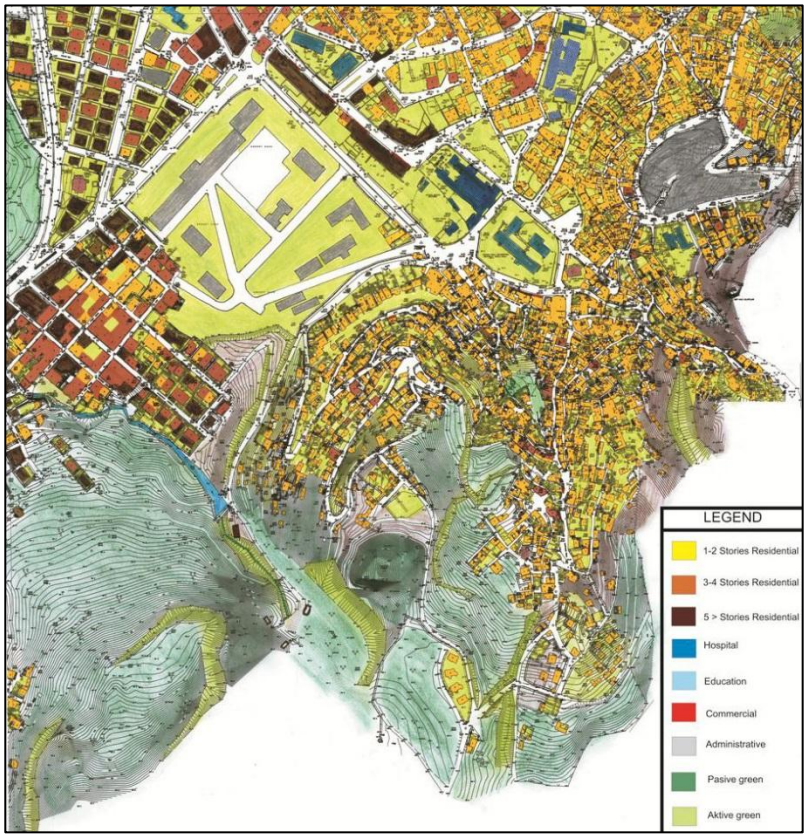


Figure 5.13: Land Use Analysis of Bağrıyanık District (Personal Drawing)

The dominant use of the area is residential that only a few small neighborhood markets are located in the site. A technical high school and hospital is located on the north of Bağrıyanık neighborhood. In addition to natural edges, the quarter is hidden by the large military zone. Bağrıyanık is a collectively formed neighborhood. Around this area, different income groups are living. As the neighborhood is close to high income residential area and there is a link with an arterial street; however, as mentioned above

there is no visual and social interaction between these two different areas. Moreover, near forest land there are newly built gated communities.

Figure 5.14: High and Middle Income Residential Areas close to Case Study Area (Personal Archieve)

Technical infrastructure level of the neighborhood is limited with the provision of water and electricity but one of the arterial paths is insufficient to meet the demand. Antakya is on the first degree earthquake zone. Even though, all urban facilities have a certain level of risk associated with various threats, Bağrıyanık Neighborhood has relatively less risks than the other parts of Antakya since it is located on a hill, geologically safer for earthquakes. On the other hand, some houses were built on the floodplain, which is vulnerable to disasters. Additionally, there are houses located on risk area in terms of land sliding. The squatters, located inside the valleys are mostly empty; probably as a result of past experiences of flood. Overall, physical infrastructure is weak in this area.

Figure 5.15: Low quality commercial and residential uses in the neighborhood (Personal Archive)

As Bağrıyanık Neighborhood is close to the city center so the urban amenities are within walkable distance for the inhabitants of the area. In a 500 m diameter; the neighborhood, adopted as a walkable distance even for children; a university, hospital and schools are accessible from the neighborhood. There is a primary school in Havuzlar Neighborhood, however, the school is not accessible for children due to the topographic barriers since they have to walk down a steep hill and climb again.

Figure 5.16: Topographical features of the district (Personal Archive)

The general profile of the inhabitants can be described as urban poor with low education level, high household size and irregular marginal jobs. Majority of the inhabitants are benefited from the state charity funds. The majority of the population in Bağrıyanık Neighborhood has not got a regular job and some work for temporary or unskilled jobs in the industrial areas, far from their houses. Thereby, integration with the city center and urban life is a serious problem for the inhabitants. Although the settlement area is segregated segregation from its surroundings and poor living conditions but a slum culture has not been emerged, which is a positive aspect of the neighborhood. Accordingly, there is not a security problem that the neighborhood is safe. Additionally, social relations affect the feelings of security. As the social relations are close in the neighborhood and the inhabitants are close relatives or friends the sense of security is still high.

5.6. Morphological Features of the Case Study Area

The area has lower density with respect to surrounding by a population density of 100-200 persons per hectare. This is the result of both topographic obstacles and one storey squatter housing fabric. From the figure and ground analysis, it can be seen that the layout of the buildings is harmonized with the lines of topography. The structures are dense in more habitable areas and vacant in high slopes. Moreover; the whole quarter has a low accessibility due to topographic obstacles and few public transport services. Due to its physically segregated situation as being on a steep hill top; the higher part of the district is deprived of urban amenities. Although, the road system is highly permeable due to its harmony with topography, a road hierarchy is lack in both lower and upper part of the district. An organic pattern which gives reference to topographical lines is the characteristic feature of the urban pattern.

Figure 5.17: Urban Pattern of the Case Study Area and Close Surrounding (Personal Drawing)

Based on satellite image and site observations, the project are was analyzed in terms of three urban morphology theories of figure and ground theory, linkage theory and place theory.

5.6.1. Figure and Ground Analysis

By figure and ground analysis, the relationship between building mass which is the solid and void has been investigated that the main urban grain and the spatial order it creates were identified. From figure and ground analysis, it is observed that the main reference of order which is the topography of the site that the squatter tissue fallows the topographical lines which provides an organic order and continuity. Even though there is not a planned or provided public space like a defined square or urban park, semi-public or semi-private spaces, formed between the houses in the accessible parts of the neighborhood are used as public space.

Figure 5.18: Figure and Ground Analysis of the Bağrıyanık District (Personal Drawing)

The spatial hierarchy can be observed through solid and voids that there exist a complex but systematic spatial system by interacting spaces between buildings. The voids between the structures are functioned as semi-public and semi-private spaces. Since the buildings follows the topographical, they do not define the street line is all parts. However; the walls and sheds of the gardens define the street line precisely. At the center of the neighborhood a clear opening as a distorted round square can also be observed through figure and ground analysis. The inhabitants do not have any property right that this affects the morphology of the site. Inside the blocks, the houses share the same courtyards and gardens which create a relational integration.

5.6.2. Linkage Analysis of the Site

By linkage analysis, the main system of circulation, connection and movement is investigated that two main means of communication is identified in the area as the roads and the open green system providing a linear communication link. The main connectors or communication spines of the site can be also perceived from solid and voids. Since the area has an organic tissue, there is not a precise spatial hierarchy of road network. Besides due to topographic obstacles, the area is naturally pedestrian friendly. The roads were organically evolved by benefiting from the topographical system that the main spine follows the contour line of the hill.

The area has low accessibility due to topographic obstacles and limited public transport services. As it is a physically isolated area, developed on the top of the steep hill; the higher part of the neighborhood is deprived of urban amenities. Although, the road system is highly connected due to its harmony with the topography, a road hierarchy has not been structured in both lower and upper parts of the neighborhood. However; there also exist vertical roads, which are generally composed of stairs serving only to

pedestrians by climbing the hill. Those paths are narrow opening creating access and shortcuts between the blocks.

In addition; there exist green continuous linear areas that they also functioned as paths as well as shared gardens. In other words; they are semi-private connectors providing access from public roads to structures. Although some parts are steep, the open areas are generally rehabilitated and can be used properly by inhabitants by help of stairs or small terraces.

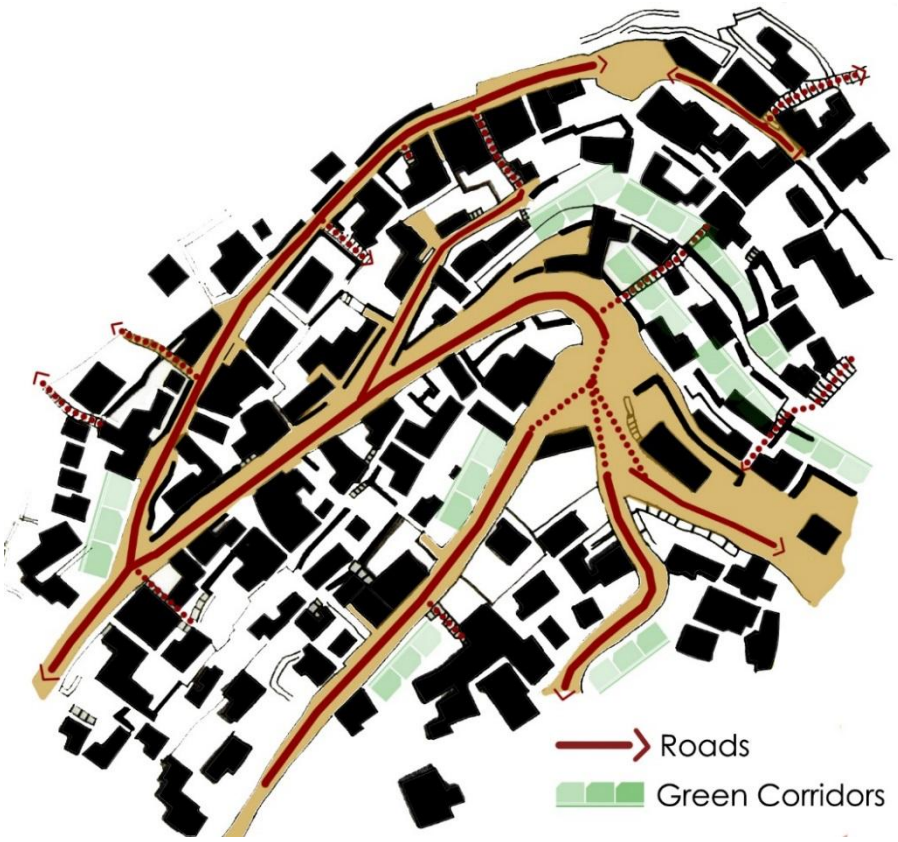


Figure 5.19: Linkage Analysis of Bağrıyanık District (Personal Drawing)

5.6.3. Place Analysis

By place theory analysis, in addition to basic urban design elements the cultural, behavioral and human characteristics of the site is investigated. Since the features of urban form and morphology was investigated by two preliminary analysis as the figure–ground and linkage, the focus of the place analysis is determined as image analysis, gestalt analysis and identity.

Firstly, there is one major and one minor node in the site. The main node is located in the middle of the neighborhood defined by structures walls and natural elements. The second node is located in the northern side of the main one used for daily activities by woman and children. Secondly there exist clear topographic edges at the north and south of the site defining the northern border of the site with the steep topography. Thirdly there occurs only one landmark as a part of the node which is *the tandır* used by women collectively in the area. Fourthly the site is divided in to districts which define the urban blocks as well. Each blocks have a socio-spatial organization in itself that the open green areas in the middle used collectively by the inhabitants of the district. Lastly, there are many paths including dead-end and ramparts. However; the main path of the site is the curvilinear road providing access to main road.

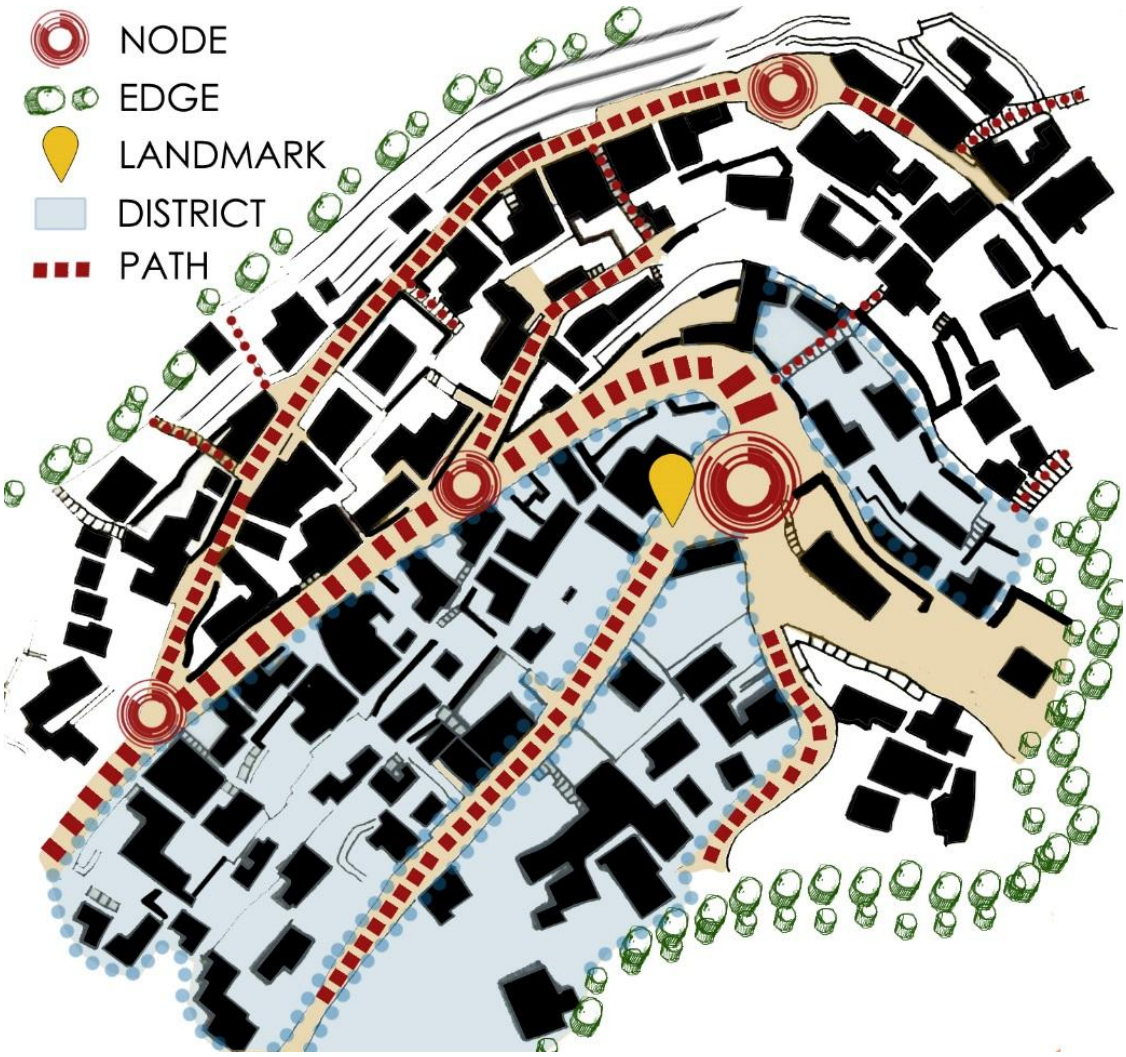


Figure 5.20: Place Analysis of Bagriyanik District (Personal Drawing)

Figure 5.21: Main node of the neighborhood (Personal Archive)

In terms of basic design principles of Gestalt Law, the site has a high level of order. The forms of the structures both unveil similarity and variety that although they are different as parts they can bring out a unity. There exists a high level of continuity at the same time that a curvilinear rhythm derived from the topography can be observed in the site. The roads and paths have a high level of connectivity that either by houses or by walls or gardens, the street line can be easily followed in the site.

In addition to the continuity of roads, open green areas and structures, there also exist continuity in vertical green system of green roofs which is a traditional element of houses in Antakya. The scale is appropriate to human in the site that the houses have floor areas ranging from 100 m2 to 150 m2 that they are one or storey buildings.

Although the density is low, there exists proximity between structures which defines usable spaces between the buildings.

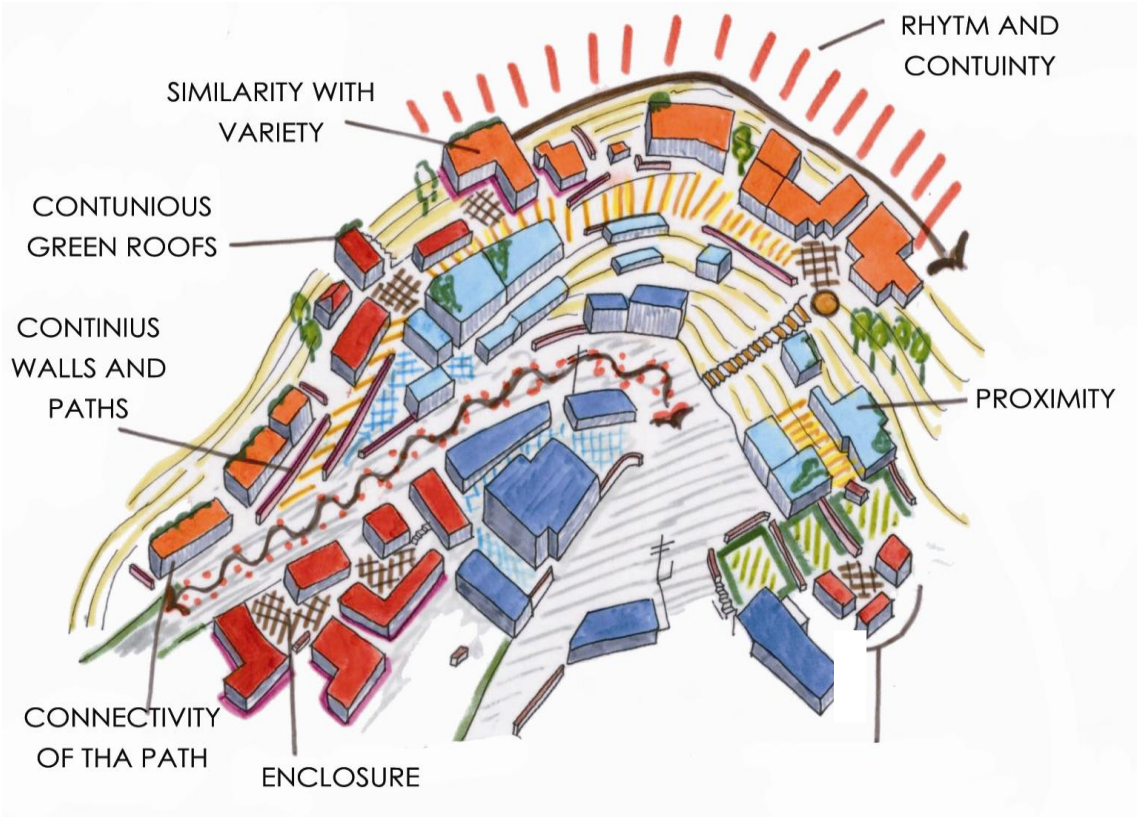


Figure 5.22: Gestalt Analysis of Bağrıyanık District (Personal Drawing)

Lastly, in Bağrıyanık case study area the cultural elements expressing character and identity are also investigated. The definite edges of the site creates habitable piece of lands that it creates compact parts of settlement in the neighborhood. Since there is not a parceling implementation or ownership right, there exist a variety of semi-public and semi-private spaces used as gardens or agricultural purposes collectively. In other words; it can be said that the physical limitations creates a life in both physical and cultural urban spaces in the district.

Figure 5.23: Socializing nodes of "Tandır" and contuinty of organic roads (Personal Archieve)

Moreover; on the corners of roads, scattered in the neighborhood, there are "*tandır-tandoors*", used as a shared cooking area. These corners help the socialization of women that the largest tandoor is located in the main node of the site that it makes the area a communication and meeting place mainly for women and children. By the green roofs created by vines, the dynamic use of place and high level of spatial hierarchy, Bağrıyanık district reveals a strong sense of place as well of spatial identity by place analysis.

Figure 5.24: Analysis of Character and Identity of Bağrıyanık District (Personal Drawing)

CHAPTER 6

CONCLUSION

This chapter concludes the research firstly by summing up the scope and content of the research. Then, it states expected benefits and constraints of the research. Finally, it makes some recommendations to improve the urban transformation implementations in squatter areas.

6.1. Concluding Remarks

Change is a part of urban areas including the man-made ones and the nature based effects. Thus, urban transformation has very early roots since ancient civilizations. However; after industrial revolution, change and transformations in urban areas accelerated. In Turkish case, squatter housing problem emerged after World War II with mass migrations from rural to large cities. From ignorance to acceptance, different approaches constructed to solve mainly physical and secondly social problems of squatter settlements. In terms of implementation two main models were created firstly, large scale redevelopment projects conducted by collaboration of governmental bodies and private enterprise. Secondly partial implementation plans created through partial plans which increased density implemented by small contractors.

Urban transformation conducted through implementation plans are generally criticized since they have insufficient impact in terms of social welfare but concentrated in physical space. Those plans generally require increasing density to attract contractors to

invest the area. To do this, provision of social services and green areas generally became under sufficient standards. On the other hand, the physical quality of the buildings were increased and transformed into apartments.

Since they are conducted by local and central governments, large scale redevelopment plans may involve more contribution in terms of social services and rights. Those projects can involve organization of the community and public participation as well as physical upgrade of housing by public or cross-subsidies. However, for both models deficiencies of the social side of the projects including displacement has been discussed in literature. Urban transformation projects in Turkey are generally evaluated as one-sided projects having physical focus.

Urban design is not limited to investigation of urban physical space apart from social, cultural and economic dynamics. Thus, the mere focus of urban transformation projects is not thought to be handled in physical side. Moreover, it can be discussed that urban transformation creates better residential units in terms of quality. However; the quality of urban spaces cannot be measured by the quality of residents. Under the light of above mentioned reasons, in this study, the main aim is to evaluate the morphological features of space produced by urban transformation projects in Turkey. Accordingly the hypothesis of the study is "*Urban transformation do not creates better quality of urban spaces?"* Related to the main question and hypothesis, different sub-questions are also revealed as;

- *"The socio-spatial well-being of communities can be sustained through urban transformation?"*
- *"What are the morphological features of urban environments created through improvement plans and large scale redevelopment projects".*

In order to define the quality of urban spaces produced by urban transformation projects, two control cases and one main case study selected. The two control case studies are picked from well-known urban transformation projects implementing in Turkey which are Dikmen Valley Urban Transformation Project and Şentepe Urban Transformation Project. The two control cases are selected from two major urban transformation approaches conducted in Turkey. Dikmen Valley projects can be seen as a characteristic example of large scale urban redevelopment project model and Şentepe Transformation Project is an example of urban transformation via implementation plans. The main case is selected from a squatter housing area, in which a distinct development pressure did not take place from Antakya, Bağrıyanık District.

The main case study is selected since it includes features of squatter housing areas including ownership, topography, quality, socio-economic profile and amenities. However; any ownership right did not give or promised to inhabitants. Furthermore, development pressure of private sector did not take place as well. Thus, the use value of squatter housing increased in the case study area that urban morphology was also shaped related to it rather than property relations. The case study and two control case study areas are evaluated by a success criteria table by referring the development models, main features and morphological values they have.

In terms of data collection of the study, the redevelopment plans, projects, protocols and reports of transformation projects; analysis, articles, theses, satellite images, direct observations and physical artifacts are collected as a multi-aspect approach. In addition, as mentioned, multiple case study method is used in order to compare the morphology of transformed areas with squatter settlements. The main arguments and analysis conducted in the study was rooted in empirical studies and observations.

In the analysis of urban form as the first part of the study, the description and content of urban form, its evolution by change in settlement needs and the factors shaping urban form is discussed. Firstly, the main elements affecting urban form are evaluated from literature research. Urban form is not just corresponded as the shape of urban space but also the potential level of social interaction is observed through the morphological features.

In terms of literature research, firstly the evolutionary development trends of urban forms are discussed from the Classical Times, Medieval Times, Renaissance & Baroque in terms of main morphological features. Afterwards, industrial city, the effect of modernism and the new urbanism trend in the post-modern period are discussed. Those features produced from the literature research in terms of evolutionary process of urban form are used as an input indicator in analysis of morphological evolution of the main case study era. Then the elements affecting and reshaping urban form is discussed in order to understand what shapes the physical urban space both in terms of existing urban pattern and in terms of urban regeneration process.

After a general examine the factors, different types of urban form is evaluated that those findings are used in evaluating the morphological features of the control cases and the main case study area.

Then as the main indicator of the case study analysis, urban morphology theories are investigated. As a result, the main urban design indicators evaluated by figure - ground theory, linkage theory and place theory are analyzed. Afterwards, social aspects of urban morphology are discussed. The role of urban form in social life, spatial hierarchy including public space, semi-public space, semi-private space and private space are discussed.

At the end of this part of the study, the regenerative role of community design under urban design criteria is discussed since the case studies of this study covers the urban

transformation process and results of squatter neighborhoods. In the next part of the study, to focus of the study is moved to squatter settlements and the process of squatter housing in Turkey parallel to the main aim of the study and hypothesis.

In the second part, which is the third chapter of study, firstly the definition of squatter housing problem has been discussed under major approaches. Since squatter housing is a world-wide phenomenon in many developing countries, the different views in terms of the main forces under the emergence of squatter housing is discussed. As a result, mainly approaches of Turner and Burgess who are the main contributors to squatter housing phenomenon in developing countries are discussed. Then the other approaches are evaluated including the Adam's views.

The main point of the evaluation of those views is to understand the different driving forces in the emergence and development process of squatter housing by rural immigrants. Turner's approach mainly focuses on the use value of a squatter dwelling. The consolidation attempt of the dweller is also valid in different degrees Furthermore; Burgess puts a different side of the squatter housing by emphasizing the economic side of the squatter phenomenon. Parallel to Burgess, Adam also emphasize the economic value including production side. Afterwards by the definition of actors and processes the differentiation of ""gecekondu"" phenomenon from the others types of squatter phenomenon is acquired.

Then the focus of the study is moved to the evolution of squatter housing in Turkey beginning from 1950s till present. In addition to evolutionary process, different intervention policies towards squatter housing in throughout the world are discussed. Afterwards, by narrowing down the topic, the intervention types to ""gecekondu"" problem in Turkey are investigated. At the end of this part of the study, the legal frame as the main enacted laws in order to solve the "gecekondu" problem in Turkey are discussed. In the synthesis tables it is also seen that the main targets of the laws

generally could not be achieved and those laws do not have a spatial reference in terms of urban design or community planning. This outcome has also become an important concern during the evolution of main and control case study areas with respect to urban design criteria.

In the fourth chapter of the study, the control case studies have been evaluated. Firstly the general features of Dikmen Valley Urban transformation model which constitutes an example to large-scale urban transformation projects are explained. Then the aims, plans, stages, major strengths and weaknesses of the project is evaluated. Afterwards, the morphological analysis acquired from literature review has been conducted for Dikmen Valley case study area. Afterwards, the general features, aims, and concept of Şentepe Urban Transformation Project which is an example of transformation areas by implementation plans have been discussed. Then, the morphological analysis of the case study area was conducted.

In the fifth chapter of the study, the main case study has been evaluated as Antakya Bağrıyanık District. In this part of the study, firstly the main features of Antakya and historical evolution of the morphology of the city is discussed. Then, morphological typologies in Antakya were evaluated including the case study area. Afterwards, the morphological analysis of the urban transformation projects implemented in Antakya has been evaluated. At the end of the chapter, the morphological analysis of Bağrıyanık District including urban design values has been discussed.

The main evolution in terms of urban design criteria is conducted through three urban morphology theories in two control case study area and in the main case study area which are;

- Figure and Ground Theory

- Linkage Theory

- Place Theory

By figure and theory the spatial organization of space in two dimensional view has been observed by investigating the relationship between solids and voids. The spatial hierarchy from public space, semi-public space, semi-private space to private space was also acquired in case study areas. In terms of Gestalt laws, enclosure, similarity and continuity can also be observed. Furthermore; the main references of order in terms of nature and power lines as well as the properties of rhythm can be observed via figure and ground analysis.

As the second important indicator of the evaluation of urban design criteria in case study areas, linkage theory was assessed. By linkage theory the main communication lines, axes and connectors can be observed in urban space in two dimensional manner. The road system and hierarchy, roles of open green areas as collectors and continuity of paths and green areas are evaluated by linkage theory analysis.

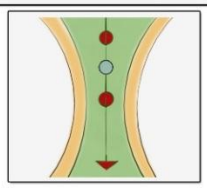
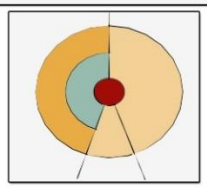
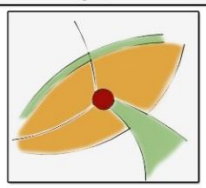
As the third aspect of urban morphology analysis, place analysis is conducted in three main case study areas. As well as the image analysis of Lynch investigated empirically in the sites, the other urban design elements, social and cultural clues are investigated. The sense of place, order, silhouette, rhythm and Gestalt elements are analyzed under place analysis in Dikmen, Şentepe and Bağrıyanık sites respectively.

In addition since Bağrıyanık district is the main case study area, a more detailed analysis in terms of urban design elements are conducted. Firstly, the detailed urban design criteria mainly produced through Gestalt Laws are discussed. Then the cultural elements which contribute to sense of place are also discussed via sketch analysis of Bağrıyanık District.

Furthermore, since Antakya is the main case study area, and the analysis of two main regeneration approaches are contextually different, the two examples of urban

transformation sites in Antakya are also investigated which are urban transformation areas via improvement plans and large scale public redevelopment. By three dimensional sketch analyses, the differences between the illegal housing tissue and the transformed areas were analyzed in terms of urban design elements as rhythm, continuity, enclosure, variety, sense of place and cultural symbols. It is also observed that the spatial quality produced by improved plans and large-scale redevelopment projects produce low quality of urban spaces with respect to urban design criteria, although they develop better quality of buildings.

Table 6.1: Summary of the Morphological Analysis

Site	Dikmen Valley	Şentepe	Bağrıyanık
Conceptual Diagram ● Central Core ● Green Areas ● Transformed Area ● Squatter Area ● Social Services			
Intervention	Large Scale Redevelopment	Improvement Plans	No Intervention
Period	Since1986	Since1990s	The inhabitants have not title deeds The majority of the neighborhood is located on 2/B land. There exist upper income neighborhoods and a gted community around the site. Poor living conditions and low profile of inhabitants
Body	Metropol Imar A. S Cankaya Municipality	Small contractors Public Inst. for Infrastructure	
Strengths of the Model	Financial Model Participation Incentive	Provision of Social Services Increased Accessibility	
Weaknesses of the Mdodel	Participation (Organization) Displacement Legislative Framework Social Exclusion Disregard of Tenants	Any funding and security Displacement Disregard of Tenants Lack of Control of New Constructions	
Morphological Layout			
Figure-Ground Analysis	Loss of the lines of nature Loss of human scale Deoriation of natural silhoutte Loss of urban order in the eastern part	Loss of the lines of nature Loss of human scale and order Lack of rhytm and spatial hierarchy	Organic order and contiunity Major lines of topography Spatial hierarchy Definition of street line Horizantal and vertical rhytm
Linkage Analysis	Valley as a green open communication link Lack of network hierarchy Identification of spatial hierarchy	Ring Road as the main communication link Lack of continous green system Lack of network hierarchy	Organic network layout Actively used linear gren open systems High connectivity of paths and roads
Place Analysis	Lack of sense of place Only the Valley contribute to image of the site Rhytm and spatial hierarchy in distinct parts	Weak image value Lack of spatial hierarchy Loss of horixantal rhytm Insufficient definition of the street line	Gestalt principles High level of order Sense of place Well defined image Characteristic roofs and uses

The main arguments defined in this study by urban morphology analysis are synthesized and summarized in Table 6.1. Firstly, three main case study areas are abstracted and commercialized in term of spatial organization and main functions including central core, green areas, transformed area, squatter area and social services. Since Bağrıyanık District has not been transformed yet, there is not a social and physical infrastructure area in the site. On the other hand, there exist social services in Dikmen and Şentepe districts. It can be also noted that there is more social infrastructure provision in Şentepe District although the area was transformed through improvement plans. However; Şentepe district is the weakest district in terms of active green areas.

The other main difference of Bağrıyanık district with respect to other urban transformation area is the lack of ownership rights. Since the area is mainly located on 2/B forest land which takes its name from the Forest Law, there is not a legal way to acquire title deeds in Bağrıyanık neighborhood. As a result, the rent value in the area is very law. In addition, the illegal housing market is not visible in the area since there is not a scarcity in land and the city is quite small with respect to metropolitan city of Ankara. As a result, there is not a tenancy profile in the neighborhood. Since the economic value is very low, the use value is respectively high and the spatial organization was shaped according to those criteria in Bağrıyanık District.

Despite the unfinished spatial transformation of the control cases of Dikmen and Şentepe Districts, the transformation logic and mechanism were almost shaped in control case areas. Thus; determination of the weaknesses and strengths of those models could be possible.

As a large scale urban transformation project with a public-private partnership model, Dikmen Valley Urban Transformation Project was condemned to be a successful attempt in squatter housing transformation problem with respect to public participation. However; this trend was lost during 1990s and displacement has become an important

problem of the project. As a result, the main strength of the project was turned to an important weakness. On the other hand, displacement did not occur only due to lack of participation. The high return and the profile of uses for high income residents was also lead to leaving of the squatter inhabitants acquired a flat by project in later periods. Although, the model offers a right to house owners, tenants of the squatters in Dikmen Valley project was pushed outside from their neighborhood, since there is not defined any housing right for them.

In terms of Şentepe Urban Transformation project, which is conducted by implementation plans; there is not a defined participation model and housing right distribution system. Although, the squatter owners having adequate land share and could make a deal with the contractor can achieve a flat. Furthermore; displacement also took place since the squatter owners move to other "gecekondu" districts. However; the level of displacement is lower with respect to Dikmen Valley Urban Transformation Project since the income target group is not high income residents.

The other key issue and an important different between Dikmen Valley and Şentepe Urban transformation projects is the control of the area. Although there occurred weaknesses in terms of participation, lack of spatial reference in legal frame and displacement in Turkish urban transformation projects, the main strength is the upgrade of structures and physical environment. Since Dikmen Valley Urban transformation project was implemented via detailed and comprehensive plans, it can be said that the quality of structures in the site has been increased. However; in Şentepe case, the quality of apartments is low. Furthermore; as a result of the topographic obstacles, the roads and the retaining walls endanger the inhabitants in terms of land slide and traffic accident risks.

With respect to urban transformation areas as the control case studies, main case study has lower physical quality in terms of structures and physical infrastructure. Although

the neighborhood is very close to city center and social facilities, topographic conditions make the area inaccessible to urban amenities including schools and health services. In Bağrıyanık district any parcel division cannot be observed since the majority of the quarter is 2-B land in which an ownership right could not have been developed in Turkey. Thus; it can be said that the case study area has poor physical conditions in terms of quality of structures and infrastructural services. Despite the weakness with respect to quality of structures and services, the spatial quality of area is higher compared to control case study areas.

In Table 6.1 the summary of the findings from urban morphology analysis conducted in three case study areas can be observed. In figure and ground analysis, it is manly observed that in Dikmen Valley Urban Transformation Project, it is observed in the northern parts a new order is defined in the site with respect to urban design criteria. However; the sense of place, spatial quality and order has been lost in eastern parts. On the other hand, by very large and tall buildings, human was destructed in the site. Furthermore; in both sites the natural topographical line has been diminished. On the other hand; in Bağrıyanık district there exist a spatial system with an organic order with high connectivity and spatial hierarchy. The houses are in harmony with topographic, so there is an order in both solids and voids.

In linkage analysis, there exists a difference between Dikmen Şentepe. In terms of linkage elements, Dikmen Valley Urban Transformation Projects provides higher connectivity by the strong emphasis of valley as an open green communication line. Furthermore, in terms of pedestrian paths, Dikmen Valley Project provides a better connectivity by the main spine lying through the middle of the valley since there is not a defined connectivity system in Şentepe Transformation Area. Moreover; in both cases a network hierarchy in road systems is not visible. However; in Dikmen Transformation Area, a spatial hierarchy can be configured in certain parts especially in upper slopes. In Bağrıyanık case, spatial hierarchy is not very orderly visible since there is not any

geometric order in the site. On the other hand; there exist organically shaped semi-public and semi-private areas. Furthermore; there exists high connectivity of road system in addition to linear open green areas act as green connector. Nevertheless; there is not a network hierarchy in Bağrıyanık district as well, although there is a system in pedestrian movement in vertical and horizontal access.

In terms of place theory, the results show the social and cultural results as well as sense of place and image of urban space. In Dikmen Transformation Site, there is not a continuous settlement system but the residential parts are scattered in the site in a discontinuous system due to topographic obstacles and vast sizes of the structures. In terms of image elements, there is not a well-defined and visible image element except the valley basin act as a path. On the other hand in Şentepe district, street line is insufficiently defined since in implementation plans, the street line protection is not defined. The disorder in the structure also can be observed in the lack of spatial hierarchy. On the other hand; in Bağrıyanık district a high level of sense of place can be visualized due to cultural symbols and well-defined spatial hierarchy.

6.2. Further Comments

Since the squatter housing redevelopment and renewal programs especially only held by physical manner led to social problems, affordable housing policies also have been implemented in both preventing unauthorized housing and eliminating the side effects of redevelopment process. The main difference between the housing need and housing demand implies the main problems in housing and related to it urban socio-spatial problems including slums, growing marginal economy, socio-spatial segregation, inequity and so on.

Housing is a need as all human declaration implies it is a basic human right. (HABITAT, 2000) Thus; every human being needs and having right is to sustain a shelter. However; only with enough affordability housing need becomes a real housing demand. As Savage and Warde (n.d) states that housing market is directly linked to labor market, the financial policies and security systems are so important to overcome the deficit between the housing need and housing demand. Those implications can be generalized as housing policies. The main reasons to apply housing policy are;

- The misdistribution of income since some people having economic status for sufficient housing
- External costs of bad housing such as; ill health, delinquency, vandalism and so on
- Housing is a merit good like education and social insurance
- Public intervention is generally necessary to provide new buildings, renovation of dwellings and elimination of slums (Harvey, n.d.)

Due to above mentioned reasons; the objectives of housing policy can be summarized as;

1. To obtain the optimal use of existing housing resources
2. To ensure adequate housing for all houses
3. To guide the location of new housing
4. To be responsible for the housing needs of different social groups
5. To influence the policies of local authorities in allocating housing

Furthermore, under the light of morphological analysis, the further comment in terms of urban design can be summarized as;

- Enhance public open squares and greenery including linear open systems
- Create community spaces in nodal points

- Enhance physical quality of the environment

For Bağrıyanık case, there can be defined different intervention methods by protecting the military zone or not, destruction of the squatters and re-creation of the forest or rehabilitate the existing structures can be possible design alternatives. Design of nodes and public spaces can be also defined as the major aims of a design intent. In figure 6.1, the possible design sketches are represented with respect to those terms as a concluding remark of this study.

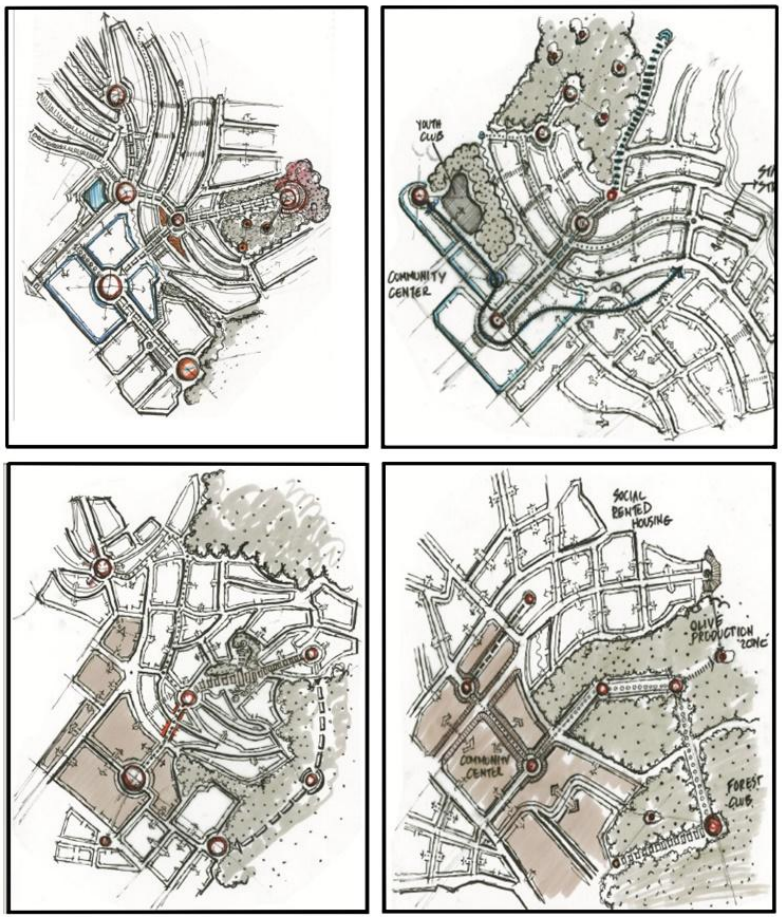


Figure 6.1: Different Design sketches on regeneration alternatives of Bağrıyanık District (Personal Archive)

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