DESIGNING URBAN SPACE
WITH THE TOOLS OF THE DEVELOPMENT LEGISLATION

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_____

Prof. Dr. Canan ÖZGEN

Director

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

_____

Prof. Dr. Ali TÜREL

Head of the Department

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

_____

Assist. Prof. Dr. Adnan BARLAS

Supervisor

Examining Committee Members

Assoc. Prof. Dr. Baykan GÜNAY	_____
Assist. Prof. Dr. Adnan BARLAS	_____
Prof. Dr. Feral EKE	_____
M. Sc. Feridun DUYGULUER	_____
M. Sc. Can KUBIN	_____

ABSTRACT

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BAS, Yener

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Since 1960s, the scope of urban design broadened in a way that to control the formation process of urban space as a whole. In this respect urban coding became a distinct branch in urban planning as an integrating mechanism of planning and design processes. Thus, design control has become a crucial part of the development control systems especially in the western countries. Although the development legislation in Turkey as an urban coding system has various weaknesses about urban design and design control, it provides important tools to control urban form from macro scale to micro scale. Aim of this study is to analyze the capabilities and deficiencies of the development legislation in Turkey as a design control system.

The mostly stated complaint about the planned areas in the cities of Turkey is the loss of diversity and peculiar character of settlements as a result of the homogenization of their spatial pattern, namely apartmentalization. This problem is basically related with the exclusion of urban design from the planning process. The planning approach in Turkey merely oriented to readjustment of property appropriate to small-scale development, ignoring the concerns in regard to urban design. Therefore, beyond a technical fault resulting from the legislation, this is an outcome

of the way legal tools are used that does not realize the value of potential possibilities in the legislation.

However, if the legal tools are used efficiently in an approach that bring the considerations of urban design into fore, it might be possible to come out with more satisfactory environments in terms of diversity and richness of urban space. This is the basic hypothesis examined in this study.

In this context, firstly the relation between urban coding and design is investigated in its historical development and a hierarchical model for design control is defined. Then the development legislation in Turkey is evaluated in the frame of this model. Finally, territorial hierarchy of space is taken up as a design criterion and the capacity of legal tools in control of the transitional zones, which are critical elements of territorial hierarchy, is examined.

Key words: *urban form, urban design, urban coding, design control, development legislation, development planning, territorial hierarchy.*

ÖZ

IMAR MEVZUATININ ARAÇLARIYLA KENT MEKANINI TASARLAMAK

BAS, Yener

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1960'lardan bu yana kentsel tasarimin kapsami kentin biçimlenme sürecini bir bütün olarak kapsayacak sekilde genislemistir. Bu açidan kentsel kodlama, planlama ve tasarim süreçlerini bütünlestiren bir düzenek olarak kentsel planlamanin ayri bir dali haline gelmistir. Böylece tasarim kontrolü özellikle bati ülkelerinde, kentsel gelisimi kontrol eden yasal sistemlerin çok önemli bir parçasi olmustur. Türkiye'de imar mevzuatinin bir kentsel kodlama sistemi olarak kentsel tasarim ve tasarim kontrolü açisindan çesitli sorunlar içermesine ragmen kent biçiminin kontrolünde makro ölçekten mikro ölçege kadar uzanan önemli araçlar sundugu söylenebilir. Bu çalismanin amaci imar mevzuatinin bir tasarim kontrol sistemi olarak yeteneklerini ve eksikliklerini incelemektir.

Türkiye'de planli kent alanlari için en çok dile getirilen elestiri apartmanlasma olarak adlandirilan ve kent mekanlarinin giderek aynilasmasina yol açan süreç sonucunda mekansal çesitliligin ve yerlesmelerin özgün karakterlerinin yok olmasidir. Bu sorun temelde planlama sürecinden kentsel tasarimin dislanmasiyla iliskilidir. Türkiye'deki planlama yaklasimi kentsel tasarima iliskin kaygilari gözardi ederek yalnizca mülkiyetin yeniden düzenlenmesine yönelmistir. Dolayisiyla sorun mevzuattan

kaynaklanan teknik bir hatanin ötesinde, yasal araçlarin sundugu olanaklarin degerlendirilmemesinin bir sonucudur.

Ancak, yasal araçlar kentsel tasarimin ölçütlerini ön plana alan bir yaklasim içinde etkin olarak kullanildigi durumda, kent mekanin çesitliligi ve zenginligi açisindan daha yeterli mekanlar yaratmak mümkün olabilir. Çalismada sinanan temel önerme budur.

Bu çerçevede, ilk olarak kentsel kodlama ve tasarim arasindaki iliski tarihsel gelisimi içinde incelenmis ve tasarim kontrol kademelenmesi için bir model tanimlanmistir. Daha sonra bu model çerçevesinde Türkiye'deki imar mevzuati degerlendirilmistir. Son olarak mekanin egemenlik bölgesi kademelenmesi bir tasarim kriteri olarak ele alinmis ve yasal araçlarin bu kademelenmedeki kritik elemanlar olan geçis alanlarinin kontrolündeki yeterliligi sinanmistir.

Anahtar sözcükler: *kent biçimi, kentsel tasarim, kentsel kodlama, tasarim kontrolü, imar mevzuati, imar planlamasi, egemenlik bölgesi kademelenmesi*

to my father

Ihsan

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CHAPTER 1

INTRODUCTION

1.1. AIM OF THE STUDY

> "While I was walking in the streets of Eskisehir, I thought that I've lost my senses of time and space for an instant. Where was here? I knew that I was in Eskisehir but nearly, there was not any sign indicating that this city is Eskisehir. Long streets with narrow sidewalks, buildings that are arranged along the roads and sticked on each other in rows… All of them look like each other; built as if in a hurry. Here may be Kütahya, or Afyon, or Bilecik or also Ankara... Whatever city in whatever region of Turkey… We have created an architectural unity that has broke off from past and that have not gave any clue about future. The discomfort that I felt in the streets of Eskisehir results from the dominant image of monotonization. Our cities consist of flat, concrete walls that have not any special feature and not expose an identity (Yilmaz, 2003)."

These lines, quoted from a daily newspaper, depicts on of the most frequently directed critiques to the planned urban areas in Turkey. A homogeneous spatial pattern has been predominant on urban form and all our cities resemble each other. Wherever in Turkey, when the issue is "urbanization", the first image that pops up in mind is "the apartments" lined up in a monotonous order. Even so, the word "apartmentalization" is not only used as a term that defines a type of space production realized by small-scale developers, but also used as an aesthetic term that symbolizes the spread of monotonuity, homogeneity and dullness in urban space. Furthermore this is not only the image of urban space, but also the image of urban planning in Turkey.

Planning process in Turkey determined by Development Law no. 3194 is based on "development plans", "which are the typical examples of land use planning approach". However, in the practice, it is less than this physical approach and reduced to a tool of transformation of cadastral ownership to development parcels (Günay, 1985; 17). Therefore the development planning practice, which is insufficient in achieving the physical criteria, is completely unsuccessful in satisfying the social, psychological and aesthetic needs of the cities. As mentioned by Günay (1997,56):

> "In the approach and practice of development planning, which is merely oriented to readjustment of property, we are continuously destroying the 'place's that are parts of our social life, and (...) the meaning, the image, the character and the identity of the cities... Absolutely, there will be transformations in a city. Yet, these transformations must be painless, and the one that is put instead of the old must carry some social and psychological values. Otherwise, the cities become bland and copycat of one another.

Therefore, the monotonization and homogenization of the urban form, more than an aesthetic problem, is a comprehensive planning and design problematic, which includes various social and psychological aspects of the relationship between man and environment. On the one hand, it is about the deterioration of spatial peculiarities and the loss of community character. On the other hand, it may be taken from the viewpoint of behavioral and cognitive requirements and dealt as a problem of legibility, imagibility or a decrease in diversity of spatial experiences. It may also be evaluated as a problem causing the production of unidentified and insufficient public spaces and the lack of clear territorial hierarchies in space.

From whatever aspect the problem is tried to identify, it is related with *to exclusion of urban design process from the planning process in Turkey*. Urban spaces suffering from the problem of monotonization and lack of variety are the outcomes of the planning process, and the development legislation that determines this process plays an important role in the formation of these spaces.

The planning legislation in Turkey does not define aims and principles about urban design, rather it focuses on tools of implementation. For this reason, the concerns as regards urban design cannot occupy an adequate place in the planning practice.

Determination of legal tools on the formation of space becomes more depended on the attitudes and approaches of professionals taking part in the planning process. In spite of its deficiencies and restrictions, the legislation provides important tools that give some opportunities to control the form of space. Thus, in the frame of legislation, if the legal tools are used in an approach setting out from the objects of urban design and giving the priority to the absolute space of urban life but no to the abstract space of land market, better spatial results may be achieved.

This subject constitutes the frame of the study; that is, *the relation between urban design and the development legislation* and *the relation between urban designers and the legal tools.* In this sense, the aim of this study is to investigate the potentials and weaknesses of the development legislation, as a set of tools to control urban form in the application of different design approaches and so in the achievement of certain design criteria.

1.2. METHOD OF THE STUDY

In this study, the concept of urban design is taken simply as the process of putting planning decisions into realization and maintenance of the urban environment. In this connection, architecture, character, quality, form, aesthetic, meaning, image, comfort etc., are all subject matters to be scrutinized, debated and achieved. Therefore, urban design covers the theory and practice of producing the form and life of the city from macro scale to micro scale, from the whole city to the building details. In this process, urban design is "sometimes designing and making, more extensively guiding the design and making of the city and its parts" (Günay, 1999a;32). In other words, urban design "not only involves planning the city as a whole or design of any part of the city, but also deals with the preparation of urban codes and design guidelines, which would be legal foundation a design. Thus design guidelines and urban codes are appeared to be the basic tools to control the implementation of a plan or a design in the ongoing process of construction and reconstruction of cities" (Ünlü, 1999;5).

Although, urban design as a concept is a relatively new field and such a broad definition and framework about design of cities is peculiar to last few decades, urban codes has played an important role in formation of cities throughout the urban history. The relation between coding and design has evolved depending on the change of the relation between architecture and planning. From the emergence of urban coding in the Greco-Roman period as a rationalization of the formation of property pattern, this relation has evolved in accordance to the needs of space production modes, which depends mainly on property relations. As the recent form of this evolution, contemporary urban design is defined in the conditions of neo-liberal period in which postmodernist planning and design approaches has prevailed while the modernist approaches was decreasing as a result of the loss in total control of central Keynessian state. Thus, in these countries design control became an important dimension of development controls system Especially, in the last two decades design control became a distinct branch of urban planning and many different approaches and tools comprising a hierarchy from national level to local levels have been developed. Therefore, the objective of second chapter in the study has been to investigate the evolution of coding-design relation and to define the relation between urban coding and contemporary urban design approaches in the frame of a hierarchical model that generalize the various design control tools and complementary design advice mechanisms of different countries.

Although the development legislation in Turkey has developed formally in a similar way with western experiences, its content and nature of control has been shaped very differently. Urban design criteria have never been the major concern in the planning process of Turkey and urban coding has been used mainly to legitimize the urban development and to provide some physical standards.

Nevertheless, the reasons that makes such an approach to prevail in the planning process should not be seen only as a technical fault caused by the deficiencies of the legislation or a subjective problem resulting from the insufficient professional knowledge or inadequate attempt of the technicians who have responsibility in the process.

The way urban space is produced and its internal contradictions, which is manifested in the struggle between the approach that sees the city as a living space giving priority to its use value and the interests which considers the urban space as an abstract arena where rent is tried to be maximized. Capitalist city is the place where the exchange value centered interests are dominant in this struggle. In other words, in the capitalist system where living spaces are produced as commodity more than the use value of space, its exchange value is important (Sengül, 2001). For this reason, "as the capitalism uses space, it abstracts space from its living structure, that is, the space of capitalism is the abstract space. With respect to capitalism, two spaces that have completely distinct historical - use values, are only abstract parcels or buildings exchanged in the market. So the use value of these spaces are important as much as they contribute the exchange value (Sengül, 2001; 15).

In this context, the function of urban planning is to control and organize the chaos and disorder created by market and to find solutions for the physical and social problems of urban environment. However, in the developing countries like Turkey, where the pace of capital accumulation is low, the increase of unproductive investments is not desired and the cost of urbanization is tried to reduce. For this reason, large capital is directed to the industrial investments by the state, whereas the production of urban space is left to small capital and the squatters (Tekeli, 1991;168). In this manner, development of cities gains a dual structure. On the one hand, reproduction of labor is cheapened with squatter housing outside the control of planning institution. On the other hand, the small-scale developers dominate the production of planned urban areas. Thus, functions of planning is reduced to the rearrangement of property patterns appropriate to the small scale investments and to the solution of property disputes as in the improvement plans and to meet the physical necessities at a minimum level, while the social, psychological, aesthetic needs of urban space are neglected.

Therefore, in this dual structure, small-scale developers have realized an important part of the urban space production in Turkey. As mentioned by Sey (1998;34)

beginning from 1950s, especially with the law of flat ownership, the phenomenon of apartmentalization prevailed in the development of cities;

> "The construction of apartments which are accepted as the symbol of western life style spread over in this period. The dominant aim behind this epidemic was not to follow a fashion, but to increase the urban rent. Within the contribution of the existing laws and regulations, the entire country acquired uniformity in tits cities. There was no difference between the newly developing districts of Adapazari and Erzurum or Istanbul. The architectural peculiarities of cities were rapidly disappearing".

After the issue of Development Law no. 6785 in 1958, comprehensive planning approach came into agenda and in this approach new housing supply systems were developed as an alternative to small-scale development. Thus, pace of apartmentalization process decreased as a result of the mass housing projects realized mainly by cooperatives in 1970s.

Particularly after 1980, increasing support of the state to housing market through the Administration of Mass Housing and increasing investments of large capital to urban space, the development pattern of the cities changed from the plot-agglomerated pattern towards the articulation of large parts and urban blocks. Although development in large parts provide more flexibility to designers in their boundaries, it is hard to say that satisfactory results are attained.

In addition, as mentioned by Ünlü (1999; 79), the understanding of space production through articulation of small plots has been currency until today. The only change brought by the new development law (no. 3194) issued in 1985 was the decentralization of central authority to control urban development, yet the main logic of space production did not change. Still, especially at the micro scale, small-scale private developer is the most important agent for the creation of built environment.

Consequently, evolution of the planning practice in Turkey is a result of the historical process of urbanization summarized above and legal tools and planning approaches about the control of urban form has evolved to adapt changing conditions in this process. Although the planning practice has failed in solving many problems, it is possible to say that the development legislation progressed in many aspects throughout its evolution. The second part of this study will firstly take up this

evolution and search the historical roots of the basic features of recent development legislation and planning. Then the hierarchy of development planning system in Turkey is evaluated in frame of the model defined in previous part. Thus, focusing the basic mechanisms to control urban formation, their functions and interrelations will be investigated.

The hierarchy of development planning system has a dual structure composed of upper scale master plans and detailed implementation plans. Although there is the place of regional plan and development area plan in the legislation, generally, development plans is prepared without a strategic frame determined in regional or provincial level. Actually, the separation of the relation between the intervention scales is a general characteristic of the planning system in Turkey and it results from the approach of development planning which still has the logic of comprehensive planning, although the state has never achieved a total control on urban space in Turkey, and the planning process gained an incremental nature with the decentralization of planning authority to local governments.

Therefore, the contradiction between the static-comprehensive approach of development planning that sees the city as a controllable physical object in a long term and the weak control of the state on production of urban space has been the major deficiency of planning system. So the inflexibility of the development planning practice is the mostly emphasized criticism by the authors discussing about urban design and development planning.

On the other hand, as Akçura(1981;65) emphasize the inflexibility of urban planning in Turkey does not only arise from the development legislation, but also a result of the administrative, technical and managerial customs of the planning authorities. According to him, the development legislation is open-ended in many aspects. It doesn't assign distinct rules about the decision areas of plans. Dual structure of the planning system is open to be used as a flexible mechanism, in which the master plans determine the general policies and principles and the implementation plan translate them into spatial design decisions for specific sites. However, the means of flexibility given by laws is not evaluated sufficiently and either the master plan is

prepared as if an implementation plan or the implementation plans is designed as a whole at the beginning of the process, ignoring the possible changes in the future conditions.

Another example of this attitude is seen in the use of development bylaws that can be described as a complementary design mechanism in development planning system. Although the implementation plan-bylaw mechanism makes possible to prepare different coding systems peculiar the conditions of localities, municipalities does not use this power and they accept the Standard Development Bylaw without any change, or with slight differences. Since the development bylaw has a strong influence on formation of space, it can be said that the use of standard bylaws without considering local conditions and needs is one of the basic reasons behind the homogenization of urban form in Turkey.

Another source of inflexibility for designers is the fragmented property pattern in Turkey. It supports the segregated development pattern as agglomeration of plots, while it prevents to realize large-scale projects because of the difficulties in the land consolidation process. As clarified by Akkoyunlu (1999;136);

> Consolidated applications are expensive and they take longer time, as they require the land consolidation even before application. Furthermore, these types of applications do not provide solutions to fill the urbanization needs of countries such as Turkey where a fragmented ownership pattern is widespread.

For this reason, in spite of the flexibilities in design that the consolidated approaches provide, currently used application as the land readjustment method is the *transformation from fragmented to fragmented structure* (Akkoyunlu, 1999;140). The document in the development planning used for the determination of readjusted patterns of property is the allotment plan.

Although the adjusted pattern of property is an important determinant in the design of both private and public spaces, the allotment plans are prepared in such a way that they are separated from the implementation plans, which, in turn are the basic tools to control urban form in Turkey. This also renders the application easier.

Consequently, allotment plans are not prepared with a bearing on design criteria, but with the aim of minimizing the inequality and sharing problems between landowners.

These inflexible conditions of small-scale development do not only influence the formation of property pattern, but also the building order. Likewise, the construction rights are also arranged in a homogeneous way with a concern to decrease exchange risk in the market and speculative activities. In this manner, design in two dimensions is reduced to land subdivision, and design in the third dimension is reduced to the identification of construction rights. Furthermore, these tasks are separated from each other.

The restrictive and rigid conditions of plot-based development are the main source of the complaints of architects about development plans and bylaw. They are restricted in boundaries of plots with strictly prescribed development conditions and architectural standards. Moreover, since the Development Legislation does not include any description about urban design, there is emphasis on the coordination between related professions, which is a crucial requirement of urban design processes.

Consequently, even if we don't consider the fact that most of the urban development in Turkey has occurred outside of the control of the planning institution, it is not possible to say that the development planning practice has became successful in controlling the urban development.

Particularly, the critiques about uniformity and homogeneity of planned areas are steadily increasing. Since urban design has not been made a method of the urban development control mechanisms, it could not become a part of planning process as a public policy for controlling urban form.

Therefore, urban design in Turkey is considered as a special kind of technique used in certain large projects, such as mass housing projects, redevelopment projects, campus design projects realized by public authorities, large firms or partnerships of them. On the other hand, such projects, based generally on land consolidation or

design in one property, constitute only a small part of planned areas. The rest of it is produced with the typical development planning approach, the basic consideration of which is to rearrange ownership pattern appropriate to small-scale developers. The result is the typical apartmentalized environments deprived of diversity of urban life. So this is the main question: Is this typical development pattern only and inevitable possibility or are there alternative ways of shaping urban patterns in the development planning process?

Although the practical conditions of urbanization process cause many difficulties and the development legislation has also inflexible aspects in itself, it provides important tools and flexibilities to control urban form. However, the ways of utilizing these opportunities are not forced in the typical development planning approach. If the tools provided by the development legislation are used in an approach that bring the considerations of urban design into fore and urban space is designed as an absolute environment of life, it might be possible to come out with more satisfactory environments even in the restrictive conditions of small scale development. This is the basic hypothesis examined in the 4th chapter of the study. As an important criterion of urban design, the need for territorial hierarchy of space is taken up in this examination and the capabilities of legal tools in controlling the formation of certain spatial types are evaluated. The spatial types included in this examination are determined as the transitional zones, which provide the transition between public and private spaces, and the spatial types that include such zones. Four categories of these spatial types, which are passages and arcades, cluster housing, courtyard housing and cul-de-sac, are discussed in the frame of the development legislation using some hypothetical examples.

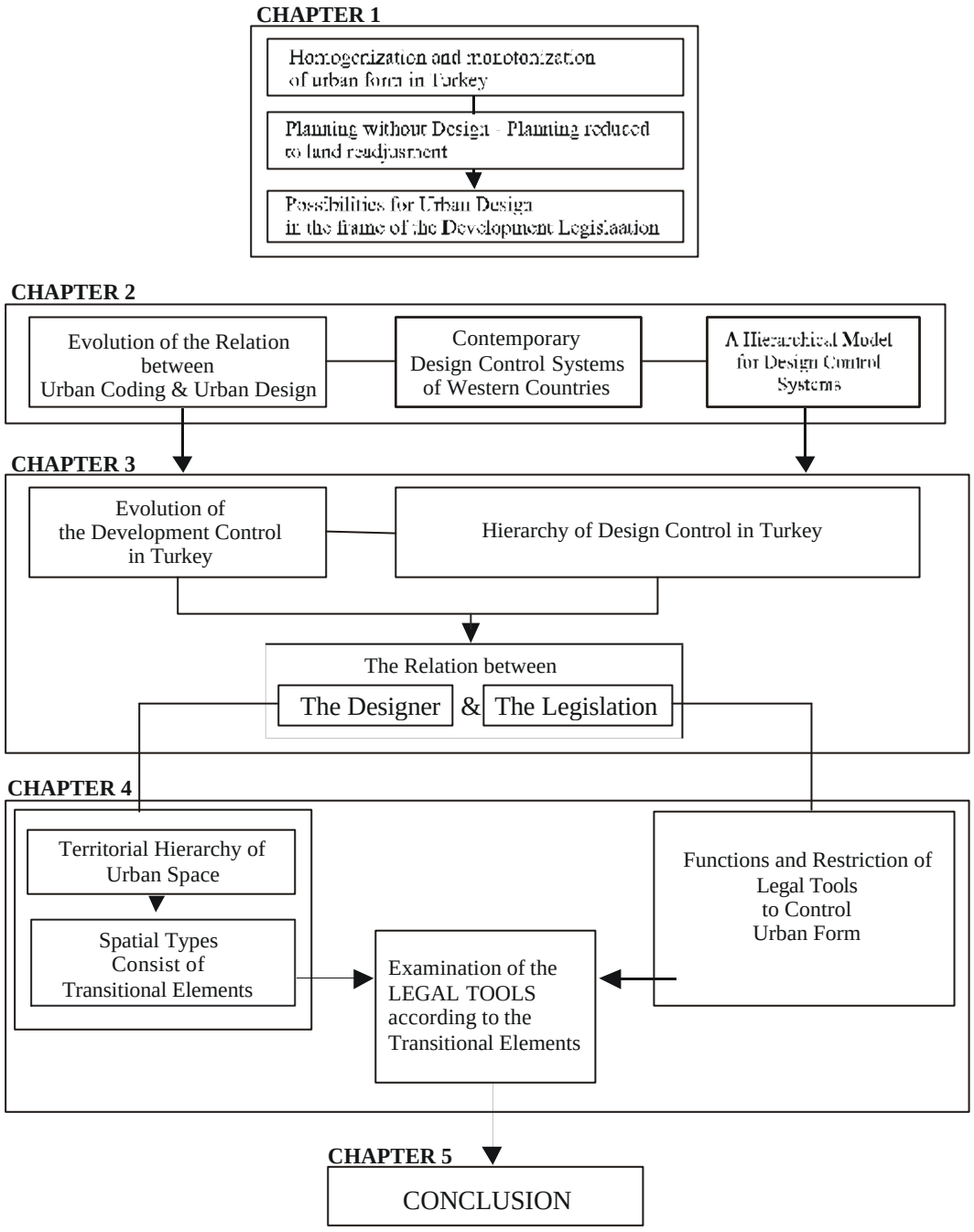
Briefly, the relation between urban design and the development legislation will be taken up in general sense. In this general frame, starting point of the study is the homogeneous urban spaces produced by the intervention of typical development approach in the process of apartmentalization. However, neither the causes of this problem nor the evaluation of existing spaces is the focus of this study. The main object of the study is to search for design possibilities provided by the development

legislation. Moreover, the continuity of urban design process through different stages of planning process will be taken into account in a way concentrating on meso and micro scale design of urban space. Because the most determinant stage of the development planning process on urban form is the 1/1000 Implementation Plans.

In this scope, the method can be described as a two staged comparative study. In the first stage, which includes 2nd and 3rd chapters the development legislation as a whole and its historical progress will be compared with the design control systems of some western countries, in the frame of the hierarchical model that generalize their design control mechanisms.

In the second stage, the design tools of the development legislation at the 1/1000 implementation plan level will be examined over certain spatial types which function as transitional elements or include such elements. As a result of this examination in chapter 4, it is aimed to investigate the capabilities of the development legislation as an urban coding system in the organization of territorial hierarchy of space. Finally, Chapter 5 will include a general evaluation of the study.

Figure 1.1. *Conceptual Diagram of the Study*



CHAPTER 2

URBAN CODING AND URBAN DESIGN

The subject of this chapter is the role of urban coding systems in urban design. Urban coding in its contemporary form, basically, is a tool to control the construction conditions, uses, and forms of the units that are produced in the plot agglomerated development pattern of the modern capitalist city. In this manner, it is an inseparable part of modern urban planning and design. On the other hand, the use of urban coding as a design control system is not only peculiar to the modern city and can be fallowed since the antiquity when the first planning attempts emerged, and it has changed throughout the history depending on the evolution of planning and design approaches. Therefore, firstly, the historical development of urban coding in Western societies will be looked over to understand that how its function has changed while the relation between planning and design approaches has been evolving. Then, the general aspects of contemporary design control systems of different countries will be evaluated. This will provide us the basic points for investigation of urban coding system in Turkey.

2.1. HISTORICAL DEVELOPMENT OF URBAN CODING

2.1.1. Invention of Coding as Rationalization of Architecture and Landownership

Although the use of grid pattern in arrangement of urban form was known since the planning of Nebuchadnezzar's Babylon in 11th century BC, the first planned city is generally accepted as Hippodamus' Miletus at 479 BC, because of that he regulated urban space according to the needs of political system by systematization of urban form through "land subdivision and zoning regulations". Four centuries later in Rome, Vitrivius would develop the concept of "development regulations" in his famous work "Ten Books on Architecture". He proposed a differentiated codification system one part of which includes urban regulations and the other part architectural regulations controlling the materials and construction techniques. Thus he attempted to control the foundation of a city from macro scale to micro scale (Ünlü, 1999; 20).

Therefore, the emergence of urban coding can be searched in its relation with the property relations in which the spaces of private and non-private realms of life are pre-determined. (Günay, 1999b). Two basic function of coding, first one of which is the rationalization and legalization of private ownership of urban land by means of land subdivision, and the second one of which is to provide public control over private space by means of zoning and construction regulations, were firstly utilized in Greco-Roman world.

Whereas in the medieval town where we cannot see a legal coding system, the physical structure evolved gradually within the rules of possession and communal property. Today, many authors argue that the physical harmony of medieval town is unprecedented. According to Günay (1999b, 118), the basic reason behind this might be sought in the concepts of communality and possession, and a slow evolution of new property relations where the individual built his own environment in democratic processes, and, the communal spaces of the church, the castle and the market hall again to fit the same process of production.

In the Renassaince period, when private property was prevailed instead of possession with the rise of mercantilism and national state, the Roman Law was reinvented as a tool to cover the necessities of developing property relations. Thus rational ordered ownership begun to dominate urban fabric, which is constituted from individual parcels developed by the state and individuals. Moreover, the designing activity was separated from construction and the architect of Renessaince emerged as a professional who had to satisfy conspicuous desires of the merchants (Günay, 1999b; 118-120). The most coherent of them is Battista Alberti. More than a professional architect, Alberti was the first urban design theorecian of the Renessaince. His book, De Architectura treats architecture and town design as a single theme and adopts Vitrivius' principles into the Renessaince architecture (Spreiregen, 1965).

Consequently, in the towns of Renassaince and Baroqe, the nation state and mercantilism introduced a new interpretation of the public under state control. This attitude of western capitalist society to employ the state and its institutions would consolidate in the municipally regulated city of 19th century as a mechanism to control the production of space (Günay,1999b).

2.1.2. Emergence of Modern Urban Coding as a Pragmatic Municipal Tool

With the industrial revolution, new social classes and property relations of modern capitalist society would create a new period for urban development. This was also the beginning of the modern urban planning. In general sense, urban planning of 19th cc. was a reaction to the industrial city. The planning approaches in this period can be grouped into three; the utopist, the pragmatical approaches and the Hausmannian approaches.

The common aspect of the utopist approaches is their attempt to overcome the problems caused by capitalist city with the mediation of space. So they are not only an idea of new ways of life or societies, but also proposals of new forms of settlement. Their approaches was based on environmental determinism, which

suppose that society can be transformed by changing its environment (Tekeli, 1980;11).

Two of these utopian socialists had significant influence on later urban design approaches. Robert Owen in England is the herald of Ebenezer Howard's Garden City of the late 19th cc., and Charles Fourier in France would inspire Le Corbusier's Unite'd'Habitation in the 20th century. The former, Howard's Garden City was a proposal of new settlement pattern based on a cluster of towns aiming to combine the attractions of the town and country. This model was based on empirical researches on ideal city size and population densities. His scientific-empirical approach would influence firstly Patrick Geddes, then the empiricists of 20th cc. like Raymond Unwin and Clarence Stein, inventor of the "neighborhood unit" concept.

The second group of planning approaches, the pragmatic approaches, is based on the control and regulation of urban development through the municipal administration. The roots of modern development control systems and urban codes are established by these regulation attempts, which mainly aim to improve sanitary conditions of the industrial city. The first of these legislations was issued in England in 1832. Then the act of 1848 brought detailed prescriptions including the formation of urban blocks. Whereas the act of 1875 is the most important of the Public Health Acts. As a result of this act the model bylaw was produced. Building bylaws were, from that point onwards, interpreted in terms primarily of public legislations (Tarn, 1980;82). As Broadbent (1990;114) states these codes had more specific prescriptions about the actual construction of dwellings such as the levels, widths and construction of new streets, their drainage, and so on.

The first expropriation laws, which would play an important role in the control attempts of urban development after 1850s, were put out in 1840s. Tekeli (1980;13) emphasizes that the protection degree of the landowners by these laws is determined by the power of the landowner classes. The expropriation law of England in 1840s was protective for landowners, so it delayed the great development operations. Whereas the French expropriation laws in 1841, which is very effective, made possible the Haussmann's operations of reconstruction in Paris in 1850s.

The operations of Haussmann was another important approach of planning in 19th cc. Haussmann, depending on the power of central state of Napoleon III, created a network of boulevards on the complicated medieval pattern of Paris by means of large scale expropriation and demolition operations. According to Spreiregen (1965;27), although a still popular conception of Haussmann's reasoning is that he thought boulevards could be used by troops against the barricades, the main reason for boulevards was financial speculation. As Günay(1999b; 130) emphasizes, it was the intervention of bourgeois which is growing as a new powerful class, by using the power of the central state in order to dominate the central area of Paris. Thus the basic function of boulevard was the transformation of the older city ownership patterns for the development of capitalistic functions.

The influence of Haussmann on the modern planning was not only limited with the design concepts but also comprises its application tools. He constituted a very strict and detailed development regulation system to control the construction process. These codes brought strict restrictions to facade variations and determined standards to street landscape that establish identical rows of plane trees, street lambs and types of pavement in sidewalks and roadways. Haussmann's urban codes proved the influence of a powerful legislative system on the formation of urban space till its smallest details (Kostof, 1992;228).

Therefore, such large scale reconstruction operations was not limited in Paris, but influenced the development of many capitalist cities. This planning practice strengthened the attitude of bourgeois and administrators to solve the problems of urban life by means of physical interventions. City Beatiful Movement in America at the end of the 19th cc. developed as a synthesis the neo-classicism of Ecole-des Beaux Art's romanticism and Haussmannian approach. Whereas, its influence would go further, and create a modernist tradition. Its large scale, mechanistic engineering method based on expropriation, demolition and rebuilding would influence the 20th cc. modernists like Le Corbusier.

2.1.3. Urban Coding as a tool of Modern Comprehensive Planning

In the turn of 19th cc., the prevailing approach in urban planning was the City Beautiful. This movement, the most extensive example of which is the 1907 Chicago Plan of Daniel Burnham, started to be criticized seriously towards 1910s. Since this approach give emphasis on the creation of civic centers, urban parks and boulevards, left its place the movement of "City Efficient" that focuses on the functional problems about health, housing, transportation, infrastructure and so on. Planning instruments like land use planning, zoning, urban standards were improved in this period, in the frame of the principles of Patrick Geddes summarized as "survey, analysis, plan" which constitutes the scientific basis of urban planning. New York Municipality issued the first zoning regulation in 1916. Thus, especially after the 1929 crisis, the "comprehensive planning" took the place of planning method of 19th cc. that is based on architectural design.

Moreover, in these years, the functionalist movement (or the rationalist with the term of Lang) starting with Mies Van der Rohe, Gropius and Le Corbusier, would establish the basis of the modernist tradition in architecture and urban design with the Athens Charter of CIAM in 1933. Attoe (1989;2) states the basic principles of the functionalist movement;

> In early functionalist thought the city was characterized as a machine, in later thought as a complex organism and as a network of community centers linked to and directed by a central core. A functionalist city is equitable; it does not favor or neglect social groups. Everyone benefits from adequate sunlight, fresh air, and access to open space. Functionalist theory treats residence, work, and leisure as discrete elements. Activities should not mix, hence zoning is a key element of the functionalist city. Orthogonal forms characterize most functionalist urban design.

Therefore, the progressist-functionalist space understanding of CIAM and the approach of comprehensive planning were overlapping. Both of them suggest a space production type under the total control of state, and domination of public property. In this context, master plan was the basic instrument of comprehensive planning which was supposed to control all land use decisions, densities and circulation. Zoning was

the main tool to apply these planning decisions. On the other hand, urban design treated as an architectural product design in one property dominated by state bodies.

The main factor underlying the domination of the approaches of CIAM and comprehensive planning is the relative stability of capitalist governments under the hegemony of ABD, which is based on a Fordist-Keynessian economic system (Harvey, 1990;50). Therefore, the modernist production of space prevailed in western countries until 1960s, the beginning of a new crisis period for capitalist system in which the state accepted that it cannot dominate space totally. The neo-liberal policies such as privatization, decreasing state investments and rise of the private property, have removed the material basis of the modernist approach or urban design and postmodernist production of space started to dominate the urban space in the western capitalist cities after 1960s.

Nevertheless, the critiques for progressist movement of urban design started at its most influentisl period, in 1950s. The design manifesto of Team X, **t**he design manifesto of TEAM X in 1954, instead of the "progressist model", which "looked to the future and inspired by a vision of social progress" proposed the "culturalist model" which is "inspired by the vision of a cultural community". Against the progressist model defending a hygienic city separating functions and putting the accent on "air, sun and greenery" in a geometric setting, the culturalist model defended the integration of functions, accentuating the culturalist urban space of spontaneous urban patterns (Günay, 1988).

2.1.4. Urban Coding as a tool for Integration of Planning and Design

The postmodernist reaction in planning and design field against the modernism found its one of the first and most strong expressions by the study of Jane Jacobs; The Death and Life of Great American Cities. The great reconstruction operations, huge infrastructure projects, suburban settlements, functional zoning etc., all of these products of "modern orthodox city planning" are criticized as the main responsible of the problems of modern capitalist cities. She accused the modernists to create

monotonous and boring environments and to destroy the diversity and liveliness of urban life. Like as Team X, she supported the revitalization of the street as a space of vital public life in a diverse and dense setting of activities (Jacobs, 1963; 2).

Leon Krier, in a similar way, claimed that the symbolic poverty of the modern cities ia a direct consequence of the practices of functional zoning and he proposed an ecological city where the all kinds of urban functions are provided in walking distance. According to him, achievement of symbolic richness of the antique cities would only be possible in these conditions (Harvey, 1990; 86).

These attitudes of liven up public space and regain the richness of urban life through revitalization of historical urban contexts would constitute the starting point of postmodern designers. One the one hand, some of them like Leon Krier, Rob Krier, Aldo Rossi, Taffuri who are named by Broadbent (1990; 157) as "neo-rationalists", like modernist rationalist, worked with architecture of abstract, geometric purity. However, in contrast to the modernists' forward looking idealism that rejects the methods and forms of the past, the neo-rationalist (or "formalists" with the term of Attoe) argues that satisfactory patterns for accommodating human need and public life exist in our urban heritage. So they assumed the existence of timeless design figures through typologizing the elements of the city (Attoe, 1989;14).

On the other hand, "the neo-empricist" stream, instead of starting out from abstract geometrical forms as in the case of neo-rationalists, has focused on human needs, and investigated man-environment relationship. Environmental design approach was established on the findings of behavioral sciences. Team X's culturalist approach, Lynch's studies on environmental cognition, Cullen's Townscape, Alexander's pattern language, and studies of Rappoport and Porteous has founded the basis of environmental design. While the neo-rationalists, deriving their geometry from the classical forms of Greece and Roman architecture, the neo-empricists generally appriciate the context of traditional medieval town as an ideal responsive environment to human behavior and urban life.

Moreover, this is not only relevant for design approaches, but also for the planning field. The comprehensive planning assuming total control on urban space through domination of state and space production has lost its efficiency in the crisis period of capitalist system. Under the pressure of liberal policies, the planning system adopted a more flexible role. State intervention to urban space was directed to the control of structural elements letting individual property owners freer in the reproduction of urban space. Planning instruments of deductive method like land use, master, zoning plans is changed with structure-local plan practice (Günay, 1999b).

In this context, changing conditions of western economies has redefined the relationship between planning and design practices after 1960s. In the modernist period, Urban Design was seen as a large-scale architecture, so it was the design of a huge product as a finalization of the decisions of master plans. Thus, there was a boundary relation between planning and design. However, from this time, urban form would not be a product of total control of the state but it would be a result of a process manipulated by multitude of actors restricted with financial resources in an ambiguous decision making environment. Therefore, urban design could not be treated as a branch of architecture any more. Thus, it emerged as a new concept and field between urban planning and architecture to integrate the changing design approaches with new flexible, strategic approaches of planning. Urban coding would claim a new role in this redefinition of the relation between planning and design.

Table 2.1. *Historical Development of Urban Coding*

PERIOD	PROPERTY RELATIONS	URBAN PLANNING	URBAN DESIGN	URBAN CODING
GRECO-ROMAN CITY	Private Property - Citizen as property owner - Development of Roman Law	Planning and Design as a part of classical-rational Architecture - Hippodamus as the first planner - Vitrivius as the first theorecian of architecture - Grid-iron pattern and regular linkages between zoned elements		Urban Coding as a tool for rationalization of Architecture and Landownership - Land subdivision - Functional Zoning
MEDIEVAL TOWN	Communal Property and Possesion	Planning and Design as a part of communal Architecture - Sponteneous Development Pattern		Rules of Possession - Unwritten social codes, traditions, norms of behavior
RENESSAINCE & BAROQUE TOWN	Revival of Private Property - Rise of mercantilism and nation state - Reinvention of Roman Law	Planning and Design as a part of Renessaince Architecture - Urban fabric constituted from individual parcels developed by the state and merchants. - Fillarete's Sforzidna-Star shaped military city - Alberti's Palmonava-Star shaped military city		Rediscovery of Vitrivius' principles and coding system of greco-roman period
19th CENTURY INDUSTRIAL CITY	Absolute Private Property - Collectivization of property - Municipal control on property - State action in property	Emergence of Planning distinct from Architecture as a municipal action - Utopian Approaches - Pragmatic Approaches - Hausmannin Approaches City Beautiful Movement - Reactions against Haussmanism	Urban Design as a tool of transforming society - Charles Fourier - Robert Owen - Haussmann - Ecole de Beaux Arts - Ebenezer Howard's Garden City - Camillo Sitte	Emergence of modern urban coding as a pragmatic municipal tool - Public Health Acts - Building By-Laws - First Expropriation Laws
20th CENTURY MODERN CITY	Public Control over Private Property - Middle class property - Domination of public property in urban space - Total control of the State over production of urban space in Fordist-Keynessian system	Urban Planning as a comprehensive discipline - Suburbanization and decentralization of the city - City efficient; Patrick Geddes' principles as the basis of scientific planning - Comprehensive Planning	Urban Design as a large scale Architecture - Wright's Broadacre City - Garden City Movement - Clarence Stein's Neighborhood unit - Raymond Unwin's Radburn - Bauhaus, Mies van der Rohe, Le Corbusier - Functionalist, Rationalist, Progressist Paradigm; CIAM - Empricist, Culturalist Paradigm;TEAM X	Urban Coding as a tool of Modern Comprehensive Planning - Zoning ordinances - Development Standards - Master plan
20th CENTURY POSTMODERN CITY	Restoration of Private Property - Restoration of small property - Restoration of corporate property - in a neo-liberal, post-fordist system	Decentralization and Flexibilization of Planning - Structure Planning - Advocacy Planning - Communicative Planning	Urban Design as a contradictory field between planning and architecture - Neo-Rationalists-Formalists-Morphologists Leon Krier Aldo Rossi Rob Krier Taffuri - Neo-Empricists-Humanists-Environmentalists Cullen Rappoport Lynch Porteous Alexander Newman	Urban Coding as a tool for Integration of Planning and Design - Development of flexible coding tools - Emergence of urban coding as a distinct branch of urban panning - Development of design guidelines - Integration of design control with planning systems

2.2. CONTEMPORARY URBAN DESIGN AND DESIGN CONTROL

After the emergence of the concept of urban design, definition and content of it has become a major debate subject. In the modernist period, aims and tools of planning and architecture were overlapping. Whereas after sixties, postmodernist approaches emphasizing the diversity, individual expression, historical and local contexts took the place of modernists. Thus, the boundary relation between planning and architecture changed into the contradictory relation between the nature of these professions appeared. Günay(1999a;74) clarifies the evolution of the concept of urban design on this dialectical bond between the provocative individuality of architecture and the bureaucratic rationality of planning. According to him, a substantial portion of urban design debate originates from this dilemma between planners and architects. The architects generally tend to define urban design as architecture in terms of mass-space-form relations, or aesthetics, or imposition of architectural orders at parcel level, negating the many forces and actors, which make a city. On the other hand, the planners generally define it simply as a physical arrangement reducing the city to the frame of land use, densities and zoning issues or to the issues about quality of life like urban furniture, paving, landscape.

Barnett (1974;186) also emphasizes the same dilemma, and defines urban design as a middle ground between planning and architecture, on which both claim their own perspectives but neither architecture, nor planning can fill it very well.

Therefore, the scope and content of urban design has been growing up in the direction of the critiques for the modernist paradigm and the dilemma between architects and planners. In these debates, some of them defined urban design as a macro scale design issue, neglecting its relation with micro scale problems, while others were defining it as a small scale landscape design in public spaces. Some others reduced it to the aesthetics or visual appearances of the urban environment rather than an overall spatial organization. Some of designers emphasized the social, psychological and cultural aspects, while some others were focusing on the

discussion of process or product design. Moreover, some discussions were about which professions' responsibility is urban design; planning or architecture? Is urban design an activity of private sector or private sector? All of these ambiguous aspects of the concept of urban design have been debated by planners and architects (Madanipor, 1997; 363-383). Through these debates the focus of urban design has proceeded from the substantial issues about design criteria and visionary attitudes to the procedural and practical issues about analysis, policies, and implementation processes. Thus, urban design debate concentrated on the dimension of urban development control as a mechanism to integrate planning and design processes.

In this way, urban design debate reached broad definitions of the concept, which are determined with reference to the process of space production. Lang's definition is based on two ways of his process:

> (1) by setting the design policies and guidelines for such developments, allowing other people to make their own design decisions within them, or (2) by having one set of the whole design and development process. In the former case urban design is closer to city planning and in the latter case closer to architecture.

Or with the property terms of Günay (1999a;42) design in one property is architecture and design for many property is urban design. This constitutes also the difference between product design and process design.

In a similar way, Barnett (1974;30) defines on the same problem; "What about those parts of our cities and towns where large scale development will not occur, only a process of piece-meal modifications on a block-by-block, or even lot-by-lot basis? Is there any way to plan such areas so that they come to have the coherence of a group of buildings designed at one time." Therefore, according to him, urban design is the process of "designing cities without designing buildings". Or with the words of George (1997;143), "urban design is a second order design endeavor; that is, the urban designers are only indirectly responsible for producing built forms and the spaces between them. They design the decision environment within which others make decisions to add to or alter the built environment.

Urban design is now seen as a part of the production space and definitions of the concept comprehend the all ambiguous aspects of previous debates. Madanipour (1997,381) puts such a broad definition;

> "Urban design therefore can be defined as multidisciplinary activity of shaping and managing urban environments, interested in both the process of this shaping and the spaces it helps shape. Combining technical, social, expressive concerns, urban designers use both visual and verbal means of communication, and engage in all scales of socio-spatial continuum."

Moreover, in all of these definitions, urban coding has a central role as a tool to provide public control over the individual design and to organize public realm. Therefore, the functions and structure of development control mechanisms has been extended to comprise the all frameworks of contemporary urban design approaches in a way that it can provide the necessary flexibility to achieve design criteria of these approaches. Soutworth emphasizes such a change in American case;

> "In more recent years plans have generally demonstrated more concern for user needs, pedestrian access, preservation and re-use, and for ways to increase the identity and character of communities. Although individual project design continues as one central activity of urban design, in other cases it has focused more on managing the quality and character of large areas through policies, standards, and design review; the development of such policies and standards is becoming an important role of the urban designer" (Soutworth, 1989;369 in Günay, 1999a;26).

Since the emergence of urban design in 1960s as a distinct field, the relationship between planning and design has been changing in a way that urban design is being constructed as "public policy" (Günay, 1999a;75). Especially in the last decade there are concerted efforts to define the framework of urban design in terms of guideline generation, and integration with planning process. In the next part of this chapter some examples of the general structure of design control mechanisms from different countries will be evaluated.

2.3. EXAMPLES OF DESIGN CONTROL SYSTEMS

Especially from 1980s, design control became an essential part of the development legislations of the western countries such as Germany, France, Netherlands in the Continental Europe, or England and USA. In this period, each country adopted some mechanisms of control in accordance with the conditions of their planning practices. The planning systems of these countries are generally based on the duality of structure plan-local plan. Whereas, the methods of these system in processing the "policy hierarchy" for design control from national level to local level, site level and to design details varies from country to country. "The role of plans" in setting the policies and dimensional decisions, the sophistication of "complementary documents and mechanisms" guiding the design dimension of development differentiates even between municipalities. Moreover "consultation and participation mechanisms" in design control, "design appraisal methods" are also important aspects constituting the design control mechanisms. The examples of coding systems mentioned above will be evaluated in respect to these aspects.

2.3.1. Design Control in the United States

It is hard to define an American planning system because of 40000 local governments, which administer planning autonomously within 50 federal states. In addition to this diversified and fragmented structure of planning system, the American attitude to property that sees the land as a replaceable, tradable, exploitable commodity has developed zoning rather than planning as the most influential form of land administration (Punter, 1999;6,9).

In general, land use planning in the US has been more a matter of zoning than planning. As Barnett(1974;31) mentions the usual sequence in American cities is that zoning first, planning afterwards. On the other hand, although it was a very simple and rigid system in 1916 when it emerged in New York, it has become much more complex and flexible over the years. Besides, as described by Barnett (1974;37), first examples of flexible design control in America is realized through modifications of

zoning ordinances, such as zoning incentives, special districts. It is the principle instrument in America for controlling urban form and used as a self-executing system according to which “building permits” issued.

Therefore, until 1970s, much of the American cities did not have a comprehensive plan, and the zoning ordinance remained the only form of planning regulation. Nevertheless, in the last two decades, American land use regulation has moved beyond zoning and the general plan has now a considerable importance in shaping development in many cities. These plans are similar to structure plans of Europe with their strategies, goals, objectives and vision statements. In addition to the general plans, there are more detailed sub-area plans, particularly for city centers as well as for individual communities (Punter,1999;12).

Diversified and separated structure of the American planning system has also reflected to design control process, or “design review” in American terms. It is “the process by which private and public development proposals receive independent criticism under the sponsorship of the local government unit, whether through informal or formalized processes”. Design reviews as increasingly popular processes among planning authorities, display important differences in their policies and appraisal methods. According to a survey, 78% of planning agencies has been using some form of design review process, especially since 1980s. Moreover, 82% of design review procedures are mandatory and legislated. The design is reviewed by a special review board or by the planners themselves (Madanipour,1996;177).

Design review process contains various types of documents. Generally, the main tool of control is zoning, sometimes contained within and constrained by a plan including a vision of the future city and goals, objectives, policies and proposals to achieve this view. These policies are specified in accordance with zoning districts by various tools of design review process, such as detailed plans for downtown or for neighborhoods, city-district-community design guidelines, development standards, and transportation regulations. Some of them are prescriptive documents defining measurable criteria, defining form, dimensions, and layout of the end product, and others are performance documents containing criteria about qualities, activities,

which are more difficult to assess. Design review processes are used generally for large projects. Otherwise zoning controls are applied. Applications are evaluated for its code conformity and compliance with the plan in order to decide for grant of construction permit.

As a result, the forms of design review process, in terms of documents and their preparation or application procedures such as design appraisal methods, advice mechanisms, participation mechanisms show great variety between municipalities. On the other hand, the popularity and sophistication of these processes are steadily increasing.

2.3.2. Design Control in France

The basic feature of French Planning Law, as of the most Continental Europe is "réglemantairé": it specifies what can or cannot be done, and there can be little discretion in its implementation. In addition, the traditionally centralizing character of the French government has always assumed the leadership in cultural and aesthetic matters. Indeed, the laws of decentralization of 1983 have not significantly changed this leadership.

Therefore, design has been a major concern of the planning system in France since its inception. Although modern planning legislation developed immediately after the First World War, its contemporary structure established with the laws of 1967 and 1976. The former introduced the plan hierarchy; The Schéma Directeur, strategic and long term, and the Plan d'Occupation des Sols(POS), detailed, local and short term plan. The latter incorporated modifications plan. The latter incorporated modifications and some other legislation such as Secteurs Sauvegarde's which is about protection of heritage. Moreover, Law of Architecture of 1977 brought the requirements regarding the need to employ registered architectures to apply permission for build. Finally, The Code de l'Urbanisme incorporating these bylaws, provides a framework for planning and design control over the whole France.

As (Loew;1994,89) states, there are two basic levels of plans. The upper one is the The Schéma Directeur, strategic plan dealing with the general distribution of activities and infrastructure It is not directly applicable to design control, but it provides a general framework for land use plan and other plans have to be compatible with it. The lower level is the POS, a land-use plan at the local scale. It includes a report, a zoning map with additional graphic documents about protection, and a set of bylaws. It has a fairly standard format defined by the Code de L'Urbanisme, particularly in relation to the various zones and their bylaws. These are adapted to the local conditions.

The report analyses the local environment to provide justification for the bylaws, and morphological studies to identify local spatial context. The zones consist of two categories; the U zones for development, subject to land subdivision, and the N zones for protection where the development is restricted. For each zone, there is a chapter including 15 articles in the POS bylaws. Some of the articles are fixed and deal with land uses, the relation between buildings, roads and property lines. Others are optional and about the site coverage, scale and external appearances of buildings, landscaping and plot ratio.

Moreover, there are local institutions called CAUE, which charge planners, architects, landscape designers to provide free design advice for private and public boddies. They also make researches about architectural characteristics of the locality (Teber,1997;39). In addition, ABF, under the Ministry of Culture, is another institution, responsible for large numbers of protection areas, design issues and building permit needs the approval of more than one authority (Loew,1997;102).

Another important planning instrument in France is the "Zone d'amenagement concerte"(ZAC). It is used to initiate development, or if there is a pressure of development that requires tighter control. As Teber (1997;37) describes, ZAC provides the cooperation of all actors of planning process to establish plan, program, feasibility, time, cost, implementation dimensions for a comprehensive project of

ZAC area. Moreover it provides legal tools to provide speculation, such as to freeze land prices, to provide priority to local authority for land exchange.

As a result, in France, there is a centrally defined design control system, involving numerous participants for design advice and building permit from central government institutions, like ABF to the local authorities and design comities. The POS is used not only as a land-use plan but also as an instrument of urban design, or as a kind of design guide, including land use and zoning maps, design analysis, bylaws and graphic documents by many local authorities and the ZAC is used for defining special intervention areas.

2.3.3. Design Control in Germany

Urban planning in Germany is closely connected with urban design, and design controls are an essential part of the planning system. Design issues in planning are regulated at the federal state and municipal levels. The Federal Building Code (FBC) constitutes the legal frame of planning. As described by Pantel (1997;105,106) there are two main laws codified in FBC; The Urban Planning Law and The Building Control Law that changes state to state. The Urban Planning Law defines the plan hierarchy which has a dual structure consisting, large scale strategic plan and the detailed small scale "Bebauungs-plan", which controls the use of individual property parcels, building dimensions, communal facilities, landscape and so on. It is complemented by the local building bylaws adapted from the Model Building Bylaws of The Building Control Law. The architectural features and approaches of buildings are controlled through these adapted model-bylaw. Building permits are bounded to these plans and bylaws.

Therefore, the Bebauungs-plan and the local bylaws are the basic instruments of urban design in Germany. These might be supported by additional documents. For this reason, federal government has produces documents that provide guidance on how to control all aspects of building form, external appearance and landscape. Sometimes the municipalities produce a design manual to provide advice to

architectures and developers. These manuals explain and interpret both planning and building laws and illustrated the possibilities for development. Landscape and ecological design through site plans, sketches and photographs and detailed planting lists. They can also include standard house types, facade, roof, fenestration details etc. These are not binding rules but they can provide recommendations about layout, site design, sunlight, landscaping, ecology, hydrology, building types and details. Such manuals are illustrated through site plans, sketches, photographs and typological lists about plants and architectural elements (Pantel,1997;107).

According to Pantel, such design guidance that are produced in a wide variety in German municipalities are based on very extensive appraisal of the locality consisting both urban form and its landscape. Theses appraisals contain analysis from the overall image of the town, to the architectural, landscape, activity characteristics of districts, and solid-void analysis, morphological studies etc.

In addition to municipal advice through design guides, manuals, bylaws and plans, many municipalities have aesthetic comities consisted of architects, planners, conservation specialists, lay persons in order to advice applicants on design issues.

2.3.4. Design Control in the Netherlands

According to Nelissen and Vacht (1997;142) The importance of design control in the Netherlands is gradually increasing as an integral approach of planning, conservation and urban renewal. It is based on the Housing Act of 1991. The article of design control in this law combines the building permit directly to the “reasonable demands of design control” under the responsibility of local authorities.

The planning system has two main levels. “The regional plan” at provincial level provides the legal framework for “the local plans” and the principles of design control. The regional plan is not legally binding on the civilian. The criteria of design control should be in accordance with local building bylaws. These bylaws are adopted and extended from the “model building bylaws” laid down by the Organization of Dutch Local Authorities according to their local circumstances. The

local bylaws contain criteria to be applied in design assessments. These criteria for design control in local bylaws are a specification of the demands of design control determined in the Housing Act of 1991. Yet, there are no specific criteria in the model bylaw so that to avoid the danger of uniformity between localities (Nelissen and Vacht,1997;142).

The decision for building permit conditioned to the accordance with "reasonable demands of design control" is advised by an "independent" design control committee to the major and the aldermen. Design control committees use objective standards related to design policy and standard design criteria. Yener (1997;23) points out that all projects in the Netherlands either at architectural scale or urban scale are evaluated by these committees. The advice of the committee is not legally binding. Responsibility of final decision about building permit belongs to major and aldermen.

Therefore, as Nelissen and Vacht (1997;155) state, "the way design control in the Netherlands has been shaped and developed is unique, particularly the establishment of a committee of independent experts to offer design control advice, and the separation of the advice and the political decision in design control, and design control is more and more considered as something natural by policy makers".

2.3.5. Other Examples of Design Control From Continental Europe

In the Spain, design control is embodied in "municipal plans", which are the basic instrument controlling development. Although, there are national plan and regional plan stages in the legislation, these are not used in practice. According to Calderon(1997;157), "design control has not been a major objective of municipal plans in Spain. Functional considerations and, more frequently, a desire to maximize profit for developer have meant a lack of controls in most Spanish municipalities". Aim of the municipal plans is to establish the prevailing conditions for development by way of zoning. There are several types of municipal plans, which are differentiated in their degree of complexity and detail. These may include a wide

range of design issues handled in some types of special plans and catalogs. However, the actual design advice incorporated in plans is limited.

Italian planning system is based on the Legge Urbanistica of 1942, which institutes a typically top-down system based on master plan-local plan stages. Although there is an increase in the production of mostly informal plans, strategic planning is not very widespread in Italy. Local plan is the principle tool to control urban form. However, as noted by Vignozzi (1997,129) the general problem of local plans is that they are too prescriptive about future urban forms. Moreover, Italian planning is generally poor in providing advice to handle design issues.

On the other hand, new generation of plans give more attention to design control through a great diversity of approaches and additional design documents. The most important of the planning studies in recent years generally try to synthesize several sets of information, about urban morphology and its potential upgrading in one map conceived as a primary tool for drawing up urban design strategies. As Vignozzi (1997,136) mentions the best aspect of the Italian approach of design control is the sophisticated level of aesthetic culture and methodology. Particularly with regard to historical centers, there is a long tradition of studies on the morphology and typology of urban fabric. According to him, "local plans are often focused on urban morphology and its various meanings: some of them try to define the shape of the city as a whole, some others are content to focus on a series of architectural projects directly controlled by the plan itself; some attach a great importance to the diffuse quality of urban fabric, some others attempt the control of typologies in transformation processes" (Vignozzi,1997;140).

2.3.6. Design Control in England

The British system is differentiated from the Continental Europe and America by the fact that "the local development plan is only a guide to acceptable development in Britain, and it does not include rigid dimension or use controls, zoning maps, as do local plan documents in most of Europe"(Punter,1997;85) Thus, in the continent and

America, the matter of granting a permit is a fairly simple and clear decision based on written bylaws and development plans (Punter,1999;12). Whereas in the Britain, there is a heavy reliance upon skilled negotiation and professional interpretation. Therefore the main feature of British system, according to Punter (1997;170) is that;

> "it is discretionary, leaving plenty of scope for planning professionals employed by the local authority to interpret policies, and to negotiate on the form and content of development and allowing a planning committee composed of elected councilors ultimately to decide on the acceptability of development… These discretionary powers are limited by an appeal system, which allows aggrieved applicants to appeal to central government".

Besides, one third of all appeals are thought to involve visual and aesthetic issues. Moreover, as a result of this system, local governments in UK are more equipped both financially and technically than the municipalities of US and Europe. Regional planning is issued by central government but it is not map based and rarely includes strategies about urban design. On the other hand, unlike the most developed planning systems, central government has a tight control on local planning authorities, especially in the area of design. The advice of the Department of the Environment (DoE) on design considerations, namely the Annex A of 1992, has set out principles for planners how to deal with design issues. According to Annex A, designs should be judged against their context, and should be in character, but detailed control should be practiced only in the sensitive areas. The spaces between and around buildings as well as the buildings should be carefully set in relation to the context. Planners should concentrate on "broad matters of scale, identity, massing, layout, landscape and access", avoiding excessive prescription and detail (Punter and Carmona,1997;39).

The structure plan sets out the strategic framework for development at the county level, while local plans are prepared for each district. Besides, there is "the unitary development plan" that combines these roles in the metropolitan areas (Madanipour,1996;172). Structure plans are not map-based either, and they contain very little design advice. Thus, relying on central advices, design control in British planning system is taken up through three sets of documents at local level; development plans, design guides, and design briefs.

Local plans are map-based and can provide a basis design policies. However, Punter points that most of local plans don't have a clear vision for the locality that can be translated into a spatial form. On the other hand, since 1991 when the production of a single local plan covering its entire area became a requirement for each district, most districts have been trying to prepare district wide plans rapidly. These new plans provide a change of focus in design concepts of localities. The British design control traditionally obsessed with the external appearance of development, and particularly building elevations. This approach of aesthetic control supported by the Townscape approach of Cullen since the early 1960s. Whereas, according to Punter (1997;173), since the mid 1980s, this approach "is gradually being complemented by more social conceptions of urban design, and the public realm looking at the quality of spaces and streets, their comfort, accessibility, safety, and increasingly, their environmental health, landscape and sustainability issues".

Design guides and design briefs are both defined as "supplementary planning guidance". As distinct from development plans, they are not statutory documents. Moreover, design guides are not site specific documents in contrast to design briefs. They deal with large areas or with specific topics. They are used to sophisticate the design policies of development plans and may cover a broad set of design issues.

Design briefs can be defined as "the full range of requirement specified by the local planning authority for the development and design treatment of particular sites, with explicit emphasis on the appearance of the development"

Table 2.2. *Examples of Design Control Systems from Western Countries*

COUNTRY	LEGAL FRAME		PLANNING AND DESIGN CONTROL HIERARCHY				
			NATIONAL-REGIONAL LEVEL (Central Government Intervention)	LOCAL LEVEL			
	LEGAL BASE	GENERAL CHARACTER		LOCAL PLANS	COMPLEMENTARY DOCUMENTS	ADITIONAL ADVICE	BUILDING PERMIT
AMERICA	* Administration of financially and legally ***autonomuous local governments*** within different legal frames of federal states	* Diversified, fragmanted structure based on legally binding written documents * Development control is based on ***zoning rather than planning*** * *Active intervention of courts* to design review process	* Generally, there is *no intervention* of central governments to local authorities	**Comprehensive plans and zoning** * Cities rarely had comprehensive plans until 1970s and zoning was primary tool. * Increasing use of plans in some states; new acts requiring preperation of plans, and conformity of zoning to these plans. * Plans are *strategic* type of documents containing design goals, objectives, and policies around a future vision	**Design Review Process.** * Increasingly popular process based on zoning districts constrained by the local plan * Design Guidelines as the specifications of design policies, some of them are legally binding * Neighborhood Guidelines and Development Standards as site-specific tools	* *Landmark Comissions* for conservation of historic buildings * *Design Review Boards* or Design Comissions	* Necessity of conformity with zoning regulations, plans and other documents
ENGLAND	* ***Town and Country Planning Act*** legitimises design control by setting down the statutory framework.	* ***Discretionary*** System relying on professional interpretation restricted by an active *appealing* system, even in the aesthetic and design issues * Efficient control of central govenment on local governments	**Regional Plans** * Not map based, rarely include strategies for design issues **Structure Plans** * Set out the strategic framework for local plans of districts * Sometimes include strategic framework of local design **Central Government Advice** **County Council Design Advice** * Set out design principles for municipalities	**Development Plan** * Not legally binding but provide decision frame for discretionary power of planners * Map-based documents providing design policies in the frrame of structure plans and government advice * It does not include zoning maps and dimensional decisions	**Design Guides** * Provide guidance on specific design topics * Not legally binding documents **Design Briefs** * Provide site specific guidance * Not legally binding documents **Site Specific Design Codes** **Urban Design (Master) Plans** * Provide prescription of the exact form of a specifc project		* Based on discretionary powers of planners and negotiation
FRANCE	**Code de l'Urbnanisme** * Incorporates all the rules and regulations concerning planning, conservation and design control	* Planning system based on legally binding, written regulations and documents * Efficient control of central government on local authorities about aesthetic, design and protction issues	* Tight control of central government by ABF institution on the protection of heritage. even at building scale **Schéma Directeur** * Strategic, long term plan dealing with general distribution of activities and infrustructure * Not directly applicable to design control	**Plan d'Occupation des Sols (POS)** * Detailed, short term plan containing an analysis report and complementary documents **Zone d'amenagement Concerte (ZAC)** * Special areas above the power of POS determined for various purposes, generally for initiate development or for protection * Provide a comprehensive frame cooperating all actors * Provide legal tools to prevent speculation	**As the appendix of POS** * Zoning Map * Set of Regulations covering wide range of design issues. Its format is fairly standard, defined in Code de L'Urbanisme * Additional graphic documents for protection areas	* Additional advice by **CAUE**, local design committee; not legally binding	* Necessity of conformity with local plans and its additional documents
GERMANY	* The Federal Regional Planning Act * **The Federal Building Code** containes the Urban Planning Law and the ***Building Control Law*** based on the model building regulations and varies from state to state.	* Planning system based on legally binding, written regulations and documents * Hierarchical adaption of regulations from federal state to state and municipalities	* A common system of state development programmes and ***regional*** and ***area development plans*** , which form a framework for municiplal planning * **Federal goverment design guidance** on local design regulations * **Model building by-laws** determined by states adapted from the federal legislation	**Flachennutzplan** * Large scale prpatory strategic plan * Not applicable directly to design control **Bebauungsplan** * Small scale legally binding landuse plan controlling various design issues	**Local Building By-laws** * Adapted from the model by-law **Design Manuals** * Guidance on specific design issues * Not legally binding	* Additional advice by **Aesthetic Committees** constituted by municipalities composed of design proffesionals; not legally binding	* Necessity of conformity with local plans
NETHERLAND	* **The Housing Act of 1991** * Town and Country Planning Act of 1985 * Urban and Rural Renewal Act of 1985 * Ancient and Historic Buildings Act	* Planning system based on legally binding, written regulations and documents * Independent Design Control Committees efficient in the grant of building permit.	**Regional Plans** * Prepared by provinces * Provides a legal framework for municipal plans * Provide design principles for local design control * Not legally binding on civillians	**Local Plans** * Legally- binding documents * They don't prescribes details but provide the general scheme	**Municipal By-Laws** * Adapted from model-Bylaws laid down by a natipna organisation municipalities	**Independent Design Control Committees** advice to major and alderman for their final decision about building permit	Granted by major and alderman compliance with "reasonable demands of design control", local By-law and Local Plan
SPAIN	**Lay des Suelo** * Regulates hierarchy, types and contents of plans and development control pocedures in all of the 17 quasi-federal regions of Spain	* Generally, design control is not a mojor objective of municipal plans	**National Plan** * Not exist in practice **Regional Plans** * A few of them exist in practice and they lack a common structure	**Municipal Plans** * Establish prevailing conditions for development by way of zoning * Three Types of Municiplan plans according to degree of complexity I. **PGMO** (most detailed) II. NSPM III. PDSU (least detailed)	**Zoning regulations** * Main tool for design control as an integral part of PGMO **Plan Especial** * Detailed plan prepared for special areas		Based on a minimum set of conditions set out in the municipal plans
ITALY	Legge Urbanistica * (Urban Planning Act) * Determies the types and contents of plans and development control pocedures	* Typically top-down system, prescriptive and legally binding * Strategic planning is not very wide spread in Italy * Italian system is generally poor in providing advice on design issues * Advanced morphological studies supporting municipal plans	* Central state and regional laws controlling the development in conservation areas	**Regeolatori Generali (PRG)** (Master Plan) Particolareggiati **Detailed plans for particular sites**	* **Local Building Codes** * **Design codes and guidelies based on morphological analysis** in some municipalities * Diversified approaches of design control in new generation plans mainly focusing external apperance		* Necessity of conformity with local plans

(Madanipour,1996;175). There are two major components of a brief; the first one is the descriptive part containing information on the character and the context of the site, and the second is the prescriptive part in which the interventions of the planning authority for the site are spelled out. The certainty level of intentions varies widely according to circumstances. In most cases, documentation of them provides a framework for negotiation with developers. In this sense, design briefs as an instrument of negotiation are a part of process of managing the development of the built environment (Madanipour,1996;175). As a result, plans, design guides and design briefs can be regarded as complementary tools of the design control in England.

2.4. HIERARCHY OF DESIGN CONTOL

The function of urban coding has been redefined since 1960s, as parallel to changes in planning and design approaches. Urban coding as design control became a mechanism for integration of urban planning and urban design. Especially in 1980s and 1990s, design control became an embedded part of planning systems and it emerged as a distinct branch of urban planning. As seen in the European and American cases summarized above, there is a general tendency for defusing design control to all stages of planning process through various documents from central government advice to local design codes.

Control degree of urban form in different stages of planning process, and so the kinds of documents show many differences in each system. Moreover, names, contents and interrelation of these documents have also differentiated. On the other hand, it is possible to say that design control is not limited only with design codes but it comprises a hierarchy from general design objectives and policies to implementation procedures. For this reason, the descriptions of the design control devices are made in the frame of such hierarchical models.

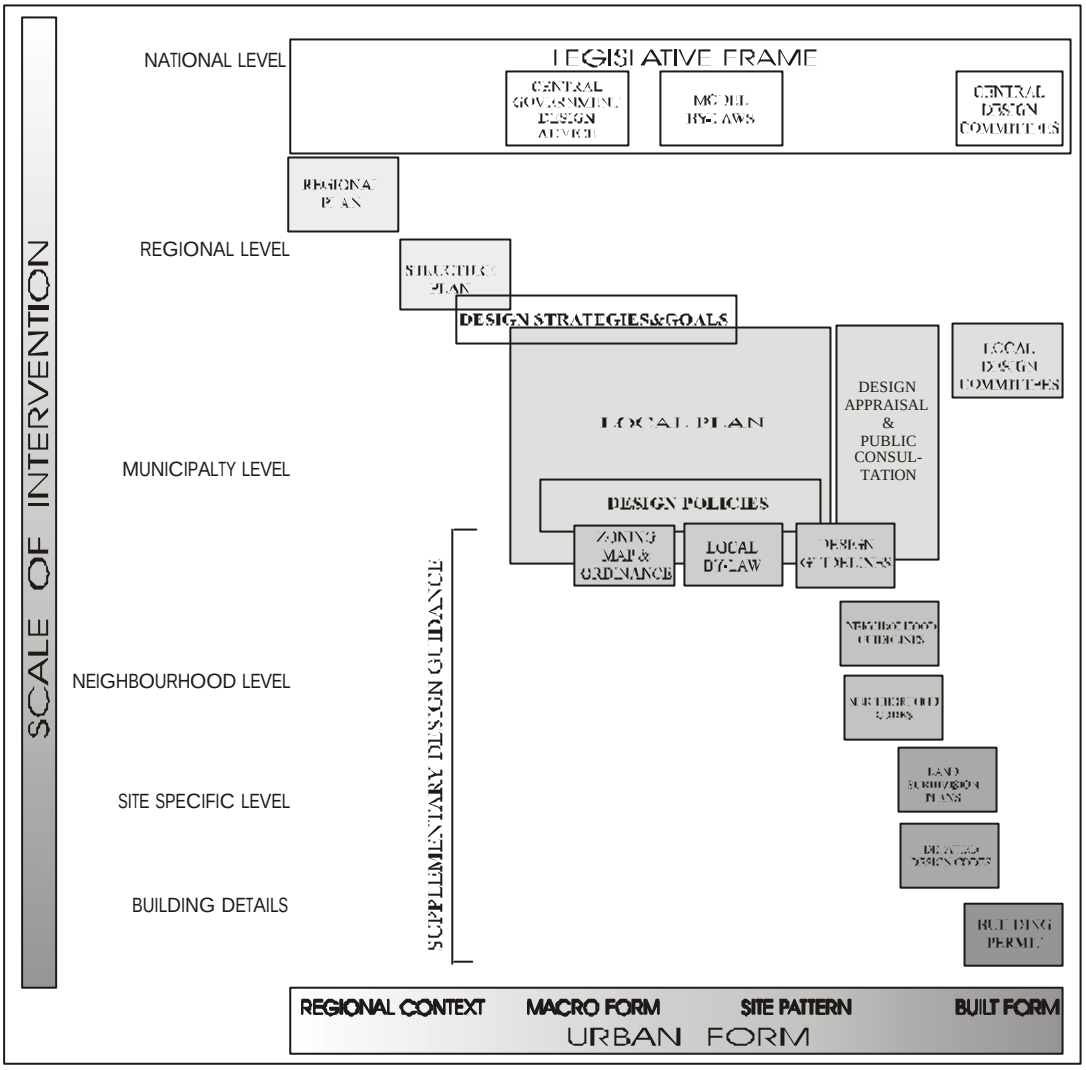
For example, Shirvani (1985;141-155) defines these documents as "products" of urban design, and classifies them into four categories: "policies, plans, guidelines, programmes. Policies are a framework for action, urban design plan is a three dimensional framework within which incremental changes are implemented. George (1997;147-148), interpreting the categorization of Shirvani, ignores the category of plan because of its product-oriented, static nature, and proposes the term "regulations" instead of guidelines, as a broader category. According to him, programmes are

> "the organized and systematic control and deployment or re-deployment of collective resources so that individual decisions to add to or alter the built environment are encouraged to a certain end. A wide variety of programmes have found their way into the urban designers' toolbox: capital improvement programmes, tax increment financing districts, facade easement progammes, transfer of development rights…"(George,1997;48)

Lang focuses on the relationship between design objectives, principles and guidelines in American context. Similarly Hall distinguishes between general design goals based on theoretical criteria and objectives applied to a particularly locality. Both emphasizes the value of "performance" rather than "prescriptive" criteria. Punter and Carmona (1997;93) combining Lang's and Hall's categories, develop a broader framework to define the key components pf design policy. The policy component in this framework is integrated with development (or local) plans. In addition to the policy component, they identify a comprehensive hierarchy of design documents from national scale to building scale (Punter and Carmona,1997;316-332).

Combining these policy components and guidance hierarchy In Figure 2.1., it is tried to set them into the hierarchy of planning system that controls the formation of urban space.

Figure 2.1. *Hierarchy of Design Control*



2.4.1. National Level

At the national level, central governments establish the legal basis of planning system that determines the basic stages of planning process, and draws the control frame of them. In most of the western countries, decentralization policies, especially between 1960s and 1980s, created a flexible system based on structural plan-local plan integrity, in which local governments gain the power of controlling urban development through their own legal codes. In many European countries "model regulation" are used to provide a general frame to local coding systems.

"Central government advice", mainly in Germany and England is another intervention tool to local design. Moreover, in some European countries, such as France, there are institutions of central authorities, which intervene to the development at the building scale in special historical areas.

2.4.2. Regional Level

Regional and structure plans (general plans, comprehensive plans) as strategic control mechanisms focusing on economic growth strategies, general land use and protection issues and major infrastructure investments, rarely include design content. Nevertheless, structure plans has an important potential in establishing the strategic dimension of design and determining the frame of local design principles. Especially in the Netherlands, Germany and England this potential has been valued. Moreover, metropolitan plans, which comprise a hierarchy from metropolitan scale to local scale, provide the strategic frame of design for local design control.

2.4.3. Local Level (Municipality or District Level)

Formation of urban space is controlled mainly at this level, through various instruments. These can be grouped into three; policies, plans, supplementary guidance devices. The relation between them changes from locality to locality. Yet, it

can be said that policies and plans are generally integrated components and they are supported and specified through various types of complementary devices.

2.4.3.1. Design Policies

Shirvani (1985;144) defines the design policies as "indirect design methods that provide a framework for action. They are not generalized goals and objectives, but neither are they specific implementation strategies." Lang also emphasizes the difference between objectives, policies and guidelines;

> The quality of any urban design depends on the quality of the design objectives set and on the quality of the design principles and design guidelines used to achieve them. Writing empirically-based design guidelines so they are politically and legally acceptable is no straightforward task. An understanding of how cities function helps clarify the setting of objectives, but the decision on what they should be is always political (Lang,1996;20).

Therefore, as argued by Punter and Carmona(1997;93), design policies are essentially statements of design objectives (i.e. what a design should actually achieve) and occasionally statements if design principles (i.e. the link between and objective and the desired physical form). Moreover, formulation of these objectives and principles should be based on design appraisals, which analyses the character of the city. Design appraisals have brought new dimensions into the planning survey. Morphological studies similar to Krier, contextual analysis as in Cullen, image and legibility analysis of Lynch type, analysis of activity patterns as in the Pattern Language of Alexander and, and public consultations on design issues have become established in the planning process as a part of planning surveys in many Western countries.

Design policies should be conceived as a hierarchy, working from district wide to local scales, and from plan strategies, objectives, and principles to supplementary design guidance. Since these terms are used interchangeably, formulation of this hierarchy changes between cases. Thus a key problem in policy formulation and connecting them is;

> "where to draw the line between policy and guidance. Placing policy that forms the basis of control decisions in the plan and all the rest in the supplementary guidance is often easy in theory but difficult in practice. Clearly, where matters of detail are involved, particularly issues that lie explicitly outside government advice, then these are likely to be best included as guidance. In any event, it is important to emphasize the key principles of guidance within policy, to cross-reference carefully each to one another, and to subject all guidance to public consultation, ideally in connection with the plan"(Punter and Carmona,1997;331).

2.4.3.2. Development Plan

Development plans (or local plan, district plan, master plan) are not documents showing the "end-state" as in the traditional physical planning but, it is an umbrella or coordinating framework for strategic frame drawn by structure plan (upper scale), design policies and all kinds of supplementary guidance (Punter and Carmona,1997;317). The local plans may also determine the overall spatial features, land use and major transportation networks, and depicts special project areas, conservation zones, combining these issues with specific bylaws.

2.4.3.3. Supplementary Design Guidance (Bylaws)

Supplementary guidance tools can be handled in four groups; Zoning Controls, Design Guidelines, Local Bylaw, and Development Standards. These may include each other and take place interchangeably in different systems.

Zoning Controls

Zoning is the process of dividing a city up into zones, each of which has different legal requirements. Within each zone, the size and shape of the buildings that can be placed on the land, and the uses that can be placed in the buildings are specified by regulations (Barnett, 1974;31).

It is the traditional control tool of modern urban planning and at the same time, most widely accused tool because of homogenized single-used environments that it produced.

As mentioned above, American system of development control has been based on zoning. A classic example is the Chicago Zoning Ordinance that defined 22 types of use-district and 71 categories of floor-area ratio. The bulk of it deals with prescribing dimensions, beyond which there is no other reference to design and aesthetic objectives (Madanipour, 1996; 177).

On the other hand zoning regulations has become more complicated and more flexible, especially since 1960s. The first flexible zoning in America developed in1960s. Barnett (1997:37) describes three types of such methods. These are Planned Unit Development (PUD), Zoning Incentives and Special Zoning Districts.

> "PUD, sometimes known as cluster zoning is used in rural and suburban areas that are being intensively developed for the first time. Ordinary zoning regulations can be suspended for a particular property, and the developer instead, submits a master plan that, within the same over-all density, produces higher-density cluster for housing, leaving significant areas of the tract in their natural state. If the plan is approved, it becomes the development bylaw for the property in question."

The second one, incentive zoning is used to encourage developers to provide certain uses and design features in return for a bonus. For example, if a developer provides a plaza that met the qualifications in the zoning ordinance, he can achieve an increase in floor area up to 20%. Alternatively, a smaller bonus can be given for an arcade provision (Barnett, 1974; 41).

The third is the special zoning district which is used to protect certain uses and encourage other compatible use (Punter, 1999;10) or to achieve certain design objectives. These district-based regulations are backed up by various design guidelines and incentive zoning codes. Lang describes two famous examples of them, which are created in the frame of New York's Incentive Zoning Ordinance of 1961.

Punter (1999; 10) gives some other types of zoning regulations. Floating zones allow certain uses but do not specify where they should go; spot zoning brings special provisions on to a particular site; cluster zoning, allows land to be kept

underdeveloped for conservation or open space purposes; Transfer of Development Rights allows development rights to be transferred to other sites; Inclusionary Zoning specifies uses to be included in development such as low income housing.

In addition to these American examples, Australian flexible zoning puts forward another alternative method, which is based on conditional use. In this system for each zone, the zoning ordinances put some uses 'as of right', others, which are prohibited outright, and thirdly the uses for which a conditional use permit is required. By ths way participation of inhabitants might be ensured for the planning and design process(Faludi, 1986;165 in Ünlü, 1995;111)

Local Bylaws

Local Bylaws are regulations adapted from a model-bylaw determined by central governments as in the German and Italian systems or by national organizations pf local governments as in the Netherlands Case. They are legally binding documents, generally used as detailed bylaws to control landscape, architectural standards and building appearances.

Local Bylaws can also be laid down directly by the local authorities as in the area bylaws of the Netherlands. Similar to special zoning districts in America, these regulations are used as comprehensive mechanisms for special limited areas.

Development and Design Standards

These are readily quantifiable criteria with which to asses applications. They are used to secure safe and healthy living conditions. However, standards rarely secure good design by themselves and they might cause standardized solutions (Punter and Carmona 1997; 319).

Design standards can also be utilized as a way of sustaining flexibility through prescription of minimum standards. However, there is the danger of damaging common identity if they are not restricted by other mechanisms (Ünlü, 1999;112).

Design Guidelines

Design guidelines are sophisticated documents addressing the specific elements of urban form (Shirvani, 1985; 147). As distinct from plans, zoning ordinances or regulations, they are not legally binding documents according to Lang (1994; 82). Guidelines are the lines between design policies and the physical design. They are the explicit operational definitions and specifications of principles by which a physical form is to be generated. In other words, design guidelines are used to translate the design policy statements into more spatial terms in a specific topic. They are generally proposed by municipalities and sometimes by individual developers and their design teams. Thus, their subject, use ways and control methods are widely differentiated.

The types of guidelines according to their subject cover a lot of topics. For example, in a study on design guides of British towns, the main topics are sorted according to the number of authorities dealing with subject as such; "materials, shop fronts, house extensions, advertisements, conservation areas, housing, landscape, car parking density, residential roads, disability provision, grant aid, town scheme, crime prevention (Punter and Carmoud, 19997;323).

Traditionally design control in western countries has been regarded as aesthetic control dealing with landscape or building appearances. Whereas, the development of environmental design approaches since 1960s has influenced the design control approaches and the focus of design guidance has been shifting from physical-aesthetical to social-psychological concerns. In this manner, Punter (1999;202) defines two main sets of guidelines according to their subject. The first one is the guidelines focusing on "urbanistic criteria". Urbanistic guidelines deal with proposed building's relationship to the public realm and the pedestrian experience. They employ definitions of context that embrace patterns of use, activity and movement in an area. The second group is the guidelines focusing on visual-architectural criteria. Such guidelines are related with buildings themselves and used for ensuring the consistency of proposed building's architectural characteristics with the character of townscape.

Therefore, the scope of design guides used by a municipality depends on its planner's and administrator's design approach and priorities. On the other hand, it must not be forgotten that design policies and guides are based on design appraisal and public consultation and their content are also determined (in certain level) by citizens through various participation mechanisms, according to characteristics and needs of the city.

A fundamental question at this point is that how should guidelines elaborate these principles and criteria? How should they control the elements of urban form? According to their control method, design guidelines can be divided into two kinds; Prescriptive and Performance Guidelines (Punter, 1999;202, Lang, 1994; 82, Shirvani, 1985; 150). The former attempt to establish the limits or framework within which individual designers must work through prescribing the form and quantity of a development, as in FAR requirements, setback lines. The latter seek to ensure that the development performs in a certain way by responding to particular issue.

The advantage of performance guidelines is that they don't prescribe a standard solution and leave flexibility for creativity of individual designers. Whereas, their control method is to seek compatibility to some principles, so they are largely administrative tools. It is easier to see whether a building meets a formal prescriptions So control method of prescriptive guidelines is conformity to some standard criteria.

The use of prescriptive or performance guidelines brings us another fundamental question in design control. What should be the level of prescription in design control? Or how much degree of control should be attempted? It is a great discussion of design control between architects, designers and often clients. As mentioned by Punter (1999; 203) most commentators favor policies and guidelines which do not prescribe solutions or particular forms, but which set at principles or performance criteria leaving the designer free for use his or her creativity. Whereas, this attitude which is parallel to prevailing design approaches of last thirty years, can not easily applied in planning practice. On the one hand, strict control based on detailed prescriptions may result with standardized, monotonous environments. Although it is

easier to assess the conformity of developments to such prescriptive criteria, implementation of a project under detailed control has difficulties. On the other hand, it is hard to evaluate the compatibility of a development to some performance criteria and such a control provides flexibility and creativity for the developers in the implementation. Whereas, the result of flexibility may be the destruction of common characteristics of the site unless the variety coming from flexibility is controlled by some common features. Therefore, it is a dilemma of design control, which finds its solution in the planning practice rather than theoretical debates.

Which kinds of control are used in area depends on the purposes of designers. Lang (1994; 84-88) classifies the guidelines according to their purposes into five groups. These are summarized in Table 2.3.

Table 2.3. *Classification of Guidelines According to Their Purposes*

General Purpose	Type	Specific Purposes
Defining and designing the public realm	Guidelines	for disabilities
	Guidelines, such as specification materials, vegetation, order of trees, the nature of street furniture	to ensure the consistency in the design of public spaces, especially for the pedestrian landscape
	Guidelines	to ensure that interior public spaces is open to the public
Specifying and/or restricting certain uses and built forms	Zoning ordinances	to control the type and intensity of uses
	Transfer of development rights	especially, from historical protection sites
	Prescriptive codes and guidelines, such as street and plaza layout, height, site coverage, setbacks	to control physical form and pattern
	Aesthetic guidelines dealing with building envelope, facade design, scale, meterials, textures, color	to ensure a harmonious relationship
Mechasims to stimulate particular types of development	Catalytic interventions	to change the character of an area in order to attract designed development
	Legislative tools, such as zoning incentives, special zoning districts, planned unit development, tax credits	
Preserving existing urban environment	Preservation programmes or guidelines	to maintin such environments and to prevent demolition
Specifing the nature and location of public art	Public art programmes	

Shirvani (1985;25) generalizes the urban design situations in planning practice into two as product- oriented and process-oriented. Developing an urban mall is an example of the former. On the other hand, developing design guidelines for downtown development is a process-oriented design, as in an urban design for an

entire city. A realistic urban design process can include both types of products according to him. In a similar way Lang (1994;78-80) describes four types of situations in which varying degrees of control designers exert over the actual design. These situations are summarized in Table 2.4.

Table 2.4. *Types of Urban Design*

Types of Urban Design	**Description**	**Readjustment of Property**	**Examples**
The Urban Design as a Total Design	Architectural product design on an urban scale by a single deigner or design team, then preperation and application of a development programme for the scheme	Design in one property, transformation from consolidated to consolidated ownership pattern	Central. governmental, touristic, cultural, business, and housing complexes, admisnistered-gated comminities
All-of-a Pieces Urban Design	An overall illustrative design is done by one team, and guidelines are written for developersand architects to follow in the design of individual buildings. The design team acts as the reviewer of each subproposal and elements of the project built in a short period of time.	Design of overall scheme in one property, transformation from consolidated to fragmanted, or from consolidated to consolidated ownership pattern	New towns developed by a firm, such as Seasside of Duany and Plater Zyberk, urban renewal and redevelopment projects, university campuses
The Urban Design as the Design of Infrustructure	Organization of public spaces and facilities, Intervention in two ways; formation of the pattern itself and catalytic effect of such facilities on their surroundings	Disign in public property or expropriation of private property	Such as roads, transport nodes, parks, plazas, city halls, musemus, schools.
The Urban Design as Design of Guidelines for Design	Overall control of the process of urban formation in the frame of municipal design policies and policies through various regulations, guidelines at various scales.	Desing for many property, vaious types of land readjusment	Design revies and design control processes of many cities in the Europe and US.

Therefore, Günay(1999a;42), placing urban design practice in property relations, draws the line between architecture and urban design. As seen in Table 2.3. and 2.4., the types, the degree of control, and the use ways of design control in planning practice basically attempts to control the land readjustment process and property rights. Thus, it is possible to consider the dilemmas of urban design and design control; between rigid control and flexible control, between public control and private design, between planners and architects, between deduction and induction, or between homogeneity and diversity on the basis of readjustment of property pattern and arrangement of development conditions in the property boundaries.

2.5. EVALUATION

Especially, after 80s urban coding became a distinct branch in urban planning as an integrating mechanism of planning and design processes. The second part of this chapter scrutinized some examples of design control systems in western countries, and in third part, a general model of design control hierarchy is tried to put forward and then, design control documents are focused. As a result of these evaluations, some general points that characterize development and design control process can be outlined as fallows. In the next chapter of study, the development legislation in Turkey will be taken up in the frame of these basic points.

- Structure of planning system and place of urban design in the planning process
- The relation between planners, architects, and their roles in planning process.
- Hierarchy of design control instruments
- Contents of design policies and development plans
- Land Readjustment Methods
- Supplementary Design Instruments
    - Their relation with plans, and their interrelation
    - Their legal status
    - Their nature of control
        - according to controlled subjects-elements
        - according to control criteria; urbanistic / architectural
        - according to control method; prescriptive / performance
        - according to control boundaries

CHAPTER 3

THE DEVELOPMENT LEGISLATION IN TURKEY AS AN URBAN CODING SYSTEM

The development legislation in Turkey is originated from the Ottoman legislation, which has been adapted from Europe as a part of the modernization attempts. Although it has developed formally in a similar way with western experiences, its content and nature of control has been shaped very differently. Urban design criteria have never been an important concern in the planning process of Turkey, so urban coding has not been evaluated as a mechanism for urban design but used mainly to legitimize the urban development and to provide some physical standards. Nevertheless, it has gained some strength in controlling urban form throughout its historical development. Therefore, first of all, this progress of the development legislation will be evaluated. Then, its general structure will be investigated in the frame of the model developed in the previous chapter and basic tools used for controlling urban form will be focused.

3.1. HISTORICAL DEVELOPMENT OF URBAN CODING IN TURKEY

3.1.1. Origination of Planning and Coding in the 19th century Ottoman Cities

Rise of the capitalist system in 19th century in Western countries, has lead important transformations in the Ottoman Empire. Economic structure of the empire has been connected with capitalist market system under the control of industrialized western economies, and some institutions of the western countries came into the Ottoman agenda as a part of modernization efforts of the elites.

Therefore, planning in the Ottoman cities has emerged as an attempt to adapt some of the planning approaches developing as a reaction to the problems of industrial cities in Europe.

The first group of the planning approaches of 19th century, that is the utopist approaches, which were developed as a socialist ideology of labor class in Europe before 1848, has not became effective in the Ottoman planning. Because the objective conditions for growth of such approaches has not yet exist in the social structure of the Empire. Besides, since the Ottoman cities had an agricultural texture and there was no strict differentiation between rural and urban, the anti-urban movements of the late 19th century, such as garden city of Howard, which tries to combine the merits of rural and urban settlements, were not took place in the Ottoman agenda either (Tekeli,1980;34).

According to Tekeli (1998;3) the Haussmanian approaches after 1848 have attracted the bureaucracy of Ottomans. They imitated the boulevards of western cities and tried to impose them into the Ottoman cities. Especially in the beginning of 20th century, under influence of the City Beautiful Movement, many projects were designed to create a modern urban form that cause to demolition of existing fabric of the city, but a few of them could be applied. Because there was no powerful capitalist class that finance reconstruction operations like in France, and the Ottoman bureaucracy did not have enough power to meet the cost of such operations.

Consequently, the pragmatic approaches based on health legislations under municipal control created the most considerable influence on the planning efforts in Ottoman cities. The institutional changes, such as establishment of legal mechanisms and municipal authorities were developed as a remedy to epidemics and fires. The first legislative document was created in 1839 as parallel with the first planning attempt of Istanbul in 1837. Ebniye Nizamnamesi (Building Bylaw) was issued in 1848. The first municipality has established in 1855 in Istanbul. Then, the legislation of 1848 was replaced with "Turuk ve Ebniye Nizamnamesi"(Street and Building Bylaw) in 1864. The former that was valid only in Istanbul provided the opportunity for expropriation in order to extend roads and open cul-de-sacs. The latter, valid in all Ottoman cities, brought sentences about map preparation, expropriation, parcelation, road widths and building heights. Finally, the Law of Ebniye (Building Law) was issued in 1882. In addition to earlier legal tools, it provided the principle of landowners' participation into the cover of expenses for common facilities and infrastructure. As mentioned by Özcan and Bilgen (1995;4), Ebniye legislation founded the basis of the development control in Turkey and created a tradition in the approach of public authorities to the urban development. Especially, such approaches about expropriation methods, to leave of a definite share for common uses, the determination of building heights in accordance with road widths. The first development law of the Republic would be a continuation of this tradition.

3.1.2. Planning As a Tool for Creating the Space of Modern Republic

Establishment of the Republic of Turkey was a strong break off the Ottoman past. Instead of accepting the imposition of modernity by the market mechanism into the existing social structure, founders of the republic would try to constitute a new independent nation and a modern society with its new institutions, and the cities of Turkey would be shaped as a symbol of this modern regime.

Therefore, many Ottoman institutions have been replaced with the institutions of a modern nation state. With the enactment of Turkish Civil Law in 1926, the Civil Codes of Europe originating from Roman Law replaced The Kadi Law of the

Ottomans. Thus, the full recognition and legitimization of private property start a new process of property relations. However, as Günay (1999b;236,237) states

> "this process has not been able to provide a rational government of space both in the towns and the countryside because ownership patterns reflected the spontaneity and disorder inherited from the Ottoman property system. (…) The following planning efforts and practice have remained restricted to almost the same process of a continuous struggle of regulating and conversion of the irregular ownership patterns of agricultural land into urban development. The planning practice from the first years of the Republic has basically been the production of new ownership patterns, more than a functional or physical control."

Therefore, construction of the Capital Ankara, as a major national project that reflects the image of a modern society, has been realized in this context. Although the first planning attempts by Ankara Municipality started in 1924, it was seen that incremental interventions at the level of local government is not enough to solve the problems of a rapidly growing capital city and to create the desired urban space. Therefore, in 1928 Development Council of Ankara was constituted under the control of the central state, and a planning competition was organized. From this time, the plan of Herman Jansen would control the development of Ankara (Tekeli,1980;56-60). Whereas, Jansen's plan, which is based on a low density regulated housing pattern in the principles of Garden City approach, could not be applied sufficiently, because of plan amendments comprising density increase and opening up of new land for urban development. Moreover, there were the signs of squatting in certain parts of the city (Ünlü, 1999;72). Thus, for the first time, Turkey faced with the difficulties of planning practice in a rapidly growing, speculative land market.

Although, there was no such a fast development in the other cities of Turkey, it is aimed to apply modern planning approaches all over the country. For this reason, from 1930s a set of legislations was issued. Law of Municipality no. 1580 and General Health Act (Umumi Hifzisihha Kanunu) no. 1593 in 1930 aim to establish institutional structure for planning. Building and Streets Law no. 2290 is an extension of Ebniye Law of Ottoman period, and it provides the basic tools and principles for planning and development control. It brings the obligation of

preparation of maps and plans for the municipalities and gives the power of unification and subdivision of land to them. Moreover, Law no. 2290 provides tools to control width of roads and sidewalks, building heights, and many architectural elements such as balconies, floors, kitchen, bathroom, stairs, and windows (Özcan and Bilgen, 1995;5-9). These laws would provide homogeneity of functionalist design all over the country, and the image of Anatolian cities would start to resemble each other as a result of the standardization of these laws. Furthermore, the influence of the system constituted by these laws on the planning approach of Turkey would continue until today.

3.1.3. 1950-1960 Beginning of the Rapid Urbanization

In the postwar period, social and economic structure of Turkey went into a new transformation process. Political regime changed into a multi-party structure and the etatism in economic policies replaced with liberal policies opening to foreign markets, especially in agriculture sector, in which productivity has increased by mechanization.

These changes gave rise to a rapid migration from rural to urban. The existing planning mechanisms were insufficient to cope with such a fast transformation in cities. As a result a dual spatial structure appeared in the city; the planned areas occupied by middle class and bourgeois, and the squatter zones around them developed by the labor class outside the control of planning institution.

In this duality, on the one hand, the state had to accept the squatter housing as a cheap housing supply method for labor and, it recognized the unplanned development in Ankara for the first time with the law no. 5218 in 1948. Then with the laws of 5431 and 6188 the scope of "af yasasi" has been extended to the whole country. This was only the beginning of a series of laws that would be issued to legitimize the squatter housing until recent years (Özcan and Bilgen, 1995;10)

On the other hand, in the planned areas, the individual housing supply was insufficient to reply the growing housing demand and high costs of urban land. Thus,

apartmentalization by small-scale developers on single parcels became the dominant housing supply system and the Law of Flat Ownership in 1954 was issued to provide the legal basis of small-scale development. The spread of apartments all over the Turkey would threat the local architectural peculiarities of the cities and the monotonous image of the apartmentalized spaces would dominate the urban form in the later periods.

Therefore, two main development patterns of this period, which are squatter housing and apartmentalization, would not determine only the development of cities but also of the planning institution in Turkey until today. In the following period more comprehensive approaches would be tried to solve the problems of this dual development structure.

3.1.4. 1960-1980 The Period of Comprehensive Planning

Because of the insufficiency of the law of 1933 against the rising problems of rapid urbanization, the Development Law no. 6785 was issued in 1956. It is used as a control mechanism for comprehensive planning, which is the rising planning approach of planners in Turkey at this period. Planning authorities aimed to set a system of total control over the development of cities as in the prevailing planning approaches of the period in the western countries. The control boundaries of municipalities are expanded from the municipal boundaries to surrounding areas (mücavir alan). The mechanism of master plan-detailed plan is introduced. Zoning is defined as an integrated part of plans.

As Akçura(1980,46) explains, different from the Buildings and Roads Law of 1933, which depends on bylaws as a control tool, a great importance is given to the development plans in the new law. Building permit, expropriation and other application tasks are bounded to the development plans. In addition, the prescriptions about the contents, techniques, and preparation ways of plans are avoided in the law in contrast to the Law of 1933, that brought decisions at national scale from land use density to building heights through centrally prescribed bylaws. Parallel to this

attitude, only the general sentences are made definite, and the detailed rules are left to bylaws. Moreover, as a reaction to the uniform approach of the Law of 1933, in the Law no. 6785, it is principally assumed that "development of a city must be controlled by development plan decisions and local bylaws peculiar to that city".

25th article of this law has features that support design and creativity. This article leaves the specific design issues to bylaws, defining general criteria for construction, which are physical quality, health, social safety, local peculiarity and construction material. Moreover, 57th article brings to municipalities the obligation of preparation of local development bylaws according to model bylaws (Duyguluer, 1989;38).

The content of the Law no. 6785 is composed of three parts, starting from the issues about building and permit, and then maps, development plans and issues about unification(tevhid) and subdivision(ifraz) of land (Ünal, 1994;22). In this frame, it brings the obligation of construction in the boundaries of planned areas in order to prevent speculation. The rate of land captured worthlessly in the land subdivision process increased from 15% to 25% with the 42nd article of the law. Shortly, a comprehensive, more flexible and more applicable approach is tried to develop with the Development Law no. 6785 (Özcan and Bilgen,1995;13).

On the other hand, Duyguluer (1989;39) emphasizes that a definition brought by 43rd article of the development bylaw (imar nizamnamesi) of 1957 has influenced in a negative way urban design and formation of urban space in Turkey. This article defines the parcel as a piece of land on which only one building can be constructed. Thus, the approach of "one building in one parcel" is placed in the planning practice. This definition created many impacts; such as, subdivision operation increased, small allotment is encouraged, applications became stereotyped and typical apartments prevailed in construction, possibilities for different design approaches are restricted. These impacts of this definition has continued until the Law no. 3194 of 1985 in which construction of more than one buildings in a parcel is allowed.

Moerover, Akçura (1980;46) notes that the later legislative arrangements have not support the flexible approach of the Law no. 6785 but on the contrary, the tendency

to return the approach of the Building and Roads Law has appeared. The preparation of development plans was standardized with a bylaw in 1969. The Standard Development Bylaw, which is determined by the central government, is also a sign of the same tendency. The power of determining development bylaws is taken from the local governments with the change of law in 1972. Moreover, the approach of autonomous preparation of development plans and programs by local governments under the control of the Ministry of Development and Settlements changed and the ministry gained to authority of preparing and approving plans excluding the local governments.

Nevertheless, the most important progress in the planning institution was realized in 1960s in the frame of the Constitution of 1961. As Tekeli (1998;15) states, the new Constitution claimed the principle of social welfare state and rational use of resources in a centrally planned economic development. In this frame, several new institutions were established. The State Planning Organization (DPT) was established as a constitutional institution to apply the policies and plans of mixed economy. It is also responsible for regional planning. Whereas in spite of the preparation of Zonguldak, East Marmara, Antalya and Çukurova regional plans, these were not applied, and studies of DPT has been limited with economic planning at national scale.

In 1965, as mentioned by Altaban (1998;57), since there was no any definition and institutional model about the planning of metropolitan cities in the Development Law no. 6785, The Ministry of Development and Settlement is charged with the Council of Minister's decision to establish Master Plan Offices for Ankara, Istanbul and Izmir. Thus, firstly Istanbul and Izmir, and then, Ankara (in 1969) Master Plan Offices were founded. Moreover, the concept of Metropolitan Planning and its institutional structure introduced also in the Development Law with its revision no. 1605 in 1972. In spite of the organizational problems in approval and application of metropolitan plans, these planning offices made important studies by using interdisciplinary teams, and modern planning techniques. Especially, Ankara office

has been successful to provide coordination between the local and central authorities until 1980s.

Moreover, The Law no. 1605 brought back the 25% participation share in land readjustment that was abolished in 1969. Moreover, it expanded the conservation approach from single building scale to site scale, defining the concept of "Sit Area". Another important institution for planning is the Land Office founded in 1969 in order to provide the public control on land supply in the development areas of cities. Thus, the necessity for a public land policy to control urban development is emphasized in a legislative document. Whereas, Land Office couldn't fulfill its commitments because of the limited reserve of source (Özcan and Bilgen, 1995;15).

In the frame of these new institutions and legislations, the development pattern of cities has begun to change. As Ünlü (1999;80) writes, Turkey met mass housing as an alternative housing supply system by the late 1960s and 1970s. It came into being as a cure to the insufficiency of small-scale developers to the dynamics of urban system. Large housing projects were initially intended to house the propertyless marginal groups, but later, states once the land was expropriated by the state, they inevitably became the property of middle class and as Günay(1999b;539) states;

> "this looked like the modernist production of space in the western city. In contrast, the system did not work to build social housing, but distribution of expropriated land to cooperatives as property. Therefore, the control of space was lost to the cooperatives, each dealing with its own property. In the case of Batikent in Ankara, although the original planning principles reflected the modernist attitude of 'sun, space, greenery', the result was a chaotic production of space, because of weak control over real property distributed to the cooperatives".

Thus, "cities began to expand in the way of articulation of large parts to each other, rather than being developed by the addition of unique built forms. Urban form began to represent an enormous industrial city, which developed in the way far from that of expanding like a metropolitan city" (Tekeli, 1998;17).

On the other hand, squatter housing has been increasing in this period. Since the Law no. 6785 was still addressing to the needs of middle and upper classes, and the dual development structure of the cities was ignored, the development plans became

unsuccessful in controlling these developments. Thus, the Squatter Housing Law no .775 was issued in 1966. Different from the Af laws, it attempted to take precautions to supply cheap land and housing appropriate to the demands of low-income groups. Although some successful projects are realized in the frame of this law, it has also been far away from the solution of the problem. Therefore, unplanned areas have been rapidly expanded around the cities and the dual structure of cities has been consolidated in this period.

As a result, in the period of 1960-1980, comprehensive planning approach is used mainly by the central authorities to control the urban dynamics both at metropolitan and city scales. However, since the state did not have the enough power to control the production of space in contrast to western countries from which the comprehensive planning approach is adapted, the new institutions and laws could not provide satisfactory control over the urban development. Actually, by the beginning of planning attempts in the Ottoman period, planning approaches has not been driven from the national conditions but imported from the western countries as a part of modernization project. For this reason, they have been tried without having necessary structural conditions to apply them. Nevertheless, it is possible to say that these institutions and legislations provided important approaches, experiences and tools for the planning system of the last period.

3.1.5. After 1980 Planning in the Neo-liberal Period

By 1980s, Turkey ran into a restructuration process in the fields of economy, infrastructure and governmental institutions. Turkey's economic system was transformed to an export based economy from that of a mixed model. Therefore, the functions of urban system and its controlling mechanisms, the scale of intervention to the development of urban form was changed and new housing supply systems and transportation modes were developed. With the Law of Mass Housing and establishment of Administration of Mass Housing, the state supported the development of a housing production system, which would be arranged by land developers through big housing organizations (Ünlü, 1999;81).

In this process, the characteristic of legalization approach of squatter housing also changed. Beyond that providing guarantee for squatters, it was aimed to transform these low density housing areas into a high-density apartmentalized areas by "improvement plans" in the frame of the Law no. 2981 of 1985.

Besides, these liberalization attempts in economy were also represented in the new Development Law no. 3194 of 1985. As Günay (1999b;239) stresses the limited control over development plans by the central state is almost nullified with this law. Although the law defines 'comprehensive planning' in essence, in practice, since the local authorities were given total control over real property, it ended in incremental planning and lessening restriction on property. Consequently, its goal became conversion of mainly agricultural lands into an object of urban property at any cost, either as accumulation of large urban blocks developed by the state or large firms or as agglomeration of plots developed by small-scale developers.¨

As mentioned above, the Development Law no. 3194 is an extension of the Law no. 6785. Most of the features and implementation tools of the old law is transferred to the Law no. 3194. The new law still cannot go beyond the physical planning approach inherited from the Building and Roads Law of 1933 to The Law no. 6785. Their common approach of comprehensive planning assumes total control on urban development from control of macroform and boundaries of the city at macro scale to the forms and architectural elements of buildings. And the small-scale developer is still seen as the main actor in production of space, and the space is organized according to this logic.

Therefore, the flexible planning approaches, such as structural planning, strategic planning, communicative planning, which have taken the place of comprehensive planning parallel with the decrease of state control on space and liberalization of economic policies, have not entered the planning system in Turkey. Thus, the major criticism for the Law no. 6785 about its inflexible and static nature (Geray(1985), Akçura(1980), Bademli(1980), Günay(1985)), which sees the city as a controllable physical object, and the plan as a technical document determining the desired form of

the object in a projected long term future, is also relevant for the approach of the Law no. 3194.

On the other hand, decentralization trends of the planning authority from central to local governments in the Western countries since 1970s, finds its reflection in the Law of 3194 in Turkey. Through this law, the critiques of the old law about the dominance of central authorities on the planning process, its exclusionary attitude against the local governments, the excess of bureaucratic procedures, and the lack of unity between planning and implementation processes are compensated in a certain degree. However, as Altaban(1985) and Günay(1985) agree, decentralization of the authority is not balanced and supported with a continuous planning and approval mechanism and participation methods, as in the structural planning system in Europe. Firstly, local development plans are not framed by strategic plans at national, regional and provincial scale. Furthermore, since the technical capacities of municipalities are generally low, preparation of plans is transferred to Iller Bankasi or private planning offices as in the old system. Consequently, as Altaban(1985;12) emphasizes, except the decentralization of approval power of development plans and programs to the local governments, there is no any basic change in the Law no. 3194, beside the planning system of the Law no. 6785.

Table 3.1. *Historical Development of Development Control in Turkey*

PERIOD	GENERAL CHARACTERISTICS	URBAN PLANNING&DESIGN	URBAN CODING	SPATIAL REPERCUSSIONS
19th cc. Ottoman Period	* Connection with capitalist market * Emergence of planning as a part of modernisation attempts * Transformation from private possession on state property to planned private proeprty	* Centralized control of the Ottoman state * Emergence of municipal control * Influence of Haussmanic approaches and City Beautiful Movement	* Emergence of urban coding as a pragmatic municipal tool against health and fire problems * Foundation of the basis of the contemporary development control in Turkey * 1848 Building Regulation * 1863 Roads and Building Regulation * 1882 Building Law	* Rectilinear patterns * Enlargement of roads * Elimiaion of cul-de-sac * Appearance of pavement
1923-1950 Planning As a Tool for Creating the Space of Modern Republic	* Modernity Project (sigle-party regime) * Etatist economic policies * Planning as a tool for creating the Space of Modern Republic * The full recognition and legitimization of private property with the enactment of Turkish Civil Law in 1926	* Centralized control of the state * Development control at national scale * Influence of Garden City Movement	* Urban coding as an extension of Ottoman Legislation to the whole country * 1930 Law of Municipality no. 1580 * 1930 General Health Act no. 1593 * 1933 Buiding and Street Law no. 2290	* Grid iron pattern * Low density settlement * Elimiation of cul-de-sac * Rectilinear plans for houses and archtectural uniformity
1950-1960 Beginning of the Rapid Urbanization	* Multi-party regime * Liberal policies opening to foreign markets, especially in agriculture sector with mechanisation * Populist politics * Rapid urbanisation as a result of migration from rural	* Centralized control of the state * Adaption of comprehensive planning approach from European countries * The squatter housing as a cheap housing supply method * Beginning of apartmentalization; housing supply by small-scale developers for middle and upper classes	* Urban coding as a tool of comprehensive planning to control of whole urban form * The laws of 5431 and 6188 - firstly, recognition and legalization of the squatter housing by the state * 1958 Development Law no. 6785	* Dual spatial structure (squatter and apartments) * Divisioning of land into small plots * Individual development
1960-1980 The Period of Comprehensive Planning	* The Constitution of 1961; * Social welfare state and * Centrally planned economy	* Centralized control of the state * Regional planning attempts * Comprehensive planning at metropolitan scale * Expropriation of large areas for mass-housing projects * Influence of CIAM in mass-housing projects	* 1972 The Law no. 1605; Revision of the Development Law no. 6785 * Origination of The Standard Development Bylaw with the law no. 1605	* Articulation of large patterns (mass housing. University camouses etc.) * Small-scale development (apartmentalization) * Spontaneous development (squatter)
By 1980 Planning in the Neo-liberal Period	* Liberal economic policies * Export based economy * Privatization	* Decentralization of planning authority to local governments * Incremental Planning * Lessening restrictions on property * Intervention of large capital to production of urban space	* 1985 Development Law no. 3194 * Law of Mass Housing * The Law no. 2981; legalization of squatters	* Mass housing * Plot based development; aparmentalization * Spontaneous development; squatter housing

3.2. DESIGN CONTROL IN THE DEVELOPMENT LEGISLATION

3.2.1. Design Control in The Hierarchy of Planning System in Turkey

Urban design, as a distinct topic has never been a part of the development control in Turkey throughout its historical progress, except the codes that control some biophysical design criteria. Although importance of the concept has been rising in the planning agenda of Turkey in recent times as in the western countries, and the development legislation has been an important dimension of these debates, there is not any definition or method about urban design in the last version of Development Law. Only some partial examples of plans or special, large projects may focus on the issues or criteria about urban design.

On the other hand, some important tools, which are used in design and control of urban form, from macro scales to building details, have been developed throughout the history of development legislation. These might be evaluated as the elements of a design control system. Thus, Figure 3.1. in page 91 depicts the hierarchy of planning system in which these elements of design control are remarked. At the top of this hierarchy, there are main legal texts determined by central governments and establish the legal frame of the planning system. These legislations do not only consist of the Development Law and its bylaws. There are many other laws and bylaws either general or specific related with development issues, such as the Civil Law, the Law About the Administration of Metropolitan Cities, the Title Deed and Cadastral Law, the Squatter Housing Law, the Environment Law etc. Therefore, although there are nearly 250 legal texts related with development issues (Ünal, 1994;23) and many institutions that have responsibilities in implementation of them, as mentioned before, the scope of the study is limited with the Development Law and development plans under the authority of municipalities, and its focus is the rules and instruments directly related with control of urban form in the new development areas.

3.2.1.1. The Legislative Base; the Development Law no. 3194 of 1985

An important innovation in the Development Law no. 3194 is about its outline. The principle rules about planning are given place at the beginning of the text. Thus, as Günay (1985;16)states the understanding that starts from the building itself in the Law no. 6785, leaves its place to a logical system starting from the planning (the types and hierarchy of plans and their boundaries, preparation and approval etc.) and going down toward land readjustment (unification and subdivision of land, preparation of allotment plans), and then building issues(construction and use permit, construction controllers). Nevertheless, logic of the development laws focuses on control of the building in boundaries of its plot rather than the structure and context of the site, and the law has the power of control the each building in the city (Akçura, 1980;65).

The 6th article of the Development Law no.3194 defines two kinds of plans in the planning system; Regional Plans and Development Plans. Regional plans are prepared by DPT in case of requirement to determine the socio-economical trends, development potentials of settlements, the targets of sectors, and distribution of regional infrastructure. Therefore, there is no any novelty in respect to the Law no. 6785 and even in the period of 1960-1980 when central planning had more importance, regional planning could not be put into practice. According to 5th article of the law, development area plans are prepared in accordance with regional plans to determine decisions about the settlements and general land use such as housing, industry, tourism and transportation. However, there is not any definition about their scope and administrative organization for preparation and application. Besides, the relation between regional plan or development area plan and development plans is not clear either. Therefore, in practice, urban development is generally regulated by the development planning system at municipal level, generally without any strategic frame defined by upper scale plans at regional or provincial level.

The development planning system has a dual structure as defined in the 5th and 6th articles of the law. The first stage is the 1/5000-scaled *master plan*, which aims to determine the general physical structure of the city and the second one is the 1/1000-

scaled *implementation plan*, which has to be prepared according to the decisions of the master plan as a specification of upper scale decisions.

The Development Law itself does not include any specific rules about the control of urban form and it assigns bylaws for specific issues in accordance with the 44th article. The most important ones of them in respect to design of urban space are the Bylaw about the Preparation and Amendment of Development Plans, the Regulation about the Land Readjustment (the bylaw of 18th article), Standard Development Bylaw, Parking Bylaw, and Bylaw about Heat Isolation. The rules of these regulations, except the Standard Development Regulation, are binding on development plans. Standard Development Bylaw is valid where implementation plan does not point out the rules about construction and subdivision order.

As a result, brokenness of the relation between central and local authorities also is relevant for design control process. There is no central government design advice as in Europe cases, where the central government encourage the municipalities to attach importance on design policies in local plans, and guide them through definition of general design principles. Moreover, there is no determination of design strategies through upper scale plans as in the provincial or structure plans of European cases. On the other hand, some bylaws of the development law prescribe formation of urban space through some physical design criteria as in the Standard Development Bylaw, which is similar to model bylaws of Germany and Netherlands, and the standards for social and technical infrastructure.

3.2.1.2. The Upper Scale of the Development Planning; Master Plan

5th article of the law states master plan is prepared in accordance to regional plan or development area plan if they exist. It determines general land use decisions, main zone types, density of zones according to a projected future, development directions and proposed boundaries of settlements, transportation systems and if necessary construction conditions. Thus the formation of urban space at macro scale is controlled by means of master plans. According to the same article, “master plan is a

whole with its detailed report", so there are two main components of master plans; Plan Report and Plan Document.

Plan Report is composed of two parts as the analyses report and the planning report. The analysis report contains a stage of survey and analysis, and a stage of synthesis that put forward the problems of the city, and the plan goals or aims to solve these problems. Although this sequence of "survey, analysis, plan" that is formulated by Geddes is a generally accepted method among the planners of 20th century, its way of use in Turkey has been criticized since its inception in 1960s in the frame of the Law no. 6785.

This technical determinist approach in analysis stage also determines the nature of plan document. It assumes that its prescriptions on the map about formation of urban macroform and urban development will be exactly realized through implementation plans. Its basic tools to control urban development are zoning and circulation decisions, which form the plan document through drawings on a map of present situation of the settlement and cadastral pattern.

Plan notes are integral components of plan documents. Plan note was firstly introduced to legislation with the change of 1972 in 25th article of the Law no. 6785. It brings the opportunity to use descriptions about the all decision areas of plans. The plan note is used to express some plan conditions and principles. It is suitable to express the issues that cannot be displayed through drawings (Duyguluer, 1989;51). It is used to provide coordination between plan, bylaws and rules of laws that are not included in the plan such as disaster law, health legislation etc. Moreover, plan notes can be used to combine the components of the development plan through references to a certain component about a specific issue in the plan.

As Tekeli (2001;7) explains, the static nature of the development plans cannot reply dynamic changes of cities and it lost its relevance against the new conditions appearing in long term. On the other hand, total control demand of the development plans is inconsistent with the property structure of the city in which private property is so widespread. The private property owners seek to ways of passing over the plan

decisions or they pressurize to change them according to their interests. The determination of construction densities in a long-term lead to speculative activities and the applicability of plans decrease because of rising land prices.

For example, density decisions are used to control the macroform of the city by encouraging development in a certain area, or setting a hierarchical decrease in densities towards the boundaries of the settlement; such decisions about settlement boundaries at macro scale, means the determination of the urban lands subject to subdivision (ifraz), and the lands where subdivision is not allowed. Thus, the decisions about settlement boundaries in order to ensure feasible infrastructure provision by preventing dispersed development, to prevent the development in undesirable areas, to legalize existing development trends or to give a definite macroform to the city, generally cannot be achieved unless they overlap with existing development trends because of illegal construction or pressures for density increase.

Another problematic field of decision of the master plan is the functional zoning. The problem is that whether urban functions, such as housing, commerce, industry, has the tendency to settle down their predetermined zones and whether the planning institution has the possibility to control the development of these functions. Especially, in central areas functional zoning controls about the types of functions and prevention of the commercial functions to run over the outside of central zones do not have any efficiency in practice. Only if there is a consistency between zoning decisions and the decisions about other fields, the control of development of city center becomes possible in a certain degree (Akçura, 1981;95).

Urban standards determined by the Ministry of Development and Settlements in 10th article of the Bylaw about Preparation of Plans play a significant role in the preparation of plans. Although the Law no. 6785 of 1956 did not contain such standards, the change of the law in 1972 brought them into the planning practice of Turkey. They are compulsory for all kinds of plans everywhere in Turkey. They include norms about quantity or size of education, health, recreation, administrative units, technical infrastructure and commercial uses. In spite of the simplicity in control of these prescriptions in planning practice, they lead to some problems in

implementation phase. For example, the norms about the areas of educational uses usually may not be applied because of high expropriation costs in some cases, or their application may cause excess quantity of some uses over the needs of some places. Although, these standards are differentiated according to the four categories of city sizes, they ignore the varied conditions and needs of different regions, cities and parts of cities. For example, 10 m^2 recreation area per person had to be allocated in all types of sites and zones in every city of Turkey without any exceptions (Akçura, 1981;81).

In conclusion, macro scale issues abut urban design, such as functional pattern and distribution of activities, circulation system, formation of districts and general design principles and policies that guide the design decisions of implementation plans of districts, can be considered in the framework of master plans. However, development plans are prepared and applied in a static approach and their interventions are limited with functional and physical issues. Their components are generally used in stereotyped ways. Actually, there is not a strictly predefined functions of plan reports and plan notes in the law so they might be considered flexible tools for planners to state and represent their principles, policies and guidelines about various planning and design issues that constitute a framework for implementation plans.

3.2.1.3. The Lower Scale of the Development Planning; Implementation Plan

According to the 5th article of the law, application plan has to be prepared in accordance to master plan. It determines roads and pedestrian ways, urban blocks, construction density and order in urban blocks, location and size of common uses, and the application stages that is fundamental to development programs. Therefore the formation of urban space at site scale is controlled by means of implementation plans. Besides the application plan is the most determinant level of planning process in terms of formation of urban space. Meso scale design issues such as mass-space relation, organization and formation of public and private spaces, orientation and interrelation of buildings, landscape, infrastructure, organization of pedestrian-vehicular traffic can be considered in the framework of implementation plans.

Implementation plan has the same components with master plan; the Plan Report contains a survey-analysis report and a plan report and the Plan Document is composed of zoning-land use map and plan notes as in master plan. These components of the implementation plan can be considered as detailed specifications of the master plan in a specific site.

The analysis report usually does not contain analysis about sophisticated design issues, such as morphological analysis that aim to find out the spatial and architectural characteristics of the district, activity patterns, image analysis, solid-void analysis, micro-climatic analysis, etc.

Basic tools of implementation plan to control urban development are secondary circulation elements, construction regulations and land readjustment methods, which are imposed to spatial pattern by means of urban blocks and development parcels. These elements form the plan document through drawings and symbols on a map of present situation of the settlement and cadastral pattern. Furthermore, the presentation language of plan document is an extension of the technical attitude of development planning. The 12th article of the Bylaw about Preparation of Plans determines the presentation symbols and drawing styles of the development plans. Especially, in the implementation plan, this language is not sufficient to express urban design issues. On the other hand, there is no restrictive sentence in the law for the use of additional graphic documents as parts of plan report.

The urban standards about social and technical infrastructure determined in the Bylaw about Preparation of Plans are also relevant for the implementation plans. However, the 11th article gives the opportunity that the positions and sizes of these uses, decided in master plan, can be changed in implementation plan, on condition that they don't decline under the standards. Moreover, the 23rd article of the same bylaw puts some restrictions for design of roads. A continuous road cannot be narrowed in a certain section. It cannot be designed a pedestrian way narrower than 7 m., and a traffic road narrow than 10 m. In addition, the design of cul-de-sac is also forbidden in plan amendments. Although these rules aim to provide some minimum conditions, they don't consider many specific situations in which these restrictions

are unnecessary and they may prevent the design of many alternative schemes appropriate for the site.

Another restrictive condition for the design in implementation plan level comes from the upper scale. Although the law defines the master plan as a plan, which determines the decisions for general spatial structure, such as major roads and population densities, in practice, the hierarchical differentiation of decisions between the master and implementation plans generally cannot be achieved. As an example, Akçura (1981;79) mentions that;

> "… decisions for the hierarchy of transportation system is not produced in different stages of development planning, but secondary roads are also designed and approved together with the major roads at the stage of master plan. This attitude, on the one hand, removes the possibility to fallow the changes in conditions that might appear in the course of time; on the other hand it ignores the needs of social groups to whom these roads serve and it does not consider the influences of the building order on the circulation pattern. Actually, this inconvenient attitude is not only peculiar to the formation of circulation system but a result of the development planning approach, which aims to determine the whole development of the city in long term at the beginning of the process."

In a similar way, beyond the determination of population densities, the construction conditions might be decided in the master plan level, ignoring the specific conditions of the site, and their changes in time, and the needs of inhabitants. Furthermore, the same attitude freezes the decisions of the implementation plans by producing all of them in one step at the beginning of the process. Although, the Law no. 3194 brings the concept of "application stages" in the master plan, it is not usually evaluated in practice. Besides the preparation of all implementation plans in one hand in a short period may cause uniform and slipshod solutions in design process.

The most important step of design process after the formation of urban blocks is the land readjustment process, which is generally realized in a fragmented property structure appropriate to small-scale development, and determination of construction conditions. The land readjustment process controlled by means of allotment plans also causes inflexibilties for designers. Depending on this, constructions conditions are generally arranged in a monotonous order to avoid the inequalities between property owners. The tools that are used in the control of construction conditions and

building order are defined in the Standard Development Bylaw (SDB). Therefore, the legal tools used to control the mass-space organization and the relation between masses is defined in the municipal development bylaw that is adapted from SDB.

As a result of the static approach in the preperation of plans, and the pressures of land owners on plans, total control attempts fail in the dynamic conditions of land market. In this case, the mechanism of plan modification acts as a tool for adaptation of plans to these the changing conditions. As Ersoy (2000a;48,49) denotes;

> "especially after the power of approving plan amendments was given to local governments in 1985 with the Law no. 3194, since the control of central government was removed and bureaucratic processes lessened, there has been serious increase in the number of plan amendments… The most frequent reasons for plan amendments are extraction from public use [such as transformation of a parcel from green area to housing area], height increase, change in building order, change of traffic routes, demands for widening roads, which cause indirectly height increase in the frame of SDB. Thus, it is possible to claim that most of the plan amendments lead to density increase and alter the rent distribution seriously."

Nevertheless, as mentioned by Tekeli (2002;8), control attempts at lower scale are relatively successful in terms of implementation besides the decisions of master plan at upper scale. The failures in the implementation plan level are related with the failures at macro level. If the ambiguities and restrictions coming from the upper scale are taken into a parenthesis, it can be said that the aims of implementation plans realized in a considerable degree. Therefore, the unsuccessful spatial outcome of the control at implementation plan level is not only caused by the difficulties of implementation phase, but also a result of the approaches or attitudes of the planners preparing these plans.

3.2.1.4. Land Readjustment in the Development Planning; Allotment Plan

The importance of land readjustment task in urban design and the influence of property pattern on formation of urban space were mentioned above. Especially, in Turkey where urban space is formed as agglomeration of small plots, the transformation process of agricultural land into urban land can be considered as the process of formation of urban pattern. The first step of this process is the formation

of urban blocks by means of implementation plan in the frame of zoning and transportation decisions of master plan. The next step is called as "development application", that is the arrangement of ownership pattern in accordance with the use and form determined in the plan. There are three application methods in Turkey: the subdivision and unification, the expropriation and the land readjustment.

The subdivision and unification as a voluntary method is applied according to the 15th and 16th article of the Law no. 3194, and 24th article of SDB, in the condition that the allotment plan is completed. In this case, if a parcel is large enough, with the demand of its owner, it can be subdivided as suitable to the plan, or if the area of a parcel is not appropriate to the plan decisions, it is unified with adjoining parcels. Whereas, this method has been used as alternative to the land readjustment method in spite of rule in the law so that its implementation is cheaper and easier. Thus, it may lead to incremental applications that damage the objectives of plan and injustice results between landowners (Ersoy, 2000b;79).

The expropriation is the method of acquiring the property of land with paying its market value by public authorities for the sake of public interest. It is a compulsory method that does not require the approval of landowners. Expropriation may be used in large projects, such as construction of road, airport, dam, or in mass housing projects as in the Batikent or Eryaman cases. Therefore, it can create opportunity for total design in one property. Although the expropriation is an efficient method to intervene the property structure for public interest, it is an expensive application that cause inequalities between individuals and especially municipalities face with difficulties in compensation.

The land readjustment process is implemented in the frame of the 18th article of the Development Law no. 3194 and its bylaw. It is the transformation process of cadastral ownership into development parcels appropriate to proposals of implementation plan via the preparation of allotment plan. The process can be summarized as fallows.

Firstly, all the lands in adjustment area such as the privately owned lands, cadastral roads, public lands under the property of either municipalities or other public institutions are unified (hamur islemi). Next, necessary land for common uses that serve the adjustment area, is allocated. The 35% of total land in the adjustment area can be allocated for common services without any compensation as substitute of value increase in land that appears as a result of the development process. This is called as Common Share of Adjustment (Düzenleme Ortaklik Payi – DOP) and if its ratio exceeds 35%, municipality via expropriation acquires the extra part. DOP cannot be used for the purposes other than roads (either vehicular or pedestrian), squares, parks, car parking, green areas, playgrounds, mosques and police stations and the services related these uses. Moreover, the land necessary for public services such as school, hospital, municipal service units and other public services is also deduced by expropriation. The ratio of this land to total area is called as "Common Share of Public Services" (Kamu Tesisleri Ortaklik Payi – KOP). All of these common or public lands are allocated from each landowner in equal rates according to the size of its property. Then, the urban blocks comprising the remaining land are parceled in accordance to the plan decisions and the rules of the bylaw. The newly constituted development parcels are allotted to their old owners, as independent lots in the same location if possible or as shared lots in adjacent locations. These new parcels and their relations with old parcels are summarized in distribution and allotment tables. Finally, these tables are utilized by cartographers in preparation of "the allotment plan", which displays the exact land subdivison state and determine the base of registration of new ownership pattern in title deed.

Therefore, the land readjustment is more equitable, feasible, and technically efficient method in terms of the implementation of plan decisions. It prevents the parcel-based applications. Since large numbers of parcels can be supplied, it can prevent speculation in a certain degree (Ersoy, 2001;81). However, a general complaint about the readjustment process is the insufficiency of the DOP ratio of 35%. According to a survey, this ratio is not enough to provide the satisfactory public service in the areas where the floor area ratio (FAR) is more than 1.1 or the population density is higher than 205 person/ha (440 person/ha net). Besides, a frequently used FAR 1.89

(790 person/ha) requires 44% DOP ratio for common uses and 23% KOP for other public services, in total 67% of total land must be allocated as common use area (Sevinç, 1991). Nevertheless, in spite of the insufficiency 35% DOP according to such criteria of modernist design approach, it can be regarded as an important opportunity for a design of a pattern in which continuity of solids is dominant.

If there is are decisions in the implementation plan about parcel sizes, the allotment process has to conform to these decisions. Moreover, the forms and dimensions of parcels must be convenient for the construction conditions determined in the plan. However, the allotment plans are prepared usually being separated from the implementation plans. Subdivision by cartographers according to shares of landowners (tahsise göre parselasyon) depended on the minimum dimensions of plots stated in the 10th article of the SDB, is a widely used method of subdivision. Although the reduced numbers of common shared parcels make the implementation of this method easier, the adjusted pattern may not fit the proposed form in the plan (Akkoyunlu,1999;120).

Another part of this problem rises from the disharmony between car parking requirements and plot dimensions. The 4th sentence of the Parking Bylaw assumes the principle of provision car parking in the parcels (but not in front garden) and it states that the parcels must be adjusted sensible to this principle (20 m^2 for each car, and one lot for 4 dwellings). It may also be mentioned in plan notes. However, because of the method of "allotment according to shares", this principle is usually ignored and parcels does not provide enough area for car parking (Ersoy,2000b;93).

On the other hand, the other method of subdivision, called allotment according to plan (plana göre tahsis) in which the planner determines the exact size and shape of the plots in the plan gives better results of subdivision in respect to conformity with design decisions. Whereas, it may lead to some land sharing problems that make construction phase more difficult (Akkoyunlu,1999;19).

Consequently, as Akkoyunlu emphasizes, in spite of the flexibilities in design that the consolidated approaches provide, currently used application as the land

readjustment method is the transformation from fragmented to fragmented structure and in this method, allotment plans are not prepared with consideration of design but with the aim of minimizing the inequality and sharing problems between landowners and as separated from implementation plans. Thus the cartographer may play a considerable role in the formation of space in this process.

3.2.1.5. Supplementary Design Control Mechanism in the Development Planning; The Municipal Development Bylaw

According to Ünlü (1999;90) Standard Development Bylaw can be described as urban codes and design guidelines of planning system in Turkey. According to its second article, Standard Development Bylaw (SDB) is valid where implementation plan does not point out the rules about construction and subdivision order. Thus, the place of it in the legislation shows a necessity to be used as a complementary mechanism to development plans.

Standard Development Bylaw is valid for the municipalities that are not in the scope of the Law no. 3030 of Metropolitan Municipalities. Metropolitan cities have their own bylaw independent from the SDB. Other municipalities are authorized to prepare their bylaws by adapting the SDB to their local conditions in accordance with the 6th article of the SDB. However, Duyguluer (1989;58) put accent on that, the expression way in this article has a restricting attitude that gives to municipalities the power of bringing additions rather than peculiar redefinitions and changes. This attitude is contradictory with the approach that transfers the planning power to local governments.

Nevertheless, there is an opportunity for municipalities to determine bylaws peculiar to local conditions. So SDB can be compared to Model Bylaws in some European countries. Whereas, in European cases, rather than prescribing detailed rules directly applicable to development control, it is aimed to encourage and guide the local governments through general design principles and descriptions to prepare their own detailed bylaws.

Nevertheless, if *"the implementation plan - bylaw - allotment plan*" system is considered and used as an integrated mechanism of development control, an efficient control on formation of urban space can be possible. It gives the flexibility of preparing its own coding system to each local administration. However, local administrations including metropolitan municipalities have not realized the value of this possibility. Instead, they have used the Standard Development Bylaw without any change, or with slight differences. For this reason, all urban settlements in Turkey from urban block scale to architectural details are formed according to the same coding system, although they have different characteristics. This is one of the basic reasons behind the homogenization of urban form in Turkey. Therefore, the tools defined in the SDB plays a very important role in urban formation. These tools can be taken up in three groups; land subdivision codes, construction codes, architectural codes.

Land Subdivion Codes

These are consisted of some rules about the preparation of allotment plans, subdivision (ifraz) and unification (tevhid). 17th article of the SDB determines the Bminimum parcel widths and depths according to the height (as number of floors) of buildings and functional zones (as housing-commerce and industry). These minimum standards are used in the preparation of allotment plans if there is not any other decision about parcel boundaries in the implementation plan. As mentioned above, generally, implementation plans does not contain decisions about allotment and it is left to cartographers who draw the allotment plans depending on this article. Therefore, the land subdivision codes play an important role on the formation of plots and so the formation of buildings.

22nd article prevents the subdivision (ifraz) of a closed road or a parcel that takes place in the middle of urban block, in spite of having an outlet to road. Moreover, 25th article allows constructing more than one building on condition that setback distances defined in the 18th article are provided. The same article allows also the constitution of flat ownership in an urban block through unification of plots in case the demand of landowners. Thus, the collective construction at urban block scale

becomes possible. As mentioned below this is a frequently used development method by cooperatives.

Construction Codes

Construction codes can be thought as urbanistic regulations that focus on the relation between buildings and between public space and private space rather than buildings' itself. They can be grouped into two: *Indirect Controls* that determine construction envelop and building volume, and *Direct Controls* that determine building order.

Indirect controls consists two kinds of controls: setback distance controls and density controls. *Setback distances* determine the usable area for construction in the boundaries of parcel. Determining an empty area inside the boundaries of plots, setback distances purpose to ensure adequate sunlight for buildings, provide a transition zone between street and buildings to satisfy privacy needs and allocate necessary area for car parking and other needs. However, the setback distances defined in the 18th article of the Bylaw are not generally sufficient to achieve these purposes. As Özbay (1989;5) explains, 3 m side, 5 m front setback norm came from German standards to Turkish legislation in the period of the Planning of Ankara by Jansen. Whereas, this norm used in Germany for 2-3 storey buildings is applied in Turkey even for 10 storey buildings. Besides, although the rear garden distance defined as the half of building height in the 28th article, it is also allowed to reduce the rear garden to 2 m in case the minimum building depth cannot be provided.

Density controls are used to achieve the population densities determined in the master plan via controlling building volumes. In addition, these can be considered as the only performance tools in the development legislation since they don't impose a particular, dimensional solution, but they leave flexibility to individual designer. The first of them is FAR - Floor Area Ratio (KAKS or Emsal), that is the ratio of total construction area that is allowed in a land (a parcel, urban block or a larger site) to the area of this land. The second one is LCR – Lot Coverage Ratio (TAKS). It determines the maximum base area that can be used for construction and used together with FAR.

The FAR and LCR take part in the SDB as a definition. Their value is indicated in implementation plan. Only, 26th article mentions that in cases where there is not any measure is denoted in the plan, LCR cannot exceed 40% for block or detached building order.

Direct control tools are *control of building order* and *control of building height*. The types of building order are attached, semi-attached, detached and block order that determines the dimensions of a single mass established on one or more parcels. These are the main tools to control directly the relation between masses in two dimensions. Moreover, there are some conditions for the width and depth of buildings. According to 27th article, maximum building width is 30 m for detached order and 50 m for block order. According to the 28th article, the maximum building depth is 40 m (It is 22 m in the bylaw of Ankara, and 20 m in Bursa), and minimum rear setback is 3 m.

Building heights in the 29th article of the SDB is controlled according to the road width. In other words this bylaw originated from the Building and Street Bylaw of 1933, controls the ratio between the road width and building height.

These direct controls of buildings and plot dimensions are generally taken into consideration as a subsidiary aim and left to the prescriptions of the bylaw. However, as Ünlü(1999;95) states, they must be examined carefully, because the flexibility that FAR may bring can be lost as a result of inharmonious instructions between two groups of rights. As mentioned above, the flexibility of FAR lessens as the area of land decreases. Therefore, it is more suitable for mass development at urban block scale. FAR, especially in large parcels or at urban blocks, can provide a flexible control that allow many alternatives of mass-space organization. However in Turkey, this opportunity is not utilized adequately. According to Özbay (1989;44);

> "because of sharing problems and inadequate source for design works, urban environment turns into the repetition of a single type in hundreds. When the high cost of land is combined with the desire to squeeze in more dwellings, densities of settlements are inevitably too high. Consequently, spaces produced at the block scale may be worse than the typical developments at plot scale".

So these areas are generally formed as a series of one type of multi-storey building and the result may be worse than the typical apartmentalized areas in terms of variety and spatial organization. For this reason, as urban blocks are shaped, the method of development must be taken into consideration. Moreover, urban codes peculiar to the development of mass housing areas can be prepared to encourage the implementation of some design principles.

As a result, construction codes either as direct or indirect control mechanisms and land subdivision codes can only be efficient if they are used together in coordination. On the contrary, in practice, they are not only used separately, but also they are taken up by different legal documents inharmoniously. The use of standard bylaws everywhere in Turkey together with development plans that is prepared peculiar to a particular city lead to contradictions in implementation phase rather than a complementary relation. Thus, the separation of the relation between implementation plan and allotment plan is also relevant for the relation between implementation plan and development regulation.

For example, in settled areas of cities development control is generally left to the rules of bylaws. Since the 29th article of the SDB regulates the number of floors according to the width of road, the density of the areas subject to control of the bylaw can be higher than the areas subject to control of the plan decisions. This inconsistency is an important source of the demands for plan modification about road widening (Akçura,1981;134). Ünlü (1999;100) gives another example that cause inconsistency. In the high-sloped areas, since the heights of building are determined according to highest altitude of lots instead of the average altitude, there occur extra stories as a result of the application. By this way, the construction rights and heights of buildings are increased through bylaws.

As a result, because of inharmonious use of the system of development plan - development bylaw - allotment plan, the development planning system lost its efficiency and its limited power becomes even more insufficient and inflexible in control of urban development. Thus, at the end of the process, which is the stage of

design and construction of buildings, the architectural codes of the SDB seem too restrictive for architects.

Architectural Codes

The 10th article of the SDB gives to municipalities the power of putting out rules about the aesthetics of buildings. On the other hand, architectural codes in the bylaw go beyond the aesthetic issues and bring detailed prescriptions about architectural formation of buildings. Beyond ccodes about bulk and building height, the codes puts the details of designing a the height of a flat, the slope of roof, dimensions of corbel, width of canopy, ratio of window to floor area, materials of construction, control of color, design of garden walls and so on. The modernist approach of the Building and Road Law of 1933 that aims to ensure same standards everywhere in Turkey, to ensure sanitary needs and avoid danger of fire still continue in the SDB.

However, in a field like architecture that differentiates historically between localities, the use of Standard Development Bylaw without adoption to local peculiarities not only damage the historical characteristics of settlements but also fails in providing physical design criteria about sanitary and security needs. As a matter of fact, many architects seriously criticize this detailed control on architectural projects so that it prevents creative, genuine and original solutions appropriate the local conditions and lead to monotype buildings throughout the country.

3.2.1.6. Design Control at Plot Scale; The Role of Architects in the Development Planning

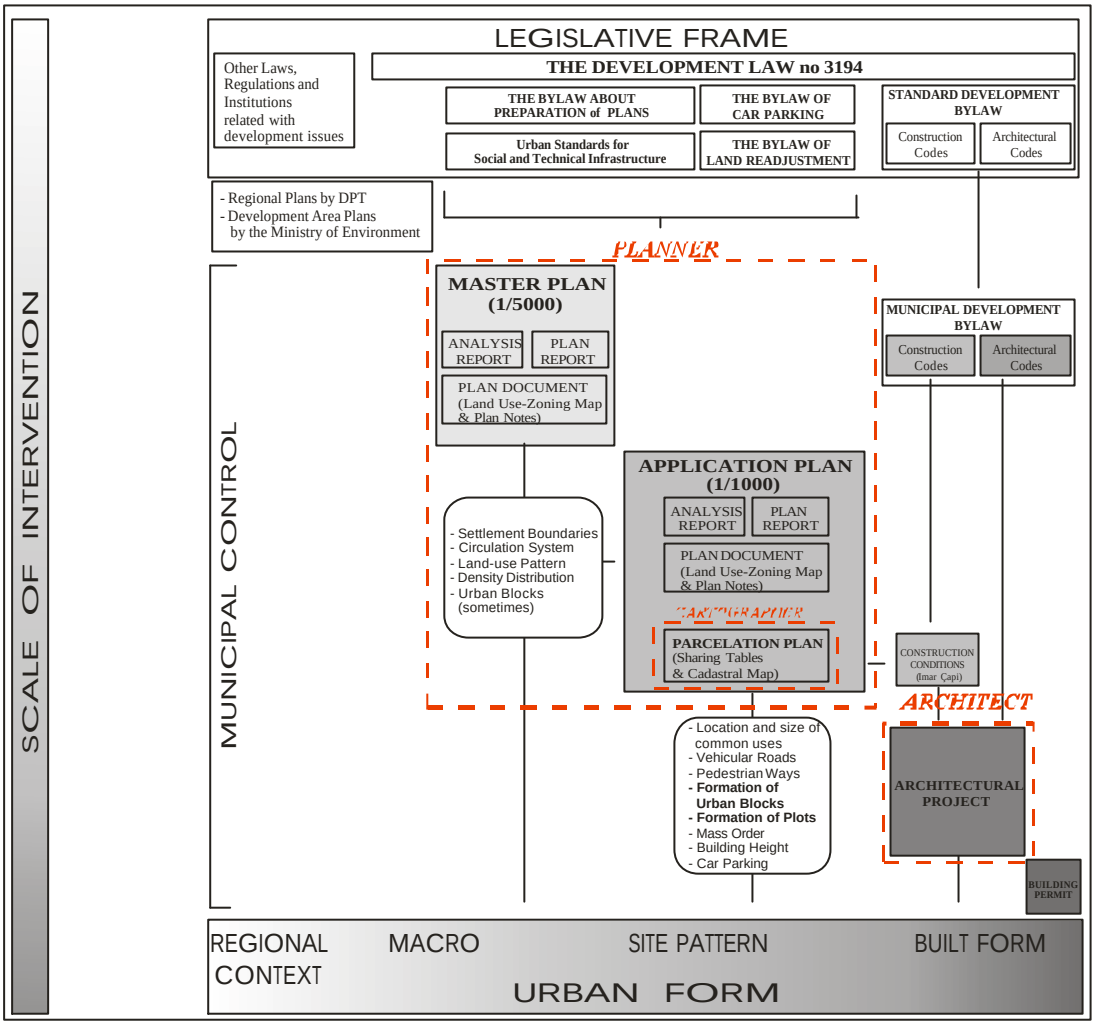
As a result of the development control process, the planning decisions coming from the upper scale become concrete as the construction conditions at plot scale. The last step of the process of determination of urban form is the architectural project design in the boundaries of plots. Architect designs the building according to the demands of his/her client in the decision frame determined in the development control system. This decision frame is composed of two parts.

The first part is a package of construction conditions called “imar çapi”. It contain the boundaries and of plots and situation in the adjacent plots, and the construction conditions that consists of the maximum coverage and floor area, building height, building order (detached, attached etc.), setback distances, construction altitude and the other standards about width and depth of the building, car parking etc. The second part of conditions for architect comes from the architectural codes of the Standard Development Bylaw that give detailed prescriptions about design of architectural elements. Moreover, other legislations about earthquake, health conditions etc. also set some restrictions.

However, as mentioned below, the limits of decision frames is so narrow that architects cannot reflect their design capacities to the architectural project. This is a crucial deficiency for urban design process in Turkey.

After the preparation of architectural project it is presented to municipality to take confirmation. Then other projects of the building about static, installation, heat isolation etc. are presented for conformation. Then the construction permission is given. Finally, the use permit is granted if the project is completed in conformity with the projects.

Figure 3.1. *Design Control in the Development Planning System of Turkey*



3.3. EVALUATION

Development control system in Turkey starting from the master plan at municipal level and continue to the construction phase, provides considerable opportunities for designers to control urban form. However, this system, rather than encouraging qualified design, it is based on the approach of preventing the bad outcomes through some prescribed solutions.

The Development Law no. 3194 is a combination of the physical-pragmatic approach of the Buildings and Roads Law of 1933, the comprehensive planning approach of the Development Law no. 6785 of 1956 and the 1980's neo-liberal movement of decentralization of planning powers to local governments. Therefore, it has a contradictory nature.

In the one hand, its implementation tools, such as development bylaws, land readjustment bylaws are based on prescribed standards and rules. On the other hand, the planning system with its dual structure assuming total control on physical formation of the city from macro scale to micro scale reflects the approach of comprehensive planning. Whereas, in practice, in contrast to provide such a total control, it fails in realizing its decisions, especially at macro scale.

Although it seems that the control of implementation of prescribed solutions is easier, it is hard to implement them in planning practice of Turkey. Moreover, this static and inflexible approach lead to a homogenized urban environment, failing even in the provision of basic physical criteria. The preparation of all implementation plans at the beginning, or in contrast the preparation of master plans as combined miniatures of implementation plans prevent the adaptation of control process to changing condition in time. Thus, the development planning system is reduced to a single decision stage. However, this is not a deficiency resulting from the legislation. The Development Law does not point out any rule that requires the preperation of detailed master plans. It assumes that implementation plans are prepared according to the requirements in time by the development programs. Furthermore, the components

of plans such as plan reports, plan notes give a considerable flexibility to present their planning and design attitudes. Similarly the possibility in the law to constitute local development codes is not evaluated and the standard development bylaw is applied everywhere.

Therefore as Idil (1994;75) states, "it is hard to bring forward the legislation as a reason for the insufficiency of urban design process. There are not strict limitations. It is possible to do many things by plan notes and plan conditions. Whereas, the essential problem is that there is no such a custom". Akçura (1981;65) also emphasizes this point;

> "In spite of the rules that it defines with the aim of implementation of planning decisions and the importance which it gives to development plans, the law does not assign distinct rules about the decision areas of these plans. We should consider this lack of clarity not as an attitude that limits the power of planning institution, on the contrary, as avoidance from limiting the decision power of development plans. Whereas, the means of flexibility given by laws is not used properly as a result of the general centralist attitude of the administration, technical and managerial customs, so the decision fields are frozen".

As a result, the structure of the development planning system has a contradictory nature; on the one hand, it focuses on the means of implementation rather than the aims and principles of the planning and design. Therefore, it has a narrow physical perspective ignoring social, psychological, aesthetic urban design issues, and inflexible conditions in practice; on the other hand, it is open-ended in many aspects, it has general definitions and efficient tools at least technically. Thus, the initiative of designers and administrators about urban design issues gain importance at this point.

3.3.1. Positions and Frameworks of Designers

The hierarchical positions of professions in the planning process are a crucial debate subject between planners and architects. Actually, this is an extension of the main contradiction between them, which originates from the nature of these professions. Günay (1999a;32) establishes his definition of urban design on this contradiction; "It is in the nature of planning to bureaucratize and socialize, while architecture tends to

individualize and liberate. This is the basic dialectical bond between the *urban* and *design* sides of urban design". If these two sides are integrated, this contradiction may be a dialectical relation that supplies urban design. It may provide the dialectic between induction and deduction and between the provocative individuality of architecture and comprehensive rationality of planning. In order to achieve this goal, urban design should become a part of public policies of urban development control (Günay, 1999;32,75).

However, as the urban development control mechanism of Turkey, the Development Legislation treats the formation of urban space as a physical control rather than a process in which various actors interact. Therefore, there is not any care about the coordination between the related professions. On the contrary, there is a strict hierarchical separation between them, in which a boundary relation is supposed instead of a dialectical bond between planners and architects.

The planner is responsible for constituting the general development scheme at 1/5000 scale by master plan and to design the site and property pattern and determine the construction conditions at 1/1000 scale by implementation plan. Then, the architect is responsible to design individual buildings in plot boundaries under the restrictions of implementation plan and development bylaw. Therefore, the restrictive and rigid conditions of the plot-based development are the main source of the complains of architects about development plans and bylaws. Discussing the position of architecture in the planning process, Özbay (1989;45) states;

> "In conclusion, the task left to architect is to design prisms, in a rectangular constant sized plot. Thus, the architect's contribution to space is reduced to plot level, or even to front facades of blocks. An unidentified pattern lack of an identity comes out as a result of designing buildings that appropriate to conditions determined by construction conditions and development bylaws in parcel boundaries. The capability of architect is not enough to raise the quality of urban space in these conditions that cause to solidify of architecture… The stylistic integrity cannot be achieved nearly, in this system that becomes identical especially with small-scale development. "

Therefore, the task of planner as an urban designer to provide the overall unity between individual designers and provide some common needs turns to restriction of the freedom of architects in these conditions. At this point, planners appear as the

major professionals in the formation of urban space from macro scale to meso scale, instead of coordination between planners and architects. And both professions are excluded from the preparation of development bylaws. On the other hand, planners are also restricted by many practical conditions such as the point of view of local governments that does not generally consider design criteria as an important issue, the demands and pressures of citizens, the inflexibility of land readjustment in a fragmented property structure for a small-scale development, the business dimension of planning that focuses on quantitative aspect of plan preparation process rather than quality of plans. Moreover, the inflexible and detailed decisions coming from the upper scale for design of implementation plans and other traditional customs that ignore the importance of urban design narrows the framework of planners.

CHAPTER 4

CONTROL OF SPATIAL HIERARCHY IN THE DEVELOPMENT PLANNING

Urban spaces that we complaint about are the products of development planning practice in which the task of readjustment of ownership according to conditions of space production has appeared as the major design criterion. On the other hand, this attitude cannot be seen only as a deficiency of the development planning system. As mentioned in Chapter 3, existing legislation has a contradictory structure. On the one hand, it defines a static planning approach based on the means of implementation, neglecting aims or principles for the formation of urban space. Thus, it does not sufficiently encourage planning authorities to use certain principles and design approaches. On the other hand, its open-ended definitions can be considered as an attitude that aim to leave flexibility for the planners and its implementation tools can be evaluated as important opportunities for planners to control formation of urban space. At this point, in the development planning system, the initiative of planners comes into front and their design attitudes and principles gain importance.

Then, what are the opportunities for planners to reflect their design attitude and creativity and certain design criteria on urban space in frame of the development legislation? In the 3rd chapter, role of the development legislation as a design control system was taken up in its general structure. In this chapter, positive and negative aspects of certain legal tools will be examined according to a specific design criterion and specific spatial types. Thus, purpose of this chapter is to evaluate the role of legal

tools in the organization of *"territorial hierarchy of space"*. In this purpose, firstly the concept of "territoriality" will be explained and then some spatial types will be defined according to territorial categories. Finally, each of these types will be discussed in respect to design with legal tools.

4.1. TERRITORIAL HIERARCHY

By public space, Lofland (1973; 20) refers to "those areas of a city to which in the 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 public and private space is fluid. 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 distinguished by various rules and symbols purpose of which is to ensure the desired "levels of interaction" and these differ among various groups so that there are differences in the tolerance and, preferences of various interaction levels. In other words, if privacy is defined, vary broadly, as the control of unwanted interaction, then the degree of control is variable according to the personal differences and affordances of the environment.

Therefore, "territory", as defined by Rappoport (1977;278) is "a particular area or areas which are owned and defended –whether physically or through rules and symbols- which identify an area as belonging to an individual group" and it is closely linked with the need of "privacy". People strive to get the appropriate level of privacy for the activity in which they are engaged. Rappoport defines privacy as the ability to control interactions, to have options, and to achieve desired interactions.

As Lang states (1987; 160) "social interaction occur more easily when people's social needs are balanced by the sense of individual autonomy that comes with privacy. Ambiguous spaces, those are neither public nor private, tend to mitigate against interactions, since the individual is less able to control the interaction on his

or her terms. Physical privacy is a prerequisite of much socially interactive behavior because it provides a setting that allows a wider range of personal choices".

According to Lang, one way of obtaining privacy is through territorial control. There is considerable evidence that when there are clear territorial boundaries for each occupant of a shared room the interaction level between them is higher then when they have to obtain privacy through reserve. The way in which buildings and the spaces between them are designed affects people's perceptions of who should be in control of them. There is a hierarchy of strengths of territorial claims. Each level in the hierarchy involves different degrees of personalization, ownership, and control. The perceived quality of the built environment is partially dependent on our ability to achieve desired levels of privacy.

Hierarchy of territories seems particularly important in societies where there is great need for security. As shown by Newman (1972) a clear hierarchical definition of territories is a key factor for security, which is a fundamental human need. Newman defines territorial hierarchies in four categories (Figure 4.1);

Private spaces, such as one's home, a student's room, or a workstation are those that are likely to be highly personalized unless there is strong opposition to it. They are also highly defended.

Supporting territories are either ***semiprivate*** or ***semipublic***. The former consist of places such as residents' lounges in dormitories, swimming pools in residential complexes, or areas of privately owned space, like the front gardens of houses that are under the surveillance of others; the latter include such places as corner stores, local taverns, and sidewalks in front of houses. Semiprivate spaces tend to be owned in association, while semipublic are not owned by the users, who nevertheless, still feel they have some possession over them.

Public spaces are peripheral territories. They are areas that may be used by individuals or group but are not possessed or personalized or claimed by them (Newman, 1972).

According to Newman, such physical subdivisions, if clearly defined and related to access paths, amenities and entries, encourage occupants to adopt proprietary attitudes and to exert potent territorial prerogatives which serve as natural and significant deterrents to crime.

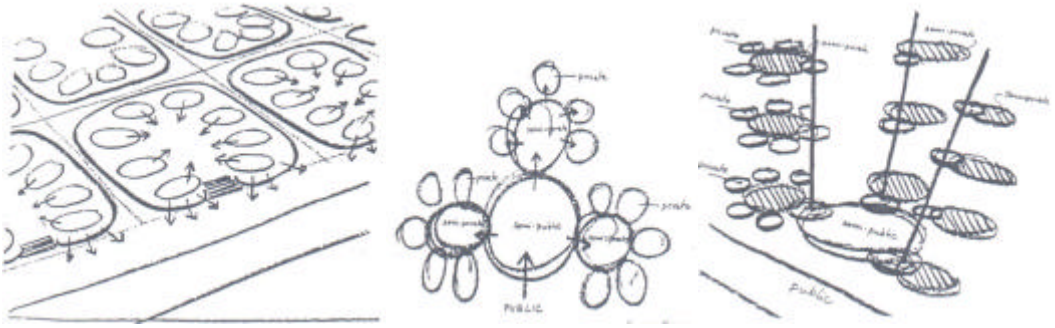


Figure 4.1. *Territorial Hierarchy of Space* (Source: Newman, 1972)

A more detailed categorization defined by Rappoport (1977;289) consists of six types;

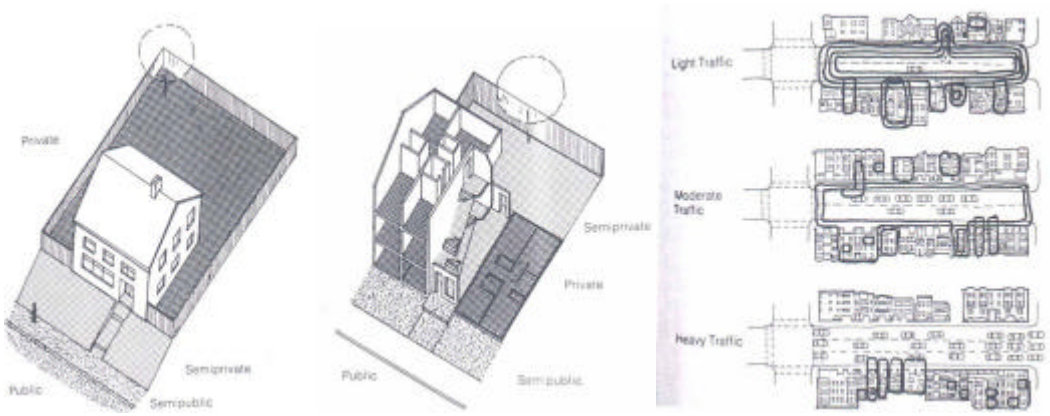
1. Urban Public – open to all
2. Urban semi-public places for public use but with some limitations of purpose, special use etc. (e.g. post offices).
3. Group public – the meeting ground between the public and private realms managed by the community.
4. Group private – community gardens or storage areas 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

4.1.1. Territorial Hierarchy and the Built Environment

There are many ways in which physical elements are used to demarcate territorial subdivisions. As an example, Newman (1972;52) describes single family detached home, which is a frequently used type of residential unit; “Single family house has its own statement of territorial claim. It has defined ownership by the very act of its positioning on an integral piece of land buffered from neighbors and public street by intervening grounds. At times the buffer is reinforced by symbolic shrubs or fences,

and in other cultures by high walls and gates. The positioning of lights and windows, which look out upon the buffering grounds, also act to reinforce this claim."

Therefore, single-family house provides clear territorial definition without much difficulty. Supporting territories appear in many forms, such as a frontyard, a porch, a flight of steps, or even a change in pavement that separates the public domain from the private one by means of a semiprivate area. Whereas in multifamily apartments a clear gradation of territories is more difficult to achieve (Figure 4.2). On the other hand, in both cases, whether or not a semipublic space would be perceived as such depends not only the house-street relationship but also on the amount of traffic on the street. If there is a heavy traffic, the claim over the exterior space is substantially reduced (Lang, 1987;151).



(Source: Newman, 1972) (Source: Appleyard and Lintell, 1972)

Figure 4.2. *Territorial Hierarchy and Built Environment*

Moreover, Newman gives some examples of the housing complexes that have weak territorial definitions. The typical double-loaded corridor residential block affords poor territorial demarcation. The private space, that is the individual apartment unit, stops at the door. Unlike the single-family house, there is no transition space between the public space (the corridor) and the private space (the unit). However, as shown by Newman in some examples, it is not an inevitable characteristic of high-rise residential buildings. As a part of architectural structure of buildings, hierarchical definition can be provided in interior spaces of these buildings.

Consequently, demarcation of territorial hierarchy in urban space can be handled at different scales as a matter of design. At micro scale it can be controlled through use of symbolic barriers such as pavement differentiation at entrances, signs, steps and physical barriers such as fences, walls, shrubs. Moreover, architectural structure of the building interiors can be designed regarding territoriality or the elements of building frontages such as arcades, porticos and porches. At meso scale, the spatial layout or organization of the environment that define the relation between private and public spaces and design of mass-space relationship can be considered in this respect. At macro scale or neighborhood scale transportation system and functional structure of the site that influence the social interactions and traffic flow, or the street pattern, layout of clusters can also be designed as a matter of territoriality.

According to Rappoport (1977; 295) the dwelling and some of its surroundings, which vary with culture, are "the private region" contrasting with the public nature of the city as a whole. He argues that any city can be seen as a set of subsystems of varying degrees of publicness and privacy. These different degrees of domains express the different desired levels of interaction, or different degrees of control. In Table 4.1., it is tried to classify the general spatial types that form urban space according to territorial categories.

Table 4.1. *Territorial Categories and Spatial Types*

TERRITORIAL CATEGORIES	**Newman**	Public	Semi Public	Semi Private		Private	
	Rappoport	Urban Public	Urban Semi Public	Group Public	Group Private	Family Private	Individual Private
SPATIAL TYPES	**Linear**	* Street	* Arcades * Porticos * Passages	* Cul-de-sac	Corridors		
	Closed	* Square * Public or commercial buildings	* Public of commercial buildings	* Courtyards of Clusters	Courtyards	* Dwelling * Private Courtyard	* Room
	Open	* Parks * Sport etc.	* Shop Fronts	* Otoparks * Gardens of apartments	* Otoparks * Gardens of houses * Entries of aparts.		

LEGISLATIVE INTERVENTION BOUNDARIES OR OBJECTS	* Roads (Car or Pedestrian) * Public Uses	Urban Blocks	Plots	Building
PROPERTY	Public	Public or Private	Private	Private

In this categorization, streets and squares as the basic elements of public domain can be considered as the focus of urban design. On the other hand, private spaces, which are mainly buildings in individual plots, can be considered as the subject of architectural design. Nevertheless, public or private spaces do not necessarily overlap with the ownership pattern. At this point, transition zones between public and private spaces appear as critical elements for the organization of urban space. As Rappoport (1977; 295) emphasizes as intermediate levels, semipublic and semiprivate transitional zones are the most variable domains that have given planners and designers most trouble.

Therefore, in the examination of legal tools of the development planning, focus of the study will be these transitional elements mainly as the objects of meso-scale design that focuses on spatial layout and mass-space organization of urban space. In typical development plans site pattern is constituted from streets defined by detached or attached apartments in small plots. In such sites, public spaces and private spaces generally overlap with the ownership pattern; roads constitute public spaces as streets, setback distances in the plots function as a transitional-buffer zone and apartments constitute private spaces. It is possible to say that the legal tools of the legislation provide important opportunities to shape these public and private spaces and the buffer zones between them through legal tools, which control the street sections, setback distances, building masses and order, architectural elements etc.

However, especially in the cases of some semipublic and semiprivate spaces where the territorial function and ownership does not overlap, some ambiguities and problems may emerge. It is necessary to give more attention for design of the spatial types that are used rarely in development plans

> **Cluster housing units**, **courtyard apartments**, and **cul-de-sac**; consist a semiprivate-transitional-common space allocated only for the parcels of a certain urban block
>
> Transitional elements that connect such spaces to public spaces, that are ***passages*** and ***arcades.***

Consequently, as the critical elements for constitution of a territorial hierarchy, which is an important criterion to obtain some basic needs like privacy and security and to create environments that support social interaction, semiprivate and semipublic spaces will be taken up in the fallowing part of this chapter and each of the elements mentioned above will be focused separately. Alternative solutions to create these elements in the development plans will be examined.

4.2. DESIGN OF TRANSITIONAL ELEMENTS IN THE DEVELOPMENT PLANNING

5 types of spatial elements, which contain transitional zones are evaluated in the frame of the development legislation. These are cluster housing, courtyard apartment, cul-de-sac, passage and arcade.

4.2.1. Cluster Housing in the Development Planning

The cluster is simply grouping of houses more tightly together and thus using the land saved for common areas possessed by these groups. It is not only a widely used principle of the 20th century urban design but also the principle of the medieval village and the principle of older community design (Whyte, 1964;11). As a type of square, the cluster was the first way man discovered of using urban space. It is produced by the grouping of houses around an open space. This arrangement afforded a high degree of control of the inner space, as well as facilitating a ready defense against external surface area liable to attack. So it has emerged as a way of territorial definition. (Krier, 1979;1). Therefore, the basic characteristic of the cluster is its residential-private function and its semi-private courtyard as common territory of the residents of cluster.

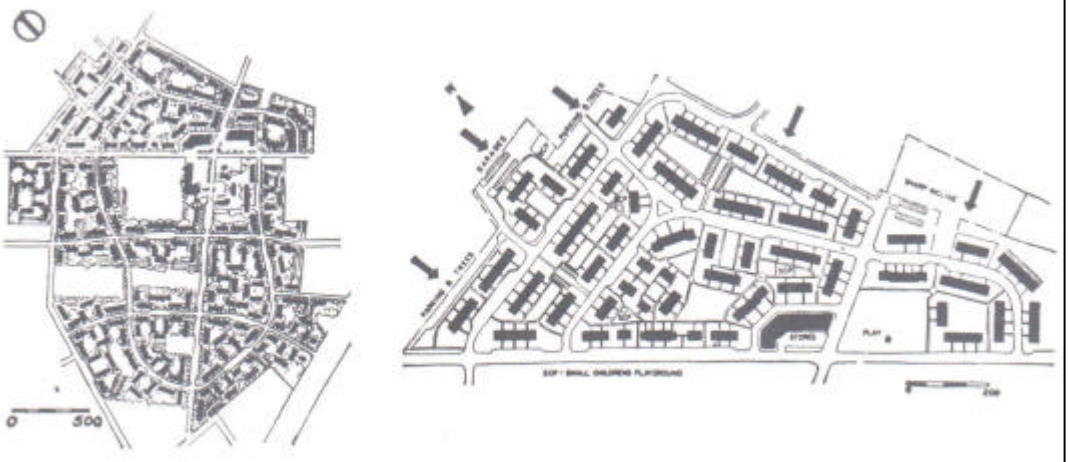
In the first decades of 20th cc., empricist designers of the garden city movement, in the frame of Stein's neighborhood principle, built several model communities on the

cluster approach, as in the example of Radburn. With decrease of the international-rationalist approaches, which propose large open spaces and inner common spaces of high-rised blocks, and with the rise of the neo-empricist approaches since 1960s, cluster housing came again into the agenda and became a widespread residential development pattern in the western countries (Figure 4.3).

Medieval cluster as the origin of modern cluster housing (Source: Kostof, 1992)

Example of modern cluster housing from the beginnings of 20th cc.

(Source: Gallion and Eisner, 1980)



BUCKINGHAM, Virginia

Figure 4.3. *Examples of Cluster Housing*

Since most of the planned areas have been produced with typical small-scale development pattern, cluster housing is not so widespread in Turkey. In the large scale mass-housing areas, in which the space is designed totally by a designer or a design team in single property, it is possible to see examples of cluster housing together with the modern high-rised block developments (Figure 4.4). The successful developments in Turkey are generally produced in this way.

Figure 4.4. *Cluster in mass housing areas of Ankara -Eryaman* (Source: TOKI)

4.2.1.1. Cluster housing at urban block scale in single property

The most widespread type of cluster housing in Turkey is the site developed at urban-block scale in a consolidated single property mainly by a housing cooperative or a small-scale developer. This development type has become the major alternative of the apartmentalization. They are designed in the boundaries of urban-blocks in accordance with LCR (KAKS) determined by development plans. In this respect, it leaves a great flexibility for the individual designers. However, in the conditions of space production, this flexibility has not lead to a diversity and richness but it has created a disorganized, monotonous pattern of high-rised apartments. (Figure 4.5) Thus, in the one hand, semiprivate-common areas in these units are formed as poorly

defined open spaces among high-rised apartments, on the other hand, the accumulation of these units do not constitute the continuity and unity of urban space. Therefore, the first one of the hypothetical examples in the study is about the problem of controlling the formation of the developments at urban-block scale.

Figure 4.5. *High-rised apartment clusters in Ankara-Neighborhood of Çigdem*

Example 1 – Cluster housing at urban block scale in single property

Possibilities for control of the developments at urban-block scale are investigated in this example. Such a control is necessary, in the one hand, to create clearly and strongly defined semiprivate areas and on the other hand to achieve an overall unity of the site, which is formed through combination of different urban-blocks. Thus, it is aimed to establish a clearly defined territorial hierarchy not only depending on the boundaries of ownership but also through the control of mass-space organization.

As schematized in Figure 4.6, the proposed plan aims to control the formation of the masses and spaces in the clusters to constitute a commercial square at the junction of two streets. In the plan document (Figure 4.6), the urban-blocks around the junction are determined as 5000 m^2 square-shaped areas in order to provide enough open space for the common uses and buildings that surround this open space. Each of these urban blocks are labeled by a number and these numbers are used as references in the plan notes to define peculiar construction codes for these urban blocks (Figure 4.6). In this example, only the codes for mass-space organization are taken up but, in this way, it is possible to prepare peculiar codes for certain urban blocks according to various criteria such as appearance of buildings, use and quality of the common spaces, sunlight, appearance of buildings in sloped areas etc.

The elements controlled through the tools defined in the legislation and denoted on the plan documents or plan notes are mentioned below.

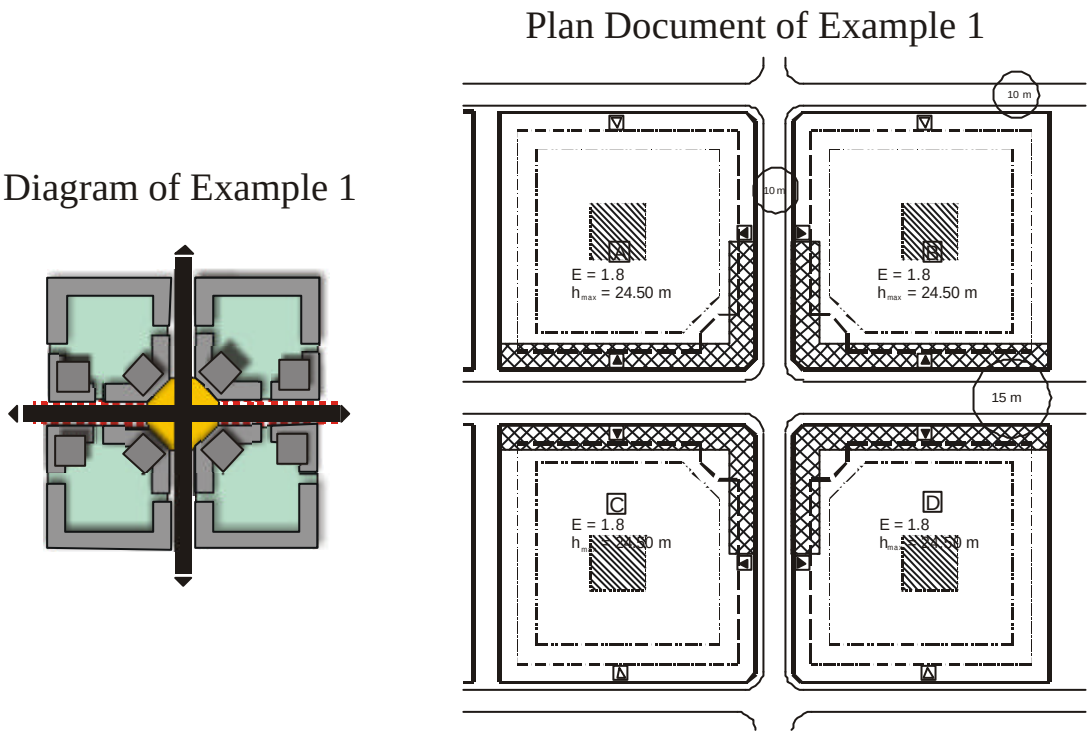


Figure 4.6. *Example 1: Cluster Housing In Single Property At Urban Block Scale*

Elements Controlled in Example 1

I. Control of *the construction density* and *maximum height*;

a. *Maximum construction area* allowed in the urban-block is determined with **LCR** (Lot Coverage Ratio – KAKS) and denoted on the plan by the symbol "**E**".

b. *Maximum building height* allowed in the urban-block is determined on the plan with the symbol "$\mathbf{h_{max}}$".

II. Control of *"mass-space relation"* in the urban block;

a. *Distribution of masses* are controlled through the definition of "**the differentiation of LCR in the 3rd dimension**" describing in the plan notes and with determination of "**the necessary facade lines**" aimed to be continuous.

Although the use of different LCR's for different heights is not defined in the legislation, the definition of the LCR in the 16th article of the SDB does not restrict such a way of use. Distribution of masses in the urban-block can also be controlled by the determination of FAR (Floor Area Ratio – TAKS) but it leads to a more strict way of control on the individual designer. Moreover, the proposal of commercial use at the first floor on the major street also encourage the design of continuous facade and affects the distribution of masses in the urban block.

b. *Section of the buildings or the relation between masses and public spaces* is controlled through the definition of "**distinct setback distances according to heights**" which are denoted by different symbols on the plan. Such a way of control on the building sections is also important to provide necessary height-width ratio of the street section in order to ensure enough sun light in the street or in the semiprivate-common space of the urban block.

On the other hand, the distance between two buildings in an urban block can be determined by plan notes. Otherwise, according to the 25th of the SDB that allows the construction of more than one building in a single plot, the construction conditions about the setback distances determined in the 18th article of the SDB becomes valid.

III. Which sides of the urban block must be used for *pedestrian access and parking entrances* is denoted by symbols on the map. It provides the opportunity of pedestrian and vehicular circulation between public space and semiprivate space.

IV. Control of *the zones allocated for common use* in the urban block with the determination of "**the inner block setback line**" by a symbol on the map. It is used to ensure minimum semi-private open space except car parking space.

V. Control of *the zones allocated as public space* in the urban block with the determination of **necessary facade lines** and **setback distances**. It provides the opportunity for obtaining public space on private property. In other words, public space is obtained without using some part of the common share of adjustment (DOP) during the application of the 18th article of the development legislation. Otherwise it is necessary to shape the urban block in accordance to the form of public square which is obtained through expropriation as a part of the DOP.

Therefore, existing tools of the development legislation give the opportunity to control mass-space organization of the large developments in single property. These tools can be used for specific purposes peculiar to certain urban blocks by design codes that are defined in "the plan notes" or in "the plan report" as a supplementary design document. Design guidelines for specific purposes can be attached to the plan document in this way. Thus, the main advantage of such developments is its flexibility. As seen in Figure 4.7 that show some possible outputs of the plan, while the criteria for the overall design of site is being ensured, it is also possible to leave

flexibility for the architect in developments at urban-block scale. On the other hand, if the construction conditions are not determined clearly and adequately, undesired outputs may appear during the construction stage.

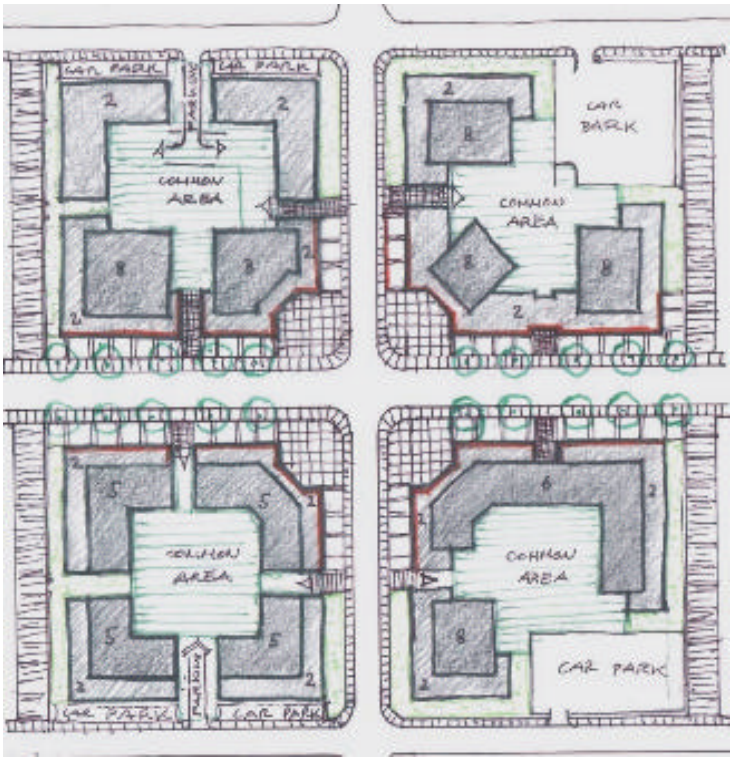


Figure 4.7. *Possible Outcome of Example 1*

4.2.1.2. Cluster housing at multi property small-scale development

As seen above different spatial organisations can be produced in the development planning when the development is planned as the combination of large single properties. Whereas in the small scale development, the outcome is generally a monotonuous grid pattern consists of apartments (Figure 4.8). One side of this problem results from the legislation. Although the development legislation is prepared appropriate to control small-scale development, it has some weaknesses in providing tools to design common spaces in urban blocks. Therefore, in the development planning semiprivate space of cluster housing is not produced. In the second example, the ways of producing cluster housing in the frame of the development legislation is discussed.

Figure 4.8. *Typical Pattern of Development Planning in Ankara-Dikmen*

Example 2. Cluster housing on multi property small-scale development

The basic difference of designing a cluster of small plots from designing a cluster in a single property is that it gives planners the opportunity to direct and strict control of the formation of cluster (Figure 4.9). On the other hand, it can be seen as a disadvantage for the individual designers who design buildings in small parcels because of decrease in the flexibility of their decision frame. Smallness of parcels restricts the decision frame of architects and the influence of planners in the formation of space becomes greater. Since the cluster of small parcels is formed as a combination of many buildings designed be distinct designers, it is hard to achieve a unity of architectural styles. Therefore, the collaboration between planners and architects in design of spatial pattern and in preparation of supplementary architectural codes as a part of plan notes and report becomes even more important in such developments. Another crucial difference, as discussed below, is production and status of the semiprivate-common space of cluster.

Plan Document of Example 2 *Possible Outcome of Example 2*

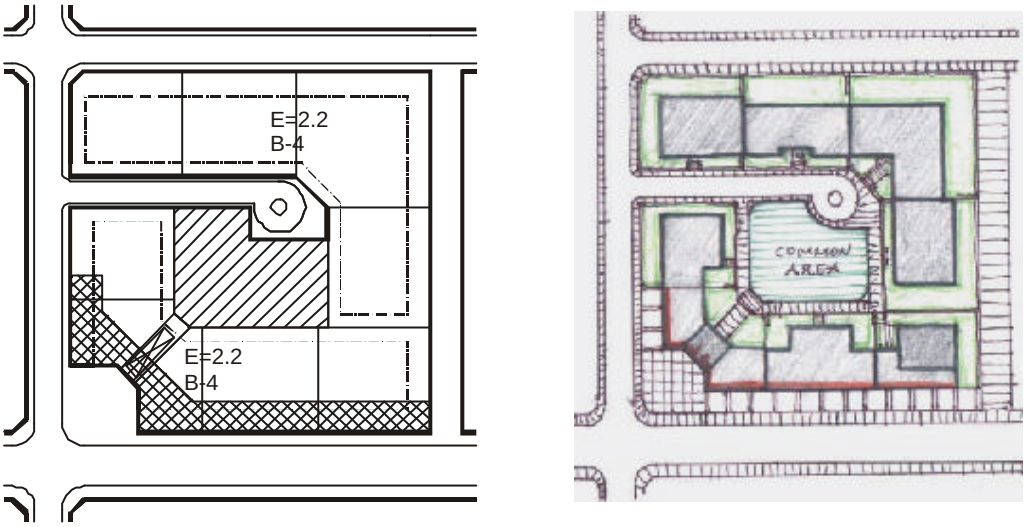


Figure 4.9. *Example 2: Cluster Housing For Multi Property Small-Scale Development*

Elements Controlled in Example 2

I. Control of *construction density, building order* and *property pattern;*

a. *Maximum construction area* allowed in the urban-block is determined with **LCR**.

b. *Maximum number of floors* allowed in the urban-block is 4 and building order is determined as "**attached order**" on the plan with the symbol "**B-4**". Use of attached order enables the design of a more strongly defined semiprivate courtyard. Moreover, it makes possible to obtain greater densities by eliminating the side gardens of apartments, which have generally 3 meters width and cannot be utilized effectively by residents of apartments. So the space obtained by the elimination of side gardens can be concentrated in the middle of urban-block as a semiprivate courtyard.

c. All of the parcels are drawn on the plan so *property pattern* is determined on plan. In this hypothetical case, it is assumed that land readjustment is solved. However, in a real case, planners should take into consideration the existing property pattern and determine the new property pattern and construction rights accordingly. Moreover, the coordination

between planners and cartographers becomes more critical in such sophisticated layouts.

II. Allocation of *public space* and *transition zone* between public space and semiprivate space

Different from the previous example, public square is formed outside of the urban-block, so it is obtained by allocation of land as a part of the Common Share of Adjustment because the size of corner parcel around the square is not large enough. Transition zone between the public square and semiprivate space of cluster is obtained through a passage crossing under the corner building (Passages will be discussed in detail below).

III. Production of *the space allocated for common use* in the urban-block;

As mentioned above, the development legislation has some problems in producing such spaces. First of all, 22nd article of the SDB prevents the subdivision of a closed road or a parcel that takes place in the middle of urban block, in spite of having an outlet to road. Their owners use such places in the same way until they are expropriated or adjusted as appropriate for construction. Therefore, the development legislation does not suggest cluster housing as an alternative model for development in multi property. On the other hand, it is possible to overcome this problem by a parking lot or cul-de-sac that extends into the cluster and arranging the form of urban block according to this cul-de-sac (cul-de-sac is discussed up below separately).

Another issue is the status of common space of cluster in terms of property. Two options can be suggested at this point:

a. The common space is formed as green area in the plan. So it is registered as public property in accordance with 18th article of the law as a part of the common share of adjustment (DOP). However, in this case, some part of DOP, which is allocated for common spaces of the

city, is utilized for the private use of a group. In addition, upkeep of the common area of cluster is left to the municipality as an extra cost.

b. Like as in Example 2, a common parcel is formed in the middle of cluster and it is defined in the legend as "the parcel that will be used collectively". Moreover, in plan notes, it is mentioned that there cannot be any construction in this parcel; the residents of surrounding buildings will use it collectively as open space.

   The ownership issue of the common parcel can be solved during application of 18th article of the law by sharing all the surrounding parcels to the common parcel in accordance to plan notes. Thus, the common space of cluster is registered as the common property of the owners of units in the cluster.

   However, the legislation does not suggest a situation in which construction right of a private property is completely restricted. So there is a weakness in the legal base of such an application. Another disadvantage of this option is the possibility of property disputes that may appear during exchanges of the real estates in the cluster because of the shared plot. Moreover, upkeep of the common space is also a problem in this option. In the apartments or cooperative sites, where the flat ownership is valid, the flat owners manage it. However, there is not a legal rule that arranges the upkeep of such a multi-property common area. It is necessary for the residents of the cluster to manage this site collectively. Some financial models, such as tax reductions, may be applied by municipality to encourage the owners to undertake the upkeep of their common areas.

A third option to produce a common area in an urban block is to determine its boundaries by setback distances, avoiding from allocating a separate parcel for the common area. As seen in *Example 3* (Figure 4.10), common car parking is obtained in an urban block by this way. The common area is

indicated on the plan document and defined in the legend as the area allocated for common car parking. Then, in the plan notes, it is stated, “the parts of parcels in these areas cannot be separated by walls”. However, in this option the shape and size of the urban block and its parcels becomes more critical and more binding on design of common space and the flexibility for designing the spatial formation of cluster decreases. Besides, since the ownership of the common area is not common, it may be more difficult to control production and upkeep of the common area.

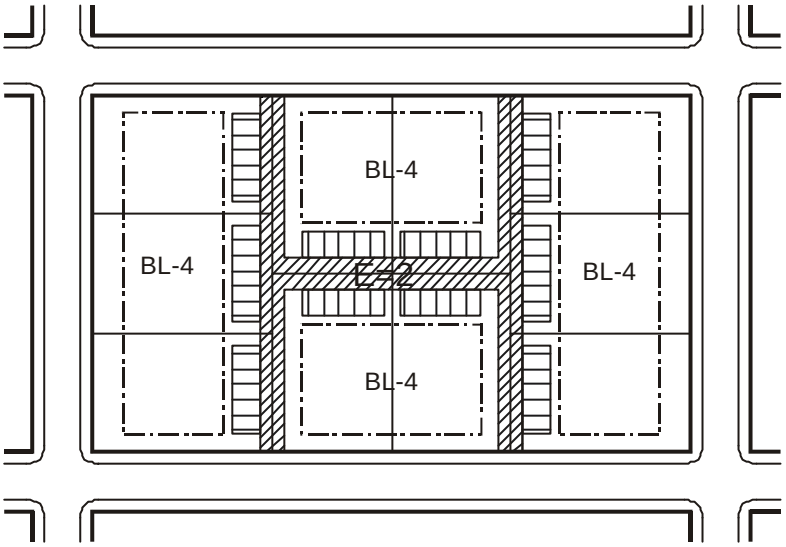


Figure 4.10. *Example 3: Common Car Park For Multi Property Small-Scale Development*

As a result, either the ownership status of common area of clusters or the upkeep of these areas is not clear in the frame of the development legislation. Thus, the cluster housing at multi-property necessitates indirect solutions as described above. At this point another option can be based on a proposal sentence in the legislation. For example, in the scope of 18th article of the law, a new definition may brought, such as “common parcel for cluster housing” and in the frame of this definition, cluster housing and the issues about ownership and upkeep of its common area, can be placed in the development legislation. Moreover, in addition to Common Share of Adjustment (DOP) and Common Share of Public Services (KOP), a third

level of common use as the common of a group can be defined for cluster housing, so an opportunity is created for planners to allocate a definite percentage of the land from the owners in the cluster as “Common Share of Cluster Housing”.

4.2.2. Courtyard Housing in the Development Planning

Courtyard house is the oldest type of town house. It has a similar principle with cluster housing. Its courtyard serves as a semiprivate common space that is connected by a semipubllic transition zone to public street. The multi-storeyed coutyard house, from the Middle Ages up to modern times, was the building type which acted as the starting point for the castle, the renessaince and baroque palace in the western cities and it is used also the recent developments (Figure 4.11).. Pattern of traditional Islamic cities has been based on the dense pattern of attached courtyard houses that open to semiprivate cul-de-sacs

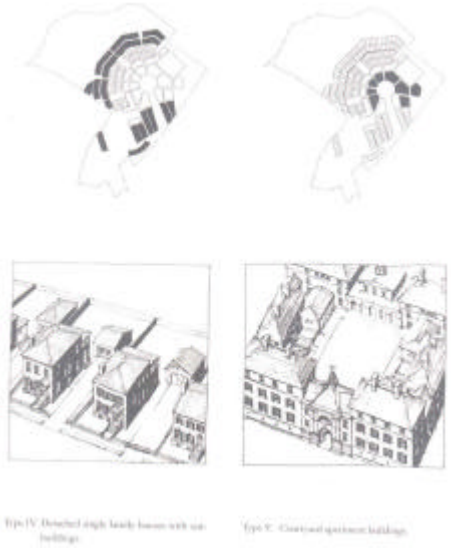


Figure 4.11. *Courtyard apartment as a housing type defined in a design guideline of an American Town* (Duany and Zyberk, 1992)

Cluster housing can be considered as the modernist form of courtyard housing. The main difference between them is that common space of courtyard apartment has a strictly defined courtyard formed by a single block or closed combination of attached apartments but cluster has a larger open space as a common place.

In Example 4 (Figure 4.12), the ways of producing courtyard apartment in single property is taken up; and in Example 5, it is discussed for design on multi property (Figure 4.13). In both of the examples a mixed use of courtyard that blocks up a commercial pedestrian street is assumed.

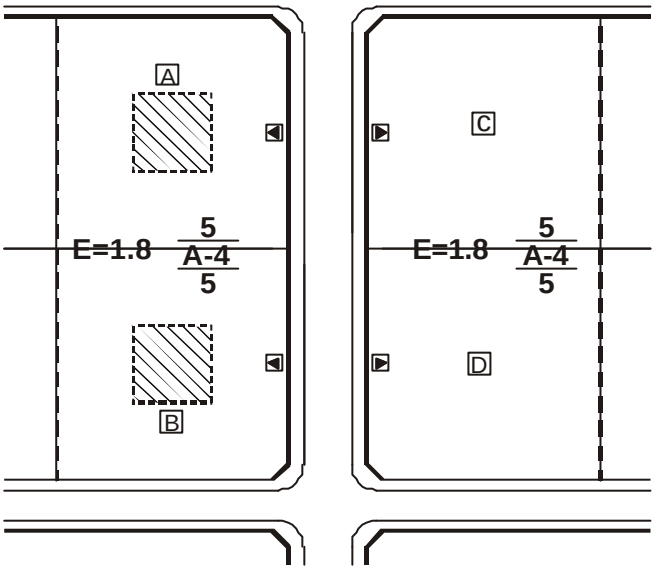


Figure 4.12. *Example 4: Courtyard housing in single property*

Example 4 – Courtyard apartment in single property

Elements Controlled in Example 4

I. Control of *construction density*, *building order* and *number of floors* in the parcel of courtyard apartment;

   a. *Maximum construction area* allowed in the urban-block is determined with **LCR**.

b. *Maximum number of floors* allowed in the urban-block is 4 and building order is determined as "**detached order**" on the plan with the symbol "**A-4**".

II. Production of *the courtyard* in the parcel;

It can be defined in two ways that are differentiated in degree of flexibility. These are displayed on the same example;

a. *An inner parcel setback distance* is determined on the plan for parcels A and B. In this way, the form, position and size of the courtyard are imposed to individual designer so it has a strict control on formation of courtyard (Figure 4.13).

b. For the parcels C and D, it is mentioned in plan note that "the building in parcels "C and D" will be designed as courtyard apartment and minimum 20% of the parcel area will be used as courtyard". In this condition only the size of the courtyard is determined and individual designer is freer in design of the position and form of the courtyard so this option provides a flexible control on formation of courtyard (Figure 4.13).

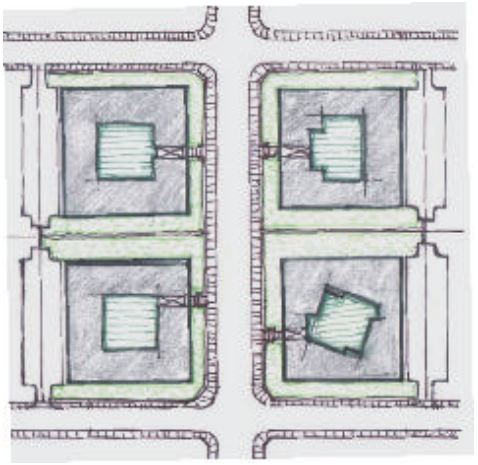


Figure 4.13. *Possible Outcome of Example 5*

III. Function of *the courtyard* in the parcel;

If the function of the parcel is determined as "commerce at the first floor and housing at upper floors" as in Example 4, the courtyard cannot be seen as a semiprivate in the working period of the shops but it is a semipublic space. It is an advantage for shops because of the increase in the surface of commerce.

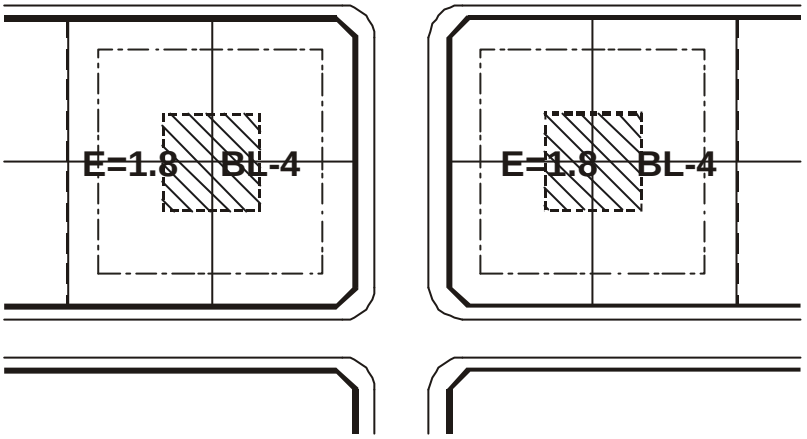


Figure 4.14. *Courtyard Housing on Multi Property*

Example 5 – Courtyard apartment on multi-property

Elements Controlled in Example 5

I. Control of *construction density*, *building order* and *number of floors*

a. *Maximum construction area* allowed in the urban-block is determined with **LCR**.

b. *Maximum number of floors* allowed in the urban-block is 4 and building order is determined as "**block order**" on the plan with the symbol "**BL-4**". Block order is used in order to define distinct construction conditions for a group of attached buildings in the urban block.

II. *Production of the courtyard* among parcels;

An inner parcel setback distance, in which property boundaries cannot be separated by walls, is determined on the plan and the area is mentioned as a common space of surrounding parcels in plan notes, as in Example 3. In this way, the minimum size of the courtyard is ensured and its formation is left to the process in which the combination of different buildings determines the form (Figure 4.17).

III. *Entrance of the courtyard* can be provided by a passage that is indicated on the plan(passages are discussed in detail below).

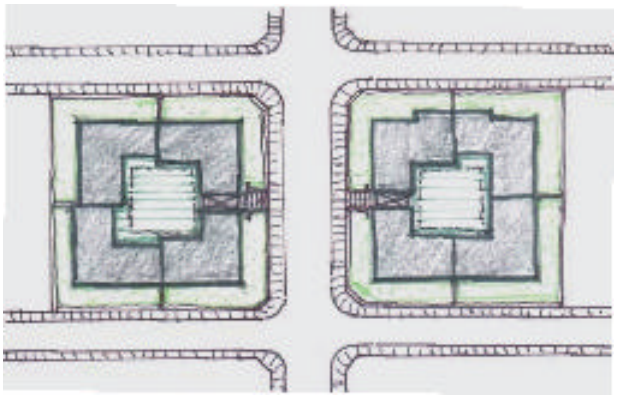


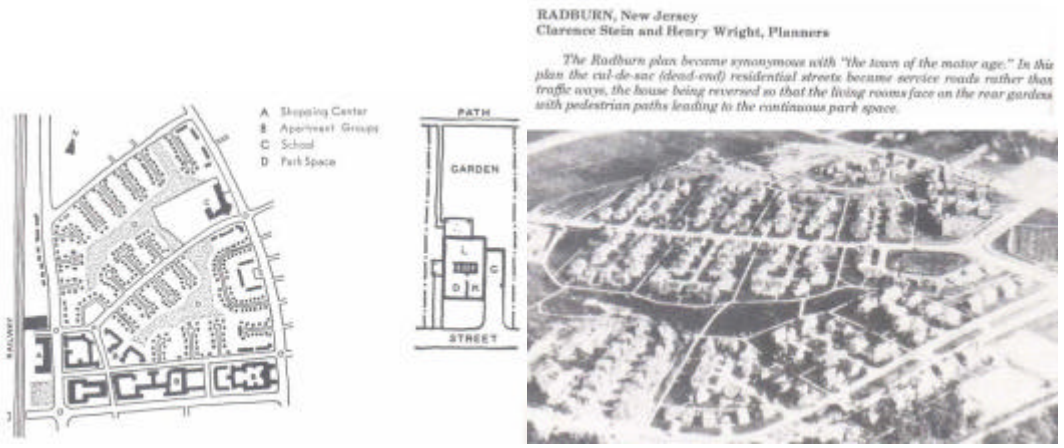
Figure 4.15. *Possible Outcome of Example 5*

4.2.3. Cul-de-sac in the Development Planning

Transformation of Roman gridded towns inherited by Islam reflects well the territoriality of the cul-de-sac as a dead-ended street. The "outer-related" open space of the streets and public places of the Roman city was reduced through infill, curtailed streets and an "inward" communication system was installed in this dense fabric, the principal element of which was the cul-de-sac. Thus, cul-de-sac was used as a semiprivate transition element to private courtyard houses in Islamic cities. On the other hand, Alberti as an urban design theorist of Renaissance, emphasizing its defensive function, would support cul-de-sacs as a way of designing defensive patterns (Kostof, 1991; 50,69).

In 20th cc. urban design, according to Broadbent (1990;129) empricist designers evaluated cul-de-sac as a key element of settlement pattern, like as cluster, especially in the examples of garden-city movement and Greenbelt Towns of American suburbs. In Stein's superblock design of Radburn, cul-de-sacs are used for vehicular access to the fronts of the houses leaving traffic-free inner streets that provide pedestrian access to common uses and continuous strip parks in super-blocks (Figure 4.16).

Cul-de-sac and superblock in Radburn



An example of superblock

Figure 4.16. *Cul-de-sac in modern urban design in early 20th century* (Source: Gallion and Eisner, 1980)

As explained in Chapter 3, cul-de-sacs are also common elements in the Ottoman cities whereas the modernization attempts and development legislations in the 19th cc. main aim of which is to prevent fires and improve sanitary conditions has forbid and eliminated cul-de-sacs. In the Republic period, such destructive operations were criticized stressing on the advantages of cul-de-sac by some designers, such as Jansen who defines cul-de-sacs as important tools of modern planning because of their simple and evident character and economic effectiveness (Duyguluer, 1995;30). However, in the Law of Building and Roads no. 2290 of 1933, cul-de-sac was not allowed. Although, this restriction doesn't take place in the SDB of 1956, as a result of a forgetfulness according to Duyguluer, it returned to legislation in 1959. The Law no 3194 of 1985 does not allow the use of cul-de-sac similar to the Law no. 2290. According to 23rd article of the Bylaw about Preparation of Plans, the designation of cul-de-sac by plan amendments is not allowed. On the other hand, as mentioned by Duyguluer (1995;58), the use of cul-de-sac with a parking lot is approved by the Ministery, moreover, there is not a sentence that prevent the use of cul-de-sac in newly developing areas.

Therefore, Example 6 is about the use of cul-de-sac in the development planning. As seen in the scheme below(Figure 4.17), cul-de-sacs in the example are assumed as parts of a superblock that has an inner pedestrian street.

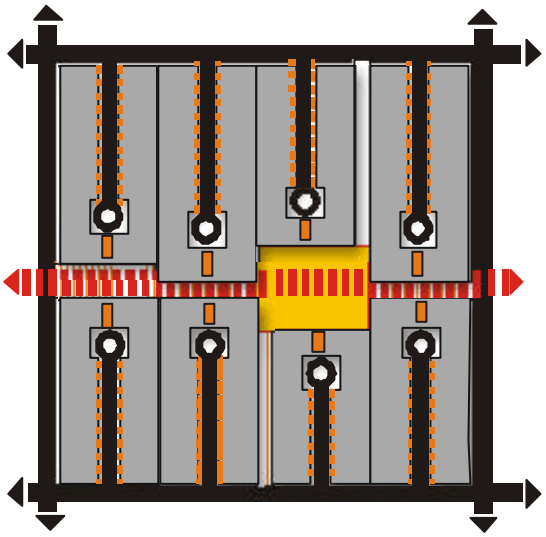


Figure 4.17. *Diagram of Example 6*

Example 6 – Cul-de-sacs as parts of a superblock

I. Control of *construction density*, *building order* in urban blocks;

c. *Maximum construction area* allowed in the urban-block is determined with **LCR**.

d. *Maximum number of floors* allowed in the urban-block is 4 and building order is determined as "**attached order**" on the plan with the symbol "**B-4**". Only the building order of corner parcels is determined separately as "**BL-4**". Moreover, their boundaries are determined on the plan. Formation of other parcels is left to the stage of allotment plan.

II. Formation of *cul-de-sacs*;

a. Cul-de-sacs are designed as open ended to avoid from decreasing the accessibility. It is necessary to provide two-side access in case of emergency. Therefore, cul-de-sacs are extended straightly to the pedestrian street with a short pedestrian connection (Figure 4.18).

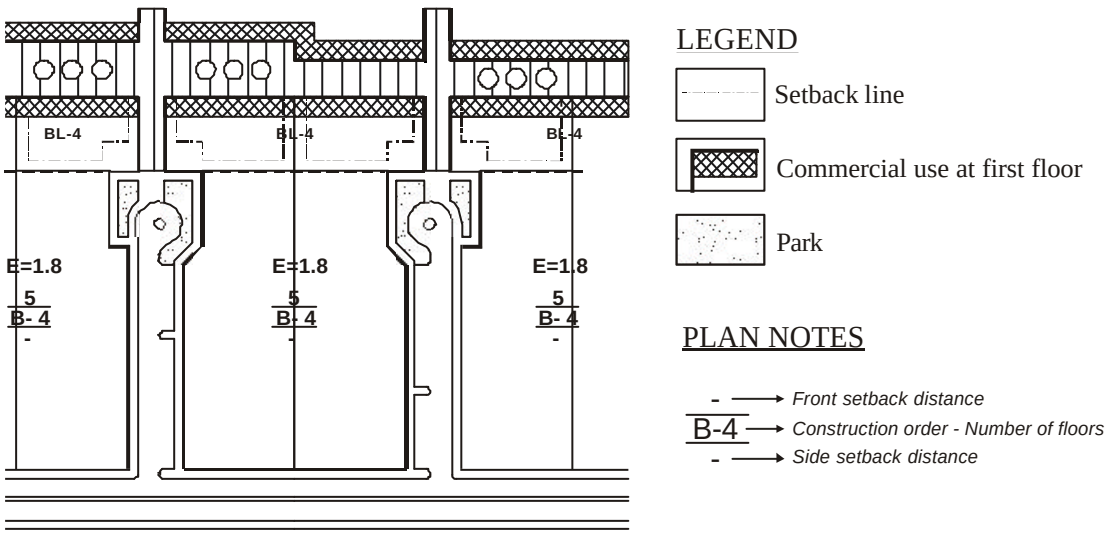


Figure 4.18. *Example 6: Cul-de-sacs as parts of a superblock*

b. The width of the connections of cul-de-sacs and the pedestrian ways between them are determined as 7 meters because of the minimum condition determined in the 23rd article of the Bylaw about Preparation of Plans. However, this minimum standard might be too restrictive in the situations where the transitions zones aimed to be narrow in order to define a closed square.

c. Small green areas are formed around the end of cul-de-sacs and so a semiprivate courtyard is created at the end of culd-de-sacs.

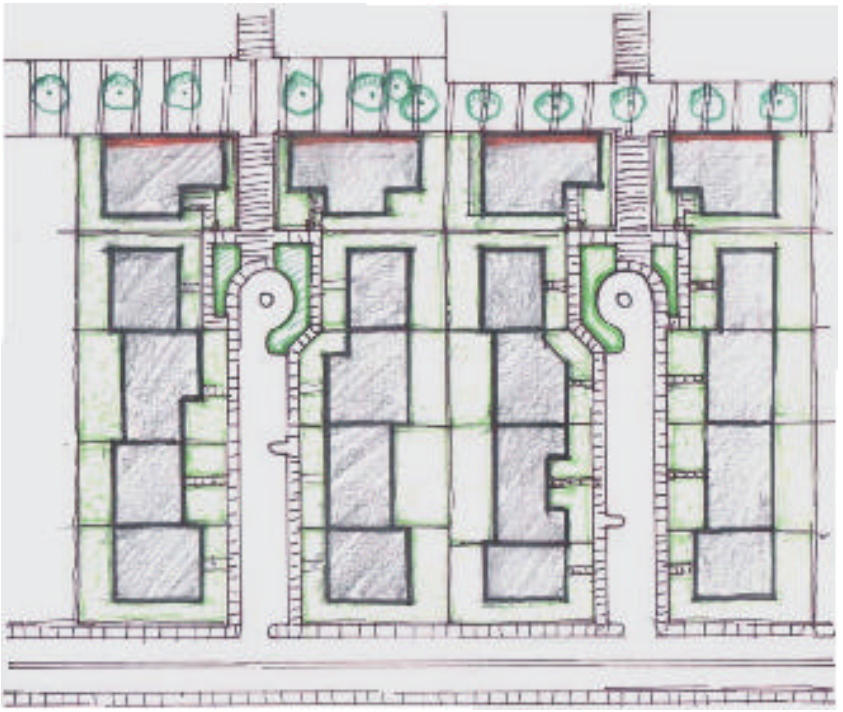


Figure 4.19. *Possible Outcome of Example* 6

4.2.4. Passages and Arcades in the Development Planning

The concepts of passage and arcade are used interchangeably in different languages. Similarly, portico can be used instead of arcade.

Geist (1983;12) defines passages in the name of arcade as a glass-covered passageway which connects two busy streets and is lined on both sides with shops. It offers public space on private property as well as easing on traffic congestion, a short cut, protection from weather, and an area accessible only to pedestrians. They can be considered as the new commercial spaces of the industrial city of 18th and 19th centuries. In this study, passage is used as the pedestrian way that connects two streets or squares passing under a block. It is a transitional zone between two public spaces or public and private spaces.

On the other hand, arcade is used in the study instead of portico or colonnaded street. According to Kostof (1992; 216) it is used as a conventional device to negotiate transitional zone where commercial activities, restaurants cafes etc. spill out into the street and public space infiltrates into courtyards. It is a recurrent element of western architecture and its history goes back to ancient city. It can be seen in the either Roman city or in the medieval cities. Alberti advocates it as a shelter from sun and rain and a space of social interaction. In some European cities like Bern, where the arcades in front of all the houses along main streets were prescribed by building codes, from the 13th to the 19th centuries. The codes allowed facades to change in style in accordance with the popular taste of the day, so long as the proportions stayed the same. These arcades remained the property of the municipality.

In the development legislation of Turkey, there are definitions about passages and arcades. The 48th article of the SDB mentions that at the places where portico is needed, the height and depth of arcades are 3.50 and 4 meters but municipality can change these measures according to conditions of the site.

In addition, the 49th article of the SDB determines the conditions for building passages in commercial areas. According to this article, the height of the passage cannot be less then 3.50 meters, and its width must be more than 3 meters for short passages, and more than 3.50 for passages longer than 30 meters. Therefore, in Example 7, the ways of implementing these articles are discussed on a combined case in Figure 4.19.

Example 7 - Passages

The 49th article assumes the passage as an element of architectural design. In this condition it is a choice of the individual designer and constructer to use the passage as an inner space of commercial activities. Thus, it can be closed except working hours. In this example, the ways of building a passage not only as an architectural element in a building but also as a part of larger spatial organization which is an object of urban design and as a transitional-semipublic element that is open all of the day.

In accordance with the 14th article of the Law no. 3194, municipalities can establish the servitude (irtifak hakki) from a part, height and depth of a property with the aim of public interest during the implementation of development plans. This opportunity can be used for creating a passage under a block. A definite part and height of one's property is allocated as a passageway between two spaces in this way. However, the place where passage is proposed shouldn't be determined randomly but there should be a valid reason in order to select that place as a passage. On the other hand, the construction right of this parcel is reserved and can be used in another part of the property.

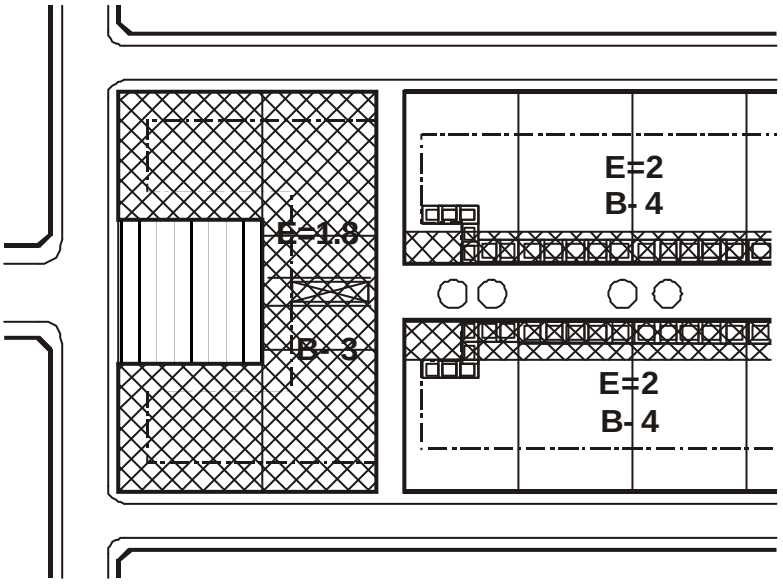


Figure 4.20. *Example 7: Passages and Arcades*

In the example (Figure 4.19), a passage is proposed in the plan indicating by a legend symbol in order to connect a public square to a public pedestrian street under the building of middle parcel. The volume that is allocated for passage is used as an extra floor at the top of the building during implementation. For this reason, it should be taken into consideration when maximum height or number of floors is determined.

Example 7 - Arcades

One way of obtaining an arcaded street in development plans is to use plan notes depending on the 48th article of the SDB. Indicating on the plan the buildings that aimed to be arcaded, it is mentioned that these buildings will be constructed as arcaded buildings. In addition, the dimension of the arcades can be added to plan notes by a drawing.

According to Özbay (1989), since the areas under arcades are included to construction area because of the definition of floor area in the legislation, property owners or constructers are unwilling to produce arcaded buildings. In western countries as noted in chapter 2, construction of such architectural elements that are parts of public space is encouraged by zoning incentives with a bonus construction right. However, incentive zoning does not take place in the legislation of Turkey.

A more direct control way of designing an arcaded street, as in the Example 8, is to use *different setback distances* for the first floors and upper floors and to determine the space that is produced in the first floor as arcaded space. Then the space under the arcade is defined as an area that will be left to public use, in other words, *the servitude* is established in this area and it is mentioned in the plan notes that the area allocated for arcade can be used as construction area at another part of the parcel. Thus the loss of property owners can be covered.

4.3. EVALUATION

In this chapter, the possibilities for organizing a territorial hierarchy in space using various spatial types are investigated. These spatial types are mainly transitional elements that are not used frequently in the development planning. Some hypothetical examples, which consists some cases at implementation plan stage, are discussed in this context. As seen in these examples, the formation of urban blocks and parcels are crucial determinants of the formation of a site. Therefore, the determination of boundaries of urban-blocks and parcels on master plan stage may remove these opportunities or alternatives that are examined in these examples at the beginning of the planning process. Thus, the determination relation between master plan and implementation plan stages is very important for the control of urban formation. In discussion of the examples, it is assumed that there is a flexibility coming from master plan stage for the formation of urban-blocks and determination of construction conditions.

As types of transitional zones, five elements are investigated. The cluster housing, courtyard housing and cul-de-sac are discussed as types of housing models that offer a semiprivate transitional used collectively, then passages and arcades are taken up as transitional elements between public and private territories.

It is seen that either in single property or on multi property, the development legislation provide important tools to produce these models. The developments at urban-blocks scale in single property give the opportunity of leaving flexibility for architects. On the other hand, it is necessary to restrict this flexibility in a site that is formed as a combination of large parcels in order to achieve some overall criteria for such a site in terms of mass-space organization as in the Example 1. Thus if legal tools are used efficiently, they are capable to provide such an overall control. On the other hand, in Example 2, it is seen that the development legislation does not assume the cluster housing at multi property small-scale development. Especially, for the production and upkeep of the common space of cluster, there are some weaknesses of the legislation. Nevertheless, there are various options in the legislation to

overcome these weaknesses, and cluster housing can also be used in small-scale development.

The courtyard housing can be considered as a small-scale compact cluster. It is possible to use alternative solutions in the frame of legislation. Each of these alternatives provides different degrees of flexibility for the architects.

Although some disadvantages of cul-de-sac such as decreasing accessibility if their lengths are not determined excessively and they are designed as dead-ended. On the other hand, the cul-de-sac with its simple structure can give the opportunity for creating many alternative spatial organizations. As seen in Example 5, being one of these spatial organizations achieved by cul-de-sac, the superblock can be used as a model in the development planning for small-scale development.

Finally, passages and arcades can be used as transitional elements to combine public and private spaces. Both of them are already defined in the legislation as spatial types with distinct articles.

Consequently, the development legislation provides tools to control the elements discussed in examples. Moreover, plan notes can be used as supplementary design documents where the tools of legislation are insufficient. Some written principles and conditions for the individual designers can be defined and they can be supported by drawings that make clear the aimed spatial outcome as in the drawings above. Such drawings should not be seen as restrictive prescriptions, on the contrary, they should be seen as some images that support and encourage the individual designers. Therefore, the collaboration of planners and architects is also important in preparation of written and visual design codes and principles as a part of the plan documents. The mechanism of plan notes, plan report and plan document gives the opportunity of this collaboration. Design codes including various topics can be collected in a report as a combined part of the plan report and plan notes, such as the report of spatial formation criteria.

Figure 4.21. *Transitionalzonesinthedevelopment planning-1*

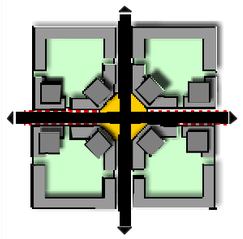
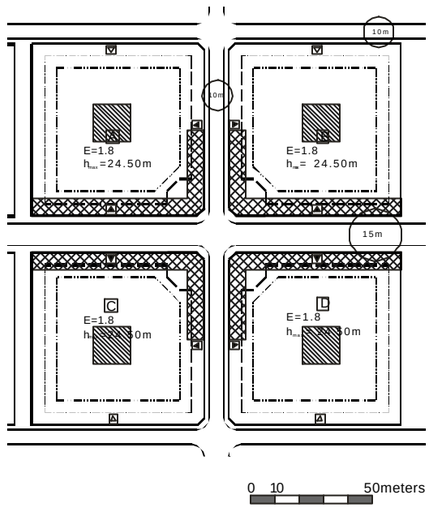
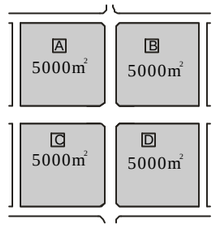
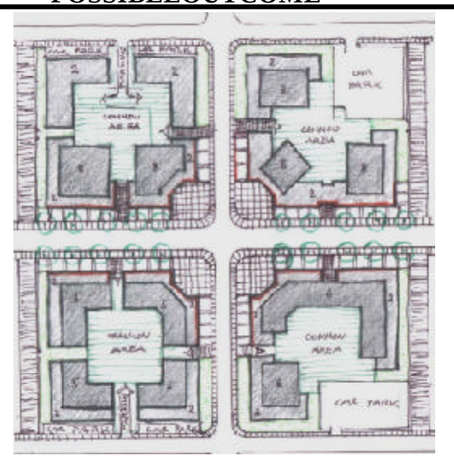
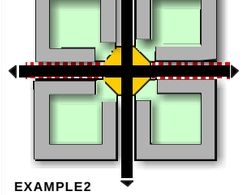
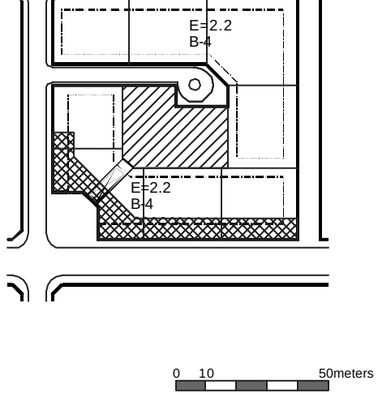
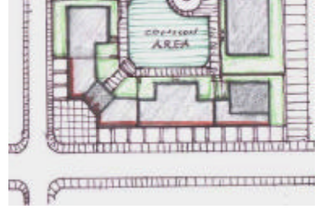
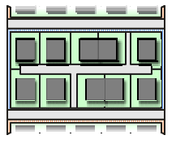
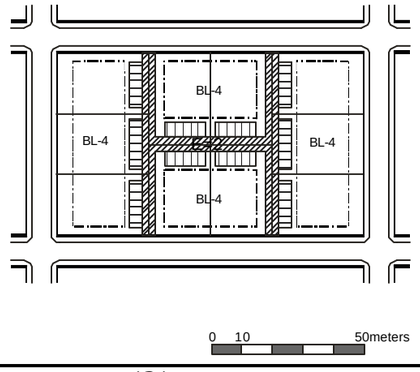
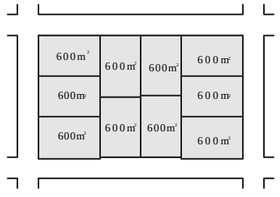
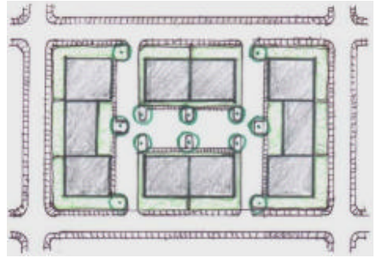
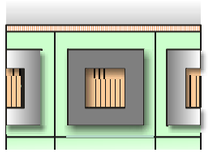
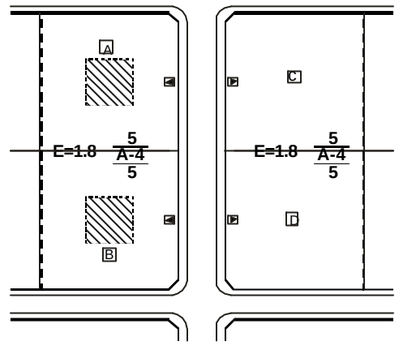
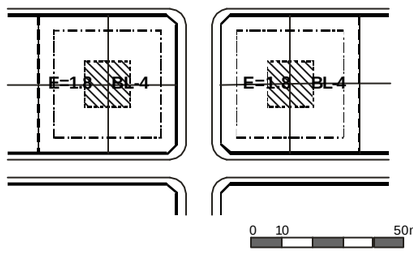
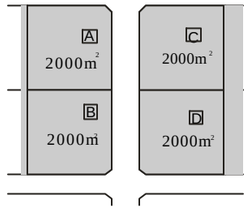
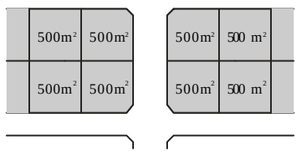
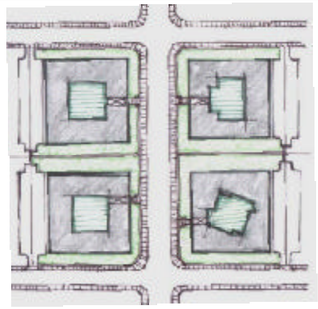
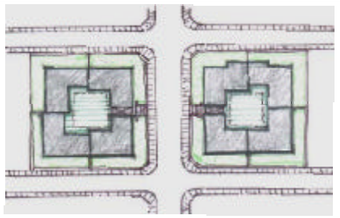
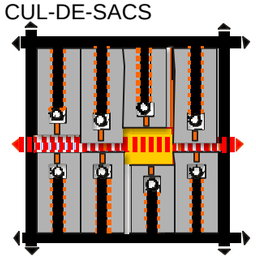
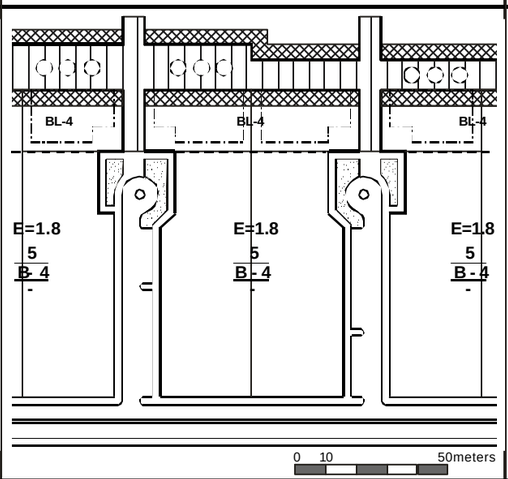
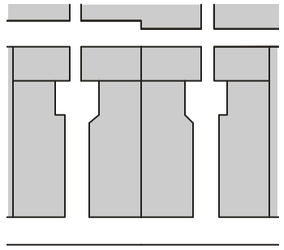
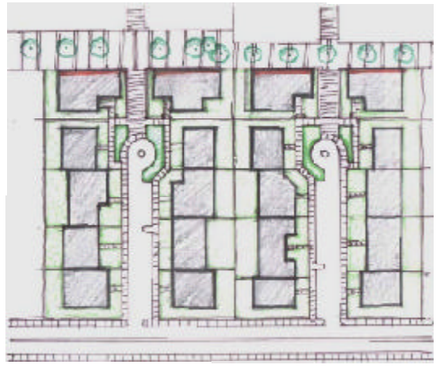
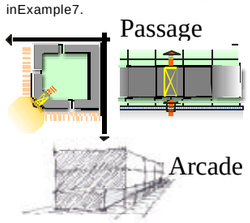
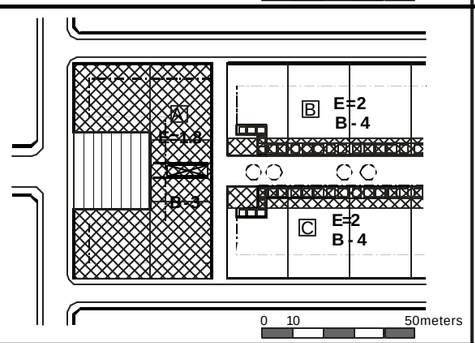
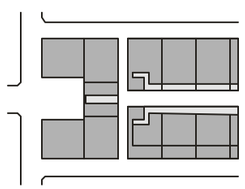
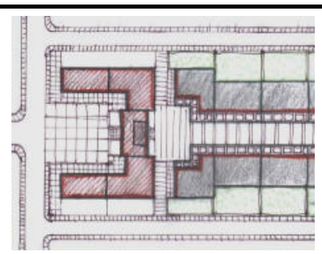
	SPATIALTYPES	PLAN DOCUMENT	LEGEND& PLANNOTES	PROPERTYPATTERN	POSSIBLEOUTCOME	DESCRIPTIONS (advantages & disadvantages)
CLUSTER HOUSING	CLUSTERHOUSING inSINGLEPROPERTY atURBANBLOCKSCALE  **EXAMPLE1** Thepossibilitiesforcontrolofthe developmentsaturban blockscaleis investigatedinthisexample.Sucha controlisnecessary **I.** toestablishclearlyandstronglydefined semiprivateareasthroughmass-space organisation	 	LEGEND Neccesaryfacadeline Setbacklinefor 1and2.floors Setbacklinefor 3.andupperfloors Inner-blocksetbackdistance Pedestrianentranceintoparcel Parkingentranceintoparcel Commercialuseatfirstfloor PLANNOTES 1.Inurban-blocksA,B,CandD; For1.and2.floors;E=1 For3.to 8.floors;E=0.8 TotalE=1.8 2.Therecannotbeconstruction insidetheinnersetbackline andthisareacannot beusedforparking. 3.Theareasbetween sidewalksandsetbackdistances cannotbeseparatedbywalls inthepartsdesignated ascommercialuse.	 Morethanonebuildingsinsingleparcel 25th articleofthelawallowsconstructingmorethanone buildingonconditionthatsetbackdistancesdefinedinthe 18th articleofSDRareprovided.Thesamearticleallows alsotheconstitutionofflatownershipinanurbanblock throughunificationofplotsincasethedemandof landowners.Thus,thecollectiveconstructionaturban-blockscalebecomespossible.Thisisafrequentlyused developmentmethodbycooperatives. Insuchdevelopments,sizeandshapeofparcelsor urban-blocksandtheir constructiondensityshouldbe determinedappropriatelytoformaclusteranditscommon space.Inotherwords,propertypatternandconstruction conditionsshouldbebasedonmass-spacestudiesfor clusterhousing.	 Underthesameconstructionconditions,itispossibleforeachcluster tohaveadifferentmass-spaceformationwhileoverallorganisationof thesiteandcleardefinitionofpublicspacesandtransitionalzonesare beingachieved.Therefore,decisionframeofindividualdesignerscan bemadeaunitedwholewithoutrestrictingtheirflexibilityexcessively.	**ELEMENTS CONTROLLED** — **TOOLSOFCONTROL** 1.theconstructiondensity; — -LCR(KAKS) 2.maximumheight; — -hmax 3.mass-spacerelation *distributionofmasses;* — -differentiationofLCRinthe3rd dimension -commercialusealongthe continuousfacades *sectionofbuildings;* — -distinctsetbackdistances accordingtoheights 4.pedestrianaccessandparking entrances; — -indicationoftherequiredsides forentrances 5.thezonesallocatedforcommon useofcluster; — -innerblocksetbackline 6.thezonesallocatedaspublic space; — -necessaryfacadelinesand setbackdistances **ADVANTAGES** — **DISADVANTAGES** **I.** Existingtoolsofthedevelopment legislationgivetheopportunitytocontrol mass-spaceorganizationofthelarge developmentsinsingleproperty. **II.** Thesetoolscanbeusedforspecific purposespeculiartocertainurbanblocks bydesigncodesthataredefinedin"the plannotes"orin"theplanreport"asa supplementarydesigndocument. **III.** Flexibilityforindividualdesigner; whilethecriteriafortheoverralldesignof siteisbeingensured,itisalsopossible toleaveflexibilityforthearchitectin developmentsaturban-blockscale. **I.** Ifconstructionconditions arenotdeterminedclearly andadequatelyanddegree offlexibilityisnotcontrolled properly,theflexibility providedtoindividual designersmaycauseto appearundesiredoutputs duringtheconstruction stage inrespectto either formationofeachclusteror overallformationofsite
CLUSTER HOUSING	CLUSTERHOUSINGfor MULTI PROPERTY SMALL-SCALE DEVELOPMENT  **EXAMPLE2** Inthedevelopmentplanning,semiprivate spaces,likeasclusterhousing,isnotused generally,especiallyinsmall-scale development.Designimplicationsofthe legaltoolsdonotsuggestsemiprivate spacesaturban-blockscaleforsmall-scale development. Aimofthisexampleistoevaluatethe legislationinrespecttothepossibilitiesfor designingclustersinsmall-scale	 	LEGEND Setbackline "Thecommonparcel thatwillbeusedcollectively" Passagewayto commonparcel Commercialuseatfirstfloor PLANNOTES 1. Therecannotbeanyconstruction in"thecommonparcel"; theresidents ofsurroundingbuildings will useitcollectivelyasopenspace 2.Inthepreparationofallotmentplan "thecommon parcel"willbeshared tothesurroundingparcels and registeredas commonpropertyoftheseparcels.	 Multiparcelssurroundingacommonparcel Propertypatternisappropriatetosmall-scaledevelopment. Sizeofparcelsaredeterminedabout500-600m².Insuch developments,sizeandshapeofparcelsandurban-block determinesdirectlytheformationbuildingsandsemiprivate-commonspaceofcluster. Intheonehand,designofpropertypatternshouldbebased ondesignofspatialpattern.Ontheotherhand,inthedesign ofspatialpattern,existingcadastralpatternshouldbetaken intoconsideration.Itmakesmoreimportanttocoordination betweenplannersandcartographersatallotmentplanstage. Ownershipstatusofcommonareaofclustersisa problematic.Subdivisionofaparcelinthemiddleofan urbanblockandthesituationofcommonparcelinwhich constructionrightofaprivatepropertyiscompletely restrictedarenotsuggestedinthelegislation	 Smallnessofparcelsrestrictsthedecisionframeofarchitectsand theinflueenceofplannersintheformationofspacebecomes greater.Sincetheclusterofsmallparcelsisformedasa combinationofmanybuildingsdesignedbedistinctdesigners,itis hardtoachieveaunityofarchitecturalstyles. Therefore,thecollaborationbetweenplannersandarchitectsin designofspatialpatternandinpreparationofsupplementary architecturalcodesasapartofplannotesandreportbecomes evenmoreimportantinsuchdevelopments.	**ELEMENTS CONTROLLED** — **TOOLSOFCONTROL** 1.theconstructiondensity; — -LCR(KAKS) 2.maximumheight; — -maximumnumberoffloors 3.mass-spacerelation — -determinationofbuildingorder as"attached" -determinationofproperty pattern 4.pedestrianaccessandparking entrances; — -cul-de-sacforvehicular entrancetocommonarea -passagewayforpedestrian underthecornerbuilding 5.thezonesallocatedforcommon useofcluster; — -determinationofasharedparcel ontheplanandplannotes 6.thezonesallocatedaspublic space; — -landallocationforpublicsquare asapartofDOP. **ADVANTAGES** — **DISADVANTAGES** **I.** Existingtoolsofthedevelopment legislationgivetheopportunityto controlmass-spaceorganizationof thesmall-scaledevelopment. **II.** Itgivesthepossibilityinsmall-scaledevelopmenttoprovide semiprivatespacesaturban-block scale. **III.** Itprovidesforplannersthe opportunitytodirectandstrict controloftheformationofcluster **I.** Thedevelopmentlegislation hassomeweaknessesin providingtoolstodesigncommon spacesinurbanblocks. Eitherthe ownershipstatusofcommonarea ofclustersortheupkeepofthese areasisnotclearintheframeof thedevelopmentlegislation. **II.** Theflexibilityofdecisionframe so creativityofarchitects is restrictedinsmallplots.
COMMON CAR PARK	COMMONCARPARKfor MULTI PROPERTY SMALL-SCALE DEVELOPMENT  **EXAMPLE3** Inthetypicaldevelopmentpatternof apartments,sincecarparksareprovided separatelyineachparcel,theareaisnot usedefficiently. Aimofthisexampleistoexaminethe possibilityforcreatingcommoncarparksin theurban-blocksconsistofsmallparcels.	 	LEGEND Setbackline "Thecommoncirculation area for carparking" Theareaforcarpark PLANNOTES 1.Thepartsof parcelsindicatedas "commoncirculationareaforcarpark" cannotbeseparatedwithwalls. Theseareaswillbeused collectivelytoaccessparkinglots.	 Multiparcelssurrounding a c ommonareal Propertypatternisappropriatetosmall-scale development.Sizeofparcelsaredeterminedabout 600m.Thecommonareaforcarparkisformedby setbackdistances,avoidingfromtheproblemof allocatingaseparateparcelforthecommonarea.The commonareaisindicatedontheplandocumentand definedinthelegendandplannotesasthearea	 Theshapeandsizeoftheurbanblockanditsparcelsbecomes morecriticalandmorebindingondesignofcommonspaceand theflexibilityfordesigningthespatialformationofcluster decreases.Smallnessofparcelsrestrictsthedecisionframeof architectsandtheinfluenceofplannersintheformationofspace becomesgreater.	**ELEMENTS CONTROLLED** — **TOOLSOFCONTROL** 1.theconstructiondensity; — -LCR(KAKS) 3.mass-spacerelation — -determinationofbuildingorder as"blockorder" -determinationofproperty pattern 4.pedestrianaccessandparking entrances; — -indicationofcommoncirculation areaforcarparksontheplan document 5.thezonesallocatedforcommon useofcluster; — -determinationofcommonarea bysetbackdistancesandplan **ADVANTAGES** — **DISADVANTAGES** **I.** Byproducingsemiprivateareaat urban-blockscaleonprivate properties,itavoidsfromthe problemsthatappearinsubdivision ofcommonareaasadistinctparcel **II.** Itisappropriatetoprovide semiprivatespacesintypicalsmall-scalepattern. **I.** Sincetheshapeandsizeofthe urbanblockanditsparcels becomesmorebindingondesign ofcommonspace,theflexibility fordesigningthespatialformation ofclusterdecreases. **II.** Sincetheownershipofthe commonareaisnotcommon,it maybemoredifficulttocontrol productionandupkeepofthe commonarea.

Figure 4.22. *Transitionalzonesinthe developmentplanning-2*

	SPATIALTYPES	PLAN DOCUMENT	LEGEND & PLAN NOTES	PROPERTYPATTERN	POSSIBLEOUTCOME	DESCRIPTOINS (advantages & disadvantages)
COURTYARD HOUSING	COURTYARD APARTMENT  Courtyardapartmentwithitssemiprivate zoneandsurroundingresidentialunitscan beconsideredasasmallclusterthat formedasablock.Twodifferentsituations arediscussedforcourtyardapartments. **EXAMPLE4. Courtyardhousingin singleproperty** Twoalternatives accordingtoformationof cluster aretakenupinthisexample.The firstalternative,whichisusedinparcelsA andB,includesstrictcontrol.Thesecond one,whichisusedinparcelsCandD, includesmoreflexiblecontrol. **EXAMPLE5. Courtyardhousingasa combinationofmultiproperty.** Designofcourtyardapartmentsinsmall-scaledevelopmentisdiscussedinthis example.	  	LEGEND Inner-blocksetbackdistance Pedestrianentranceintoparcel PLANNOTES 1.InparcelsA,B,CandD;buildings willbedesignedascourtyardapartment. 2.InparcelsAandB;therecannotbe constructioninside theinner-blocksetbackline andthisareawillbedesigned ascourtyardoftheapartment.. 3.InparcelsCandD,minimum 12%oftheparcelarea willbeusedascourtyard. - Frontsetbackdistance 4. A-4 Constructionorder-Numberoffloors - Sidesetbackdistance LEGEND Setbacklinefor 3.andupperfloors Inner-blocksetbackline PLANNOTES 1.Therecannotbeconstructioninside theinner-blocksetbacklineand thisareawillbeusedcollectively asthecommoncourtyardofapartments. 2.Parcelboundariescannotbeseparated b y wallsinsidetheinnersetbackline.	 Courtyardapartmentinsingleproperty Insuchdevelopments,sizeandshapeofparcelsor urban-blocksandtheir constructiondensityshouldbe determinedappropriatelytoformareasonablesized courtyardinsidetheparcel.Theareaofparcelsare determinedaslargerthanatypicalapartmentparceland smallerthanaclusterparcel(example1).Itcanbe consideredasasmallsizedcluster.  Courtyardapartmentascombinationof smallparcels Theareaofparcelsaredeterminedappropriatetosmall-scaledevelopment,inwhichoneapartmentisconstructed inoneparcel,andthecourtyardisformedastheir combination.	 InparcelsAandBwherethesize,dimensionsandlocationofcourtyardis controlledbysetbackdistances,theformofcourtyardisprescribedintheplan. Ontheotherhand,InparcelsCandD,onlytheminimumareaofcourtyardis prescribed.Inthiscondition, thecourtyardcanbeconsideredasa performancecriteriaintheplannotes. Thus,thearchitecthasmoreflexibility indesigningtheformofcourtyard.  Sincethecourtyardisacombinationofdifferentapartments,itsformappearas aresultoftheformationprocessofdifferentbuildings,soitcanbeconsidered asacompositionalformofdifferentarchitects.Inordertoachieveaunityforthe courtyardintermsofappearanceandstyle,itisnecessarytopropose supplementarydesignguidesintheplannotes.	**ELEMENTS CONTROLLED** — **TOOLSOFCONTROL** 1.theconstructiondensity; — -LCR(KAKS) 2.maximumheight; — -maximumnumberoffloors. 3.mass-spacerelation — -determinationofbuildingorder as“detached” -setbackdistances 4.pedestrianaccess; — -indicationoftherequiredsides forentrances. 5.thezonesallocatedforcommon useofblock; *-forparcelsAandB;* — -controlofthearea,locationand dimensionsofcourtyardbyinner-blocksetbacklines. *-forparcelsCandD;* — -controloftheminimumareaof courtyardbythedefinitionofits ratiotoparcelareainplannotes **ADVANTAGES** **I.** InparcelsCandD,controlof courtyardbyaperformance criteriaratherthanaprescription asinparcelsAandBleavesmore flexibledecisionframefor individualdesigners. **DISADVANTAGES** **I.** Prescriptionofcourtyardby setbackdistancesinparcelAandB ensureadefiniteformdesignedby planner,whereasitrestrictsthe flexibilityofindividualdesigner. **ELEMENTS CONTROLLED** — **TOOLSOFCONTROL** 1.theconstructiondensity; — -LCR(KAKS) 2.maximumheight; — -maximumnumberoffloors. 3.mass-spacerelation — -determinationofbuildingorder as“blockorder” -setbackdistances. 5.thezonesallocatedforcommon useoftheapartments; — -controlofthearea,locationand dimensionsofcourtyardbyinner-blocksetbacklines. -restrictionoftheseparating wallsinsidethecourtyardarea **ADVANTAGES** **I.** Theformationofcourtyardasa compositionofdifferentbuildings maycreateaspatialvariety **DISADVANTAGES** **I.** Thevarietyofcompositionalform maycauselackofspatialunityof courtyard.
CUL-DE-SAC	SUPER-BLOCK COMPOSED OF CUL-DE-SACS  **EXAMPLE6.** Althoughthelegislationdoesnotallowto designcul-de-sacthroughplanchanges, thereisnorestrictionaboutcul-de-sacfor newlyplannedareas.However,cul-de-sac asadesignelement hasnotbeenused effectivelyinTurkey.Therefore,theuseof cul-de-sacindevelopmentplanningis evaluatedinthisexample.	 	LEGEND Setbackline Commercialuseatfirstfloor Park PLANNOTES - Frontsetbackdistance B-4 Constructionorder-Numberoffloors - Sidesetbackdistance	 Super-blockwithcul-de-sac on smallmultiproperty Theparcelsthatformthecourtyardandtransitionalzone attheendofcul-de-sacsaredeterminedontheplan. Subdivisionofremainingpartsofurban-blocksareleftto stageofallotmentplan. Althoughcul-de-sacasakindofroadisobtainedasapart ofDOPwiththeapplication18tharticleofthelaw,its territorialfunctioncanbeconsideredasatransitionalzone	 Superblockcomposedofcul-de-sacsandothercombinationsincludingcul-de-saccanbeadaptedtosmall-scaledevelopmentandthesecombinationscanbe usedtocreateasystemofcourtyardsandsquaresthatestablishaterritorial hierarchyinasmall-scale,grid-ironpatternofdevelopment.	**ELEMENTS CONTROLLED** — **TOOLSOFCONTROL** 1.theconstructiondensity; — -LCR(KAKS) 2.maximumheight; — -maximumnumberoffloors. 3.mass-spacerelation — -determinationofbuildingorder as“attached” -setbackdistances -formationofpropertypattern 4.Semiprivatespaceallocatedfor commonuseofcul-de-sac; — -cul-de-sacobtainedasapartof DOP. 5.publicspaces; — -formationofpropertypattern -pedestrianandvehicularroads asapartofDOP **ADVANTAGES** **I.** Cul-de-saccanbeadapted easilytotypicalsmall-scale developmentpatternanditcanbe appliedwithoutmuchdifficulty eveninhighdensity developments. II.Combinationsofcul-de-sac allowsmanyalternativespatial organisations. **DISADVANTAGES** **I.** Ifthelengthofcul-de-sacis determinedexcessivelyoritis designedasadead-end,the accessibilityofsitedecreasesand itcannotwork efficiently in emergencytimes.
PASSAGES & ARCADES	**EXAMPLE7.** Althoughpassageandarcadehaveboth definitionsinthestandarddevelopment regulation,theyareusedrarelyinplans. Passageandarcadeistakenuptogether inExample7.  	 	LEGEND Setbackline Passage Commercialuse Arcade PLANNOTES 1.IntheurbanblockA,maximumnumberoffloors is3exceptftheparcelthatisindicatedwithpassage. Theareathatisallocatedtopassageforpublicuse canbeusedasanextrafloorattheftopofthe buildinginthis parcel. 2.IntheurbanblockCandD,buildingswillbe designed asarcadedinaccordancetothe dimensionsdeterminedinthestandarddevelopment regulation.Theareaallocated toforpublicuseis notincludedtoconstructionareasoitcanbeusedat anotherpartoftheparcel.	 Theareasindicatedwithgrayareallocatedfor passagesandarcadesdependingon “servitude”forpublicuseinaccordanceto 14tharticleoftheLawno.3194.Inother words,passageandarcadeassemipublic spacesareobtainedonprivateproperty.	 Intheformationofpassage,individualdesignershouldhaveflexibility whereas,intheformationofarcadewhichisanoutcomeofthecompositionof manybuildingsitisnecessarytocontrolthedetailsliketheformsofcolumns anddistancebetweenthemthroughsupplementarydesigncodesanddrawings intheplannotes.	**ELEMENTS CONTROLLED** — **TOOLSOFCONTROL** 1.theconstructiondensity; — -LCR(KAKS) 2.mass-spacerelation — -“attachedorder” -setbackdistances -formationofpropertypattern -allocationoftheareaofpassage forpublicuse 3.passageandarcadeas semipublicspaces — -allocationoftheareaofarcade forpublicuse 4.publicspaces; — -formationofpropertypattern -allocationofroadsandpublic squareasapartofDOP **ADVANTAGES** **I.** Thetoolsoflegislationare capabletocontroltheformationof passagesandarcades. **DISADVANTAGES** **I.** Constructionofpassageand arcadenecessitatemoresensitive controlofmunicipalityin implementationstage.

CHAPTER 5

CONCLUSION

The starting point of this study was the homogenization and monotonization of urban space and loss of diversity as a frequent criticism for the planned areas in Turkey. Actually, this criticism is not only peculiar to cities of Turkey. As noticed in Chapter 2, homogenization and loss of diversity is a major emphasis of postmodern critique against modernist urban design approaches in the western cities. Modernist urban planning and design, rejecting the traditional environments that contain congestion, illness and dangers, aimed to create a modern city in which everyone benefits equally from "sun, space and greenery" in a standardized, homogeneous geometric setting. Instead of street, they advocated high-rised blocks surrounded by extensive green areas, mainly in dispersed suburbs. Zoning regulations and master plan were the primary tools of the modernist comprehensive planning, and urban design was considered as an "architectural" product design as finalization of master plan decisions. Therefore, there is a boundary relation between planning and architecture and it is controlled through urban coding.

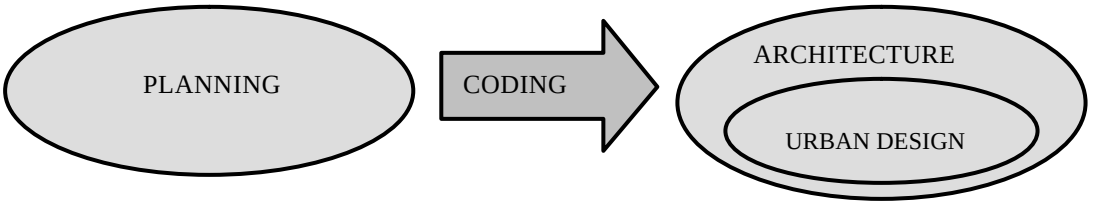


Figure 5.1. The relation between planning, design and coding in the modernist urban design

Whereas in the conditions of neo-liberal period after 1970s, flexible strategies has prevailed instead of comprehensive planning assuming total control of the state on urban space. Thus, urban design emerged as a new concept and field between urban planning and architecture to compose the changing design approaches with new flexible, strategic approaches of planning. Urban coding gained a new role with this redefinition of the relation between planning and design.

From now on urban coding would function as an integrating mechanism between planning and design processes in western countries. Design codes are prepared in a hierarchy, working from district wide to local scales, and from plan strategies, objectives, and principles to supplementary design guidance. Development plans are not documents showing the "end-state" as in the traditional physical planning but, it is an umbrella or coordinating framework for strategic frame drawn by structure plan, design policies and all kinds of supplementary guidance.

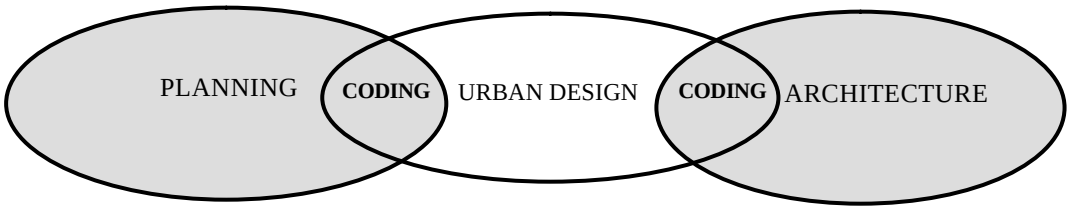


Figure 5.2. *The relation between planning, design and coding in the postmodernist urban design*

Supplementary design guides are the main innovation of contemporary urban design and they are the specifications of design policies and general aim of them is to direct individual designers to using certain criteria, while leaving flexibility for their decision environment. For this reason, performance criteria, which provide a range of solutions or basic principles to be performed by individual designers is used, rather than prescriptive codes which dictate a certain way of solution to individual designers. Thus degree of flexibility that contains the tension between diversity and standardization is a critical point in design control and the source of the many debates because weak control may lead to loss of overall effect of urban space.

As mentioned by Madanipour (1996;161), debates about design control has several dimensions. At one level this debate is a part of the tension between architects and planners about definition and method of urban design, at the heart of which lies the tension between freedom of expression versus public control. The focal point of the debate may be private interest as distinct from public interest. Within an even broader framework, the debate relates the tension between public domain and private domain and the contradiction between exchange value and use value. These contradictions has made the construction of urban design as a public policy and collaboration of planners and architects even more important in order to achieve a balance between public control and private interest, between the demands of developers and users, between individual expression and overall harmony, or between diversity and homogeneity.

Therefore, transformation of prevailing development control systems was a part of the whole transformation of the relation between planning, coding and design. Contemporary urban coding has been constructed as a mechanism in accordance with changing design principles from modern to postmodern design approaches.

Urban design manifesto of Jacobs and Appleyard reflects well the basic characteristics of this transformation. In their manifesto, they acknowledge that the Garden City of Ebenezer Howard have produced some pleasant communities, but dismiss them as more like suburbs than “true cities”. Their manifesto suggests an approach “more subtle and humane than the CIAM for development and more truly urban than Howard’s approach.” They “favor reasonable standards but oppose excessive prescriptions that destroy the texture of urban life”. They “relish some of the disorder that makes urban life enjoyable, including noise, smell and mixed uses” (Jacobs and Appleyard; 1987). In this context, they emphasize five necessary characteristic of urban fabric. These are “livable streets and neighborhoods; some minimum density of residential development as well as intensity of land use; an integration of mixed activities – living, working, shopping; a spatial layout in which buildings define public space (as opposed to buildings that sit in space); and

piecemeal growth of many separate, distinct buildings with complex arrangements and relationships (as opposed to few large buildings)" (Jacobs and Appleyard, 1997).

If we turn back at this point to the problem of homogenization of urban space in Turkey, we face with a completely different spectacle. Although the planning system, planning and design approaches and its legislative structure has adapted from Western countries in a similar path, development process is resulted with a different urban form. In Turkey, rather than a result of the reflections of a prevailing design approach and a zoning control on urban space, the homogenization of space is an outcome of development planning practice in which the task of readjustment of ownership according to conditions of space production has appeared as the major design criterion. In other words, urban design is reduced to land readjustment in the frame of development plans.

The fragmented property pattern and small-scale development in the conditions of a developing capitalist economy, in which the source allocated for urbanization is low, lead to inflexible conditions in the planning and design process and weak control over development of cities. Planning institution and its legal frame in Turkey has displayed a contradictory progress against these economic conditions. On the one hand it has tried to overcome these problems and on the other hand, it is adapted to these conditions.

Consequently, although the development legislation in Turkey has been constructed as a total control system, its implementation or tools that are used to shape urban space has been deprived of the power that achieves such a control. Therefore, modern urban design approach in the form of Western cases could only be implemented in limited places. In this manner, urban design in Turkey has not been a large-scale architectural activity as in the modern period of western countries but it has been a task that is realized in the frame of development plans (Figure 5.3). Whereas, this task is focused on the land readjustment rather than spatial design issues. So modernist-functionalist approach has never dominated urban space in Turkey.

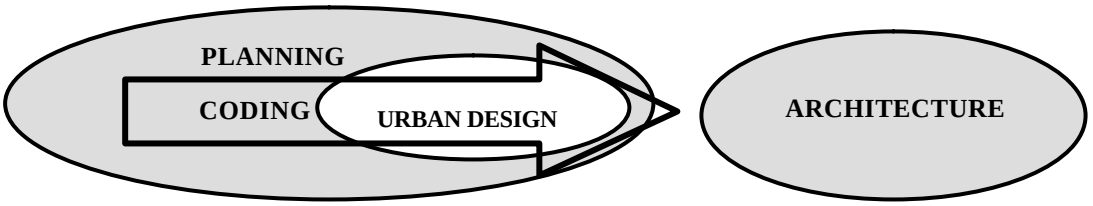


Figure 5.3. *The relation between planning, design and coding in the development planning system of Turkey*

On the other hand, as emphasized by Günay (1999b; 233), the Turkish city is living all the chaos of property relations and in many instances, it resembles the "postmodern" Mediterranean city, which has not face the problem of gentrification of inner urban areas and which has a compact structure containing mixed of functions sustained by a large informal sector. However, in the Mediterranean city a rational coordination of property relations has been achieved, both among the individuals, and between the public and private spheres of domination. The Turkish society is still living problems of property disputes.

Squatters are purely developments designed bottom to top and constructed by their inhabitants. It has not provided the democratic, enjoyable spaces aimed by postmodern theorists, although they are full of individual expression and diversity that postmodernist theorists favor.

In addition, some concepts that are valued by contemporary-postmodern design approaches have appeared as the problems of planned areas in cities of Turkey. The street has not been abandoned as in the modernist western suburbs and the spatial layout is formed by public spaces defined by continuity of buildings rather than buildings sit in space, whereas the street layout, building order and buildings are uniformly designed. They have a dense, compact residential pattern integrated with mixed functions like working, shopping, living as a result of the weaknesses in the implementation of zoning controls. Besides, there is a piecemeal, incremental development pattern of many separate, distinct buildings in small properties rather than few large buildings but they have not been designed with complex arrangements and relationships.

Certainly, through this superficial comparison, we cannot conclude that urban space in Turkey is the space appreciated by contemporary urban design. Nevertheless, it can be said that we don't have to design cities that have high spatial standards, low densities, giant structures, large open spaces and recreational areas, strict separation of functions, and extensive streets or pedestrian ways. These are not the inevitable conditions for successful urban environments as claimed by many contemporary urban design theorists. Furthermore, a genius design may turn some of these problems into opportunities. Therefore, practical difficulties and restrictive conditions of development planning cannot be put forward as sufficient excuses to explain the monotonous urban environments that we complaint about.

The determination of property and production relations on the formation of urban space is emphasized in the study. The issue of how these relations will be changed is beyond the arrangements in the legislation and it is the subject of a political struggle that includes the whole society. Whereas, as mentioned in previous chapters, in the frame of existing legal frame and planning practice, influence of planners in the formation process of urban space cannot be disregarded. In other words, planners have an important responsibility in the formation of the unsatisfactory outcomes of development plans.

As explained in Chapter 2, development legislation provides important tools to control urban form and it leaves an extensive flexibility for planners through its open-ended definitions. However, generally, planners have not evaluated this initiative area because of their weak manner in terms of urban design. Urban design approach that puts human needs and man-environment relationship to the core of planning process has not been a part of the planning tradition in Turkey and such a culture of design have not developed sufficiently. Actually, this weakness is a part of the urban culture of the whole society. As stated by Günay (1997;57), although our historical cities have a high degree of aesthetic and place qualities, they reflect the characteristics of rural rather than urban in terms of the western cities and our society was acquainted with urban culture in the last 100-150 years. It is a basic reason of the design problematic that we face in different areas of our cities.

Therefore, the typical development planning approach is not only a result of space production system but also a result of the design attitude of planners. And the ways of utilizing opportunities and flexibilities of the development legislation are not forced in this approach. If the tools provided by the development legislation are used in an approach that bring the considerations of urban design into fore, it might be possible to come out with more satisfactory environments even in the restrictive conditions of small scale development.

In this respect, in Chapter 4, it is tried to examine the capacity of legal tools in the control of urban form and design of specific spatial types at meso scale (at level of 1/1000 scaled implementation plan) according to a certain design criterion that is the need for a clear territorial hierarchy of space. Territorial hierarchy of space is not only necessary for satisfaction of privacy and safety needs but also for the creation of alternative spatial organizations that support the social interaction and richness of urban life. In this examination, it is seen that the development legislation provide efficient tools for design of transitional zones which are ambiguous elements both in terms of territorial definition and property structure.

Through control of mass-space relation, construction density and building order with the tools such as LCR, FAR, setback distances, land readjustment methods etc. together with plan notes, it is possible to create many spatial types that can be used for the organization of territorial hierarchy. There are different possible ways to use these tools for control of individual designers at different degrees of flexibility. Moreover, where the legal tools are not sufficient, plan notes can be used as a supplementary design tool in the frame of the law. Although, there are some problems for the design of some spatial types in multi property small-scale development, there are important opportunities to design alternative spatial layouts in the frame of development planning. Whereas, planners do not evaluate these opportunities in many development plans so these alternative layouts are rarely produced in our cities.

If such examinations are multiplied for other design criteria, it can be seen that the legislation provides such opportunities for many other design issues at different

scales of planning process. These criteria can be performed either as general design policies and objectives of master plans or specific design guides of implementation plans. Therefore planners have the initiative for controlling urban form at different scales and different degrees of flexibility.

On the other hand, the legislation has weaknesses in encouraging and directing planners and local governments to achieve certain design objectives and policies. It is restricted with the definitions about the tools of implementation. It is necessary to bring definitions about aims and principles of urban design in the development legislation and these should comprehend the continuity of design control hierarchy.

The master plan should be defined as a strategic plan that brings general policies rather than prescriptions about the formation of space. It is also important to encourage and support municipalities to prepare their local bylaws according to their peculiarities with the collaboration of planners and architects. The establishment of regional or local committees composed of design professionals to provide design advice for municipalities and developers as in some European countries.

The tools that control the arrangement of private ownership mainly the 18th article of the law and its bylaw should also be supported by additional tools such as transfer of development rights, incentive zoning, freeze of land prices in special project areas to prevent speculation and so on. Moreover, the allocation of common parcel of a cluster in small-scale development has some problems. Some rules may be defined to overcome these problems as shown in Chapter 4. Another problem is that the 18th article provides the consolidation of property in a certain form. However, the further transformation of these consolidated patterns is not foreseen in the legislation.

In addition, the existing implementation plan may be formed as an urban design plan that is supported by supplementary design guidelines through plan notes and plan reports and additional visual documents about various design issues.

These suggestions summarized above can be increased according to various topics. The general aim of them should be the construction of a design control hierarchy that integrate urban design with the whole of planning process from upper scales to lower scales, and to provide the collaboration of planners and architects in the formation process of urban space.

In this study, the development legislation is taken up as a set of design tools and the procedural aspects of urban design process and its tools are evaluated rather than the design issues and design criteria. On the other hand, it is emphasized that the legislation should not be seen only as a set of distinct tools but it should be seen as a whole with its tools and the design principles or objectives that define how these tools will be used according to which criteria. Therefore, the content of these aims, principles or criteria of contemporary urban design may also be evaluated in the frame of the development legislation and for the conditions of Turkish cities as a distinct study.

Moreover, such evaluations should not be made only in theoretical level but also for specific spatial types as in the fourth chapter of the study, where some hypothetical cases are taken up in respect to control of territorial organization of space. Such examinations may be multiplied in another study for different issues and criteria of urban design. Moreover, examination of real cases instead of hypothetical cases as a further study may provide better results to understand the role of development legislation in the formation of urban space.

As a result, the necessity of investigating our planning tradition and practice in respect to the design problems of our cities is evident and in this study, it is tried to provide one more step in this way.

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APPENDIX -A- GLOSSARY

ENGLISH	TURKISH
Development Program	*Imar Uygulama Programi*
Allotment Plan	*Parselasyon Plani*
Implementation Plan	*Uygulama Imar Plani*
Building Order	*Yapi Düzeni*
Common Share of Adjustment	*Düzenleme Ortaklik Payi*
Common Share of Public Services	*Kamu Tesisleri Ortaklik Payi*
Development Bylaw	*Imar Yönetmeligi*
Development Legislation	*Imar Mevzuati*
Development Plan	*Imar Plani*
Development Area Plan	*Çevre Düzeni Plani*
Floor Area Ratio (FAR)	*Kat Alani Katsayisi (KAKS)*
Homogenization of Urban Space	*Kent Mekaninin Aynilasmasi*
Lot Coverage Ratio (LCR)	*Taban Alani Katsayisi (TAKS)*
Master Plan	*Nazim Imar Plani*
Ministry of Reconstruction and Settlement	*Imar ve Iskan Bakanligi*
Plan Amendment	*Plan Degisikligi*
Servitude	*Irtifak Hakki*
Standard Development Regulation	*Tip Imar Yönetmeligi*
Subdivision	*Ifraz*
Territory	*Egemenlik Bölgesi*
Discretionary Planning	*Takdirci Planlama*
Unification	*Tevhid*