

**Investigating the Effects of Nodes and  
Landmarks  
In City Planning Practice**

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## **ABSTRACT**

This thesis deals with the analysis of landmarks that are active elements in the formation of ordered urban spaces, in helping the creation of more qualified and identified cities and in increasing the quality of the living environment. It stresses why the landmarks are important for a city's inhabitants and its visitors and aims to identify certain physical and social elements, which play role on the constitution of landmarks.

Human beings and cities have strong interactions, relations and connections with each other. Man has some impressions and impacts from the city that he lives in or that he visited. These impressions are images that are collected from parts of cities. Visual urban elements play an important role on the formation of the impressions that he has. Social, economical and cultural facts are other active elements that effect human beings just like visual urban elements. The most important thing here is, all these experiments and impressions he has, are influenced from the urban environment and its visual elements.

This study sees one of the functions of the planner as; lessening the effects of the unpleasant cities that we live in, with the positive effects of some urban elements like landmarks. Looking from this point of view, the first aim of this study is to examine the development and the usage of landmarks throughout history, the second is to define and classify landmarks and the third is to examine and discuss their use in the cities for the betterment of cities throughout history considering the planning principles.

## ÖZ

Bu tez genel olarak düzenli kentsel mekanların oluşumunda, daha nitelikli ve tanımlı kentlerin yaratılmasında ve yaşam çevrelerinin kalitesinin artırılmasında aktif rol oynayan 'nirengi noktalarının' analiziyle ilgilenmektedir. Nirengi noktalarının kentte yaşayanlar ve ziyaretçiler için önemini vurgulamaktadır. Bu çalışma, nirengi noktalarının belirlenmesinde rol oynayan fiziksel ve sosyal etkenleri tanımlamayı amaçlamaktadır.

İnsanoğlu ve kentler birbiriyle güçlü bağlarla bağlıdır ve iletişim içindedirler. İnsan yaşadığı veya ziyaret ettiği şehirlerden çeşitli izlenimler edinir. Bu izlenimler kent parçalarından toplanan imajlardan oluşmaktadır. Bu imajların ortaya çıkmasında, kentteki görsel öğeler insan algısı üzerinde etkin rol oynar. Görsel öğelerin yanı sıra sosyo- ekonomik ve kültürel etkenler de izlenimlerin oluşmasında etkin diğer faktörlerdir. Burada önemli olan, bütün bu deneyimler sonucunda yaşanan çevrenin edinilen izlenimlerin insan üzerinde bıraktığı etkidir.

Bu çalışma, yaşadığımız kentlerin olumsuz etkilerini, nirengi noktaları gibi bazı kentsel elemanların pozitif etkileriyle birlikte aza indirgenmesini plancının görevlerinden biri olarak görmektedir. Bu açıdan bakıldığında, bu çalışmanın öncelikli amacı tarih içinde nirengi noktalarının kullanımını ve gelişimini incelemek, ikincil amacı nirengi noktalarını tanımlamak ve sınıflandırmak üçüncü amacı da planlama prensiplerini dikkate alarak şehirlerin iyileştirilmesi için kullanımlarını tarih içinde incelemek ve tartışmaktır.

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# CHAPTER 1

## INTRODUCTION

### 1.1. Introduction

Landmarks have various effects on their surroundings or on the whole city macro form, they can be in the form of a sign, a sculpture, a structure or even a visual element in the urban pattern. It is known that the cities are changing, developing, enlarging day by day with the impacts of the technology, result in growing population and changing production relations. These changes result in variations in the city macro form or parts of cities in either horizontal or vertical dimensions.

Meanwhile the areas in the city core, where the landmarks are usually situated, get an unexpected demand that increases the land values. For this reason forces that expect to gain income from these areas, where the buildings stand, would like to demolish the buildings and create land in the city core. Usually, important historical buildings or some landmarks become a target and disappear overnight, in order to serve the aims of these forces.

These facts make it necessary to develop an understanding of planning that succeeds in preserving the city form that reflects every era of the city to its visitors. Having partial concentrated areas in a linear city form is only possible with the usage of landmarks that have orientating and formative properties during the process of forming urban structure.

It is seen necessary to study what is discussed here through history and in city planning practice in order to see its reality. Realization of the aims of this study is necessary in order to learn how these elements were organized, where they were situated, how they effected the cities during history and in the living cities of yesterday and today.

## **1.2. Definition of the Problem**

Lynch describes landmarks as 'major tree dimensional objects within civic space', which emphasis their quality of being prominent in urban space. From my point of view landmarks can be described as concrete speakers and attractive elements in various sizes, which reflect the community life.

Whatever the definition is, and whether a landmark is large or small in size, whether it is a building or non-building; a landmark is put there intentionally to serve different purposes. Human beings have in general two types of needs: physical and psychological. The efforts done on building landmarks are mostly derived from psychological needs, but in some cases they serve for physical needs as in the example of water elements or fountains.

Purposes of landmarks can be religious: these buildings are structures such as churches, mosques, pyramids, temples, ziggurats, which are prominent in the cities where they have been erected. These landmarks have the aim of giving religious messages to the people to serve their psychological needs. Another thing is, with these huge and enormous buildings they are also giving some clues about that religion: clues about how exalted that religion is.

Administrative institutions settle generally in buildings that attract attention at first glance and that are different than surrounding buildings and which are easily recognizable. This has the purpose of stressing the status of the administration and the ruler and stressing how powerful and wealthy the ruler and the government are. In some cases structures represents and explain the characteristics of the ruler and also of the governmental body: whether it is a judicious or a cruel, powerful or weak, successful or an unsuccessful one.

Some structures are constructed in order to commemorate a social event for the following generations. In other words human beings like to give some clues about the social structure of their times to the next generations with some elements that they imbued in the urban environment. So, social signs transfer and translate the urban lives of some different eras. Indeed having signs from the ancestors is a psychological support for the inhabitants.

Another usage of landmark buildings is much more intentional than the others. This is about usage of the environment's control function. Usually when strict social or governmental changes occur in a society, power holders tend to change the urban structure and use landmark buildings. These efforts aim at adopting the people easily to the new conditions.

Building huge buildings for some facilities can strengthen some urban facilities that are taken into consideration by the society. These buildings can be exaggerated for expressing the importance of that institution for that culture group. Usage of some elements reflects that era.

Landmarks, which are put up with the opportunities of the time of their construction sometimes cannot answer the demands of new generations. As an example Seven Wonders of the World were all great and marvelous buildings of

their time but they cannot be used now. So some important and complex buildings of yesterday may now be left to grow old and for deteriorate with the negative effects of time.

It is essential to preserve these buildings and signs, which are the cultural heritages from yesterday. Fundamental subject of research is: to investigate how it is possible to protect and preserve landmarks in present conditions of today. But this is not the theme and the aim of this study. This study is concerned with the present, and its aim is to investigate means of adopting the present landmarks, especially monumental buildings to the new urban form that is dictated by the existing needs and how to orientate the developing urban form by using these buildings as devices to achieve this goal.

### **1.3. Aim and Content of the Study**

The framework of this study consists of a detailed literature survey about the definitions and usage of landmarks through history. The purpose of this study is to determine the characteristics of landmarks and provide information on their effects to the urban layout.

The purpose of this effort is to underline the importance of buildings that act as landmarks in the urban environment. The knowledge of the importance of these elements in the cities will reinforce the efforts to preserve them. Planners and designers and indeed every member of a community, should understand and recognize the advantages and roles of landmarks, which help to order and to increase the value of the urban space.

The topic of 'landmarks' is a topic that had been studied randomly. It is usually accepted as one of the elements in the study of urban structure, but hasn't been taken into consideration in detail. This subject calls for a detailed study because it has a lot of different aspects other than its value as an urban element. At the same time, they represent prominent figures of the community of their time and are a reflection of the culture of cities of that time. Their effects will be discussed in terms of urban design principles as well as their social, psychological and cultural significance.

## CHAPTER 2

### CONCEPTUAL DEFINITIONS

#### 2.1. The Meaning of Landmarks (definition)

Landmark means an easily recognizable object in an urban environment, which marks a point. This word is composed of two words 'land' and 'mark'. 'Land' means a piece of earth, a portion of the earth's solid surface distinguishable by boundaries or ownership, the solid part of the surface of the earth, the word derives from Old English; akin to Old High German *lant* land, Middle Irish *lann*. 'Mark' means a conspicuous object serving as a guide for travelers, which derives from Old English *mearc* boundary, march, sign; akin to Old High German *marha* boundary, Latin *margo*.

In Dictionary Britannica the definition of the word 'landmark' is given as follows,

- 1: an object (as a stone or tree) that marks the boundary of land.
- 2: a: conspicuous object on land that marks a locality.  
b: an anatomical structure used as a point of orientation in locating other structures.
- 3: an event or development that marks a turning point or a stage.
- 4: a structure (as a building) of unusual historical and usually aesthetic interest, *especially*: one that is officially designated and set aside for preservation.<sup>1</sup>

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<sup>1</sup> Dictionary Britannica Online, (<http://www.britannica.com>)



All of the definitions, except the third one, fit also to the meaning of the term 'landmark' that we use in urban design and architecture. Landmarks can be an element that marks the boundary of land or it can be an object, which marks a locality. It can also be an object used as a point of orientation in locating other structures, and a building of unusual historical and aesthetic interest.

Lynch discussed the term 'landmark' in his study 'The Image of the City' as one of the five elements of a city. He made a classification into five types of elements, which are paths, edges, districts, nodes and landmarks. Lynch was the first person to discuss the importance of these elements in that manner. He studied each element's functions and each element's effects on the people who live in the urban environment, in terms of physical reality of a city, mental image of a city, imageability, cognition, identity, orientation, way- finding, urban design and architecture.

According to Lynch 'major tree dimensional objects within civic space fits most appropriately the definition of city landmark.'<sup>2</sup> Landmarks are the scenes, views that are mostly remembered from a place, so this makes people to remember one place or a city. They are the most outstanding and evident symbols of a city.

Spreiregen says; 'The prominent visual features of the city are its landmarks.'<sup>3</sup> They are in fact usually the most dominant or striking elements because they are usually the buildings; which have different properties in texture, size, and color from the buildings that surround them. They usually have a striking effect on the passerby and they are easily noticed. Contradiction with the environment and with the elements around, gives an identity or priority to be a

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2 Lynch, Kevin; 'The Image of the City', The MIT Press, 1960

3 Spreiregen, Paul D.; 'The architecture of towns and cities', Mc Graw and Hill, 1965, pg.51

landmark. There mustn't be another element around the main landmark, which can compete with it with its size, design, color or material. But despite of this, a good landmark is the one that is clear and evident but also a harmonious one.

Landmarks are important elements of urban form, they are not some additional components in a city, and the city needs them as much as it needs a transportation network, car parks or city center. They knit together buildings, streets, squares and neighborhoods and they are also a part of the greater whole. Their function is to moderate the transition between the main design elements and the urban elements.

They help people to orientate themselves in the city and help identify an area. As Lynch says; 'Landmarks, isolated objects of peculiar form associated with key locations, and to which observers can be radially oriented by sight.'<sup>4</sup> They carry information necessary for efficient and effective movement within the public space of the city. Their most important purpose should be giving identity and structure to its public realm. So that the mental map carried around the mind of the individuals can easily acquire, code, store, recall and decode information about their spatial environment. Strengthening the image of the city for the citizen and visitor should be the first aim of the usage of landmarks.

Landmarks are the objects, which acts like reference points in a city. Lynch points out this with this sentence; 'Landmarks, the point references considered to be external to the observer, are simple physical elements which may vary widely in scale.'<sup>5</sup> Some landmarks are very large and are seen at great distances. Some landmarks are very small and can only be seen close up. They are especially useful when they can be seen from great distances, at high objects over lower ones.

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4 Lynch, Kevin; 'City sense and city design', The MIT Press, 1990

Another explanation can be given with Madanipour's words: 'Nodes are the focal points in the patterns of development, such as junctions or squares and street corners. Another type of focal point in the city are physical objects such as buildings, signs, mountains and etc. which we know as landmarks.'<sup>6</sup>

They help on the zoning of the districts, and they characterize the districts and help on giving an identity and a meaning to them and the city. A city can be easily reachable and visitable when people have some pictures of it on his mind. They give meaning to the places where they are situated and make a city more memorable. When introduced with symbolic meaning their significance rises. They are the elements that receive the greatest care and attention. They are essential for the beautification, identification of the cities. City paths and nodes are frequently enriched with these dimensional objects, landmarks. The elements can be established as landmarks in both ways, by making the elements visible from many locations, or by setting up a local contrast with nearby elements.

Landmarks can be classified basically into two groups; one is the landmark, which can be seen from many points of the city, and mostly it is the dominant element in the skyline. It is the major point of reference for the individuals of the city. They help individuals to know where they are and how to get where they want to go. It has a citywide pertinence and it is shared by a large population. It can be a natural element like a hilltop or a constructed building like a tower or a significant building, but in both cases it must be an element that can be seen from a distance and from many angles. It is possible to recognize it as a single element comparing it to its background, landscape and surrounding urban environment.

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5 Lynch, Kevin; 'The Image of the City', The MIT Press, 1960, pg.78

6 Madanipour, Ali, 'Design of urban space', John Wiley and Sons, Chichester, England, 1996, pg.67

‘They might be within the city or at such a distance that for all practical purposes they symbolize a constant direction.’<sup>7</sup>



**Figure 2.1:** Pisa Tower



**Figure 2.2:** Eiffel Tower  
(Source: [www.greatbuildings.com](http://www.greatbuildings.com))

These dominant landmarks are mostly well known, like the mosque's minaret in the urban skyline of Istanbul or like remembering Eiffel Tower firstly when Paris is the subject of the conversation. In some cases some buildings or structures can symbolize a whole nation or country, as in the example of the whole Italy become abstracted with a single important building like Pisa Tower or Colosseum. It is difficult to imagine these cities without these great scenes come to our minds.

Second type of landmarks is much smaller in scale and can only be seen from nearby, like a clock tower, monument and a fountain. These are smaller urban elements and buildings that fill in the image of the observer. They are usually weak references but they are the points of reference that gives directions to

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<sup>7</sup> Moughtin, Cliff; 'Ornament and Decoration', Architectural Press, Butterworth Architecture, Oxford, 1999

strangers in the locality. They act like clues of identity and this makes a journey more easy and familiar. The separate and weak elements can be clustered in order to reinforce each other and to make the image more familiar to the observer. Also they can be arranged in continuous sequence, so that the passerby can identify each place on his own mental map. So, even the landmark is a very small urban detail, its location has a great importance and must allow it to be seen. The setting of the landmark must be a certain zone that receives more attention than others.



**Figure 2.3:** Clock Tower, Prague



**Figure 2.4:** Holy Trinity Monument,

Budapest

Both landmark types are important in creating a lively image for the observer and in helping with the reading and understanding of the environment. In addition to these, they have an important role in creating a memorable urban landscape. Therefore ornamentation in the city with various landmarks offers the designer or to the users to make the image of the city clear and evident if used correctly. As Moughtin stresses; 'It is the landmark's decorative role in building the image of a place.'<sup>8</sup>

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<sup>8</sup> Moughtin, Cliff; 'Ornament and Decoration', Butterford Architecture, Oxford, 1999

Other than these important uses of the landmarks, they can be more memorable or even more valuable if they have extra properties like historical, memorial symbolical or some other important meanings. It will be a much stronger image if it is visible for years and centuries, or if can be seen from almost everywhere near or far. These elements will be a stable point for the individuals and for the urban environment. All the landmarks or nodal buildings have either historical, or memorial or symbolical properties indeed.

All these information given is all looking to the issue from the design point of view. But even long before these were discussed and observed, weren't there any elements to be called landmarks or why had the people used them? We know that landmarks or some great, nodal buildings were used for centuries by the human beings on purpose or not, since the first humans were living in groups on earth. And we can say that they were all acting like a collective symbol of the traditions, beliefs, cultural or the social way of life, something that stands for the town and which identifies the citizens and the city. In addition to standing for or symbolizing the society that occupies the city, can also provide information or dues about its organization and power structure. Moughtin says; 'The true and genuine function of landmarks is a symbol of religious, cultural or social significance and inspiration.'<sup>9</sup> City decoration must be examined in the light of prevailing social, political and economic conditions.

## **2.2. Social Dimensions of Landmarks**

The determinants of urban form are the needs and wants of the individuals. The needs of the human beings are basic physiological and psychological needs. The primary attempt for changing the urban environment was also for one basic physiological need of ours; to have a shelter for protecting

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<sup>9</sup> Moughtin, Cliff; 'Ornament and Decoration', Butterford Architecture, Oxford, 1999

ourselves from the various conditions of the nature. As the people started to live in groups and formed a society, the society had grown more complex, new institutions; accordingly new power groups and forces had occurred. 'Urban form is determined by the action of dynamic and constraining forces that result from the needs and demands of the moment.'<sup>10</sup>

As the community rises, the primary efforts of the power groups are directed toward establishing symbols of life's natural limitations in the creation of artifacts and art. The drives that create and shape the environment originate in the psychological needs of the individuals, the reasons that are related in religious activity, ideological activity, wars and etc. Artifacts satisfy needs through their forms, which are shaped by the forces aroused from the human needs.

The urban form and urban artifacts represents the community's tradition. If any part of the urban environment is subtracted with the opinion of the public from the existing urban structure then it also means removing the meaning and the tradition of this element. The properties of artifacts; like leaving a mark or making an impression to the individuals of the community; symbolizes an approval of traditional values, symbolizes a claim of earlier generations' beliefs, opinions and customs. As Lozano mentioned: 'The physical form of a community is one of the highest cultural expressions of the society, and as such it translates social structure, lifestyle, and values to the buildings and spaces, into the physical vessel in which the community lives and evolves.'<sup>11</sup>

Traditional building forms and nodal elements may remain significant and may charged with meaning. They can symbolize power, status and wealth; power, status and wealth of the government, of the ruler; sultan, czar, pharaoh,

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10 Banz, George; 'Elements of Urban Form', McGraw-Hill Book Company, New York, pg. 92

11 Lozano, Eduardo E., 'Community design and the culture of cities', Cambridge University Press, Cambridge; New York, 1990

emperor, of the institutes; like religion, justice, of a certain family or one person. The important thing is the usage of these elements as a media of communication with the society. The holders of power can be expected to want to express it symbolically.

As the individuals want to express their wealth, status and power by these features to the community that they live in, they also want to be immortalized in order to make significant or prominent elements in the urban environment. It is used as a language to state their status to the other members of the society and maybe in a way it is a form of warning them. Individual status thus finds its permanent expression in symbols in the townscape. As Banz expressed; 'Status has been expressed in dominant burial places, in dominant places of worship, in dominant places of residence, and in dominant places of work.'<sup>12</sup>

As the urban environment is the place where cultural forces leave their marks, landmarks, which are the dominant features of the urban form, can act like as lasting reminders of past creativity. The presence of elements from the past gives the individuals a possibility of a comparison with the present and it ties the present to the past; old generations to the new ones and creates a communal identity.

In such buildings and elements of the urban form, groups may recognize their common roots, and for this goal the power units of the community can locate the elements intentionally. Historical events, past heroisms, famous leaders can be commemorated by these elements in order to leave their marks to the next generations. This is done during the times of crisis or during times of big changes like revolutions or wars in order to meet the psychological needs of the society.

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12 Banz, George; 'Elements of Urban Form', McGraw and Hill Company, New York, pg. 40-41



Also during the times of revolutions, new beginnings or pretentious steps; it is seen that the will to form may also be applied in the attempt to manipulate the human motives. (Official architecture in Nazi Germany, Stalinist Russia, and Washington D.C. demonstrates the consequences of such efforts.) It may be an act to dominate to change the usual appearance and may help to condition the urban environment. The design of any part of the urban artifact represents an intervention in the environment' s control function.



**Figure 2.5:** İstanbul, Looking at the landmarks, one can have clues about the social life.

Minarets tell us that Istanbul is a Muslim city. (Source: Moughtin, Cliff; 'Ornament and Decoration', Butterford Architecture, Oxford, 1999,pg. 68)

Indeed monumental buildings have always been a part of the urban scene; whether it is used as a sign of power, sign of status, or whether it is used for commemorating an event or even for manipulating the human behavior. The pyramids in Egypt, the temple in the Greek world, great medieval cathedral, mosques of the Muslim world, palaces of Renaissance, pioneer buildings of the modern world have dominated the cities. As Mougthin says; 'Societies in the past have attempted to symbolize solidarity, power and position by adorning their cities with great works of architecture.'<sup>13</sup>

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13 Moughtin, Cliff; 'Urban design- Green dimensions', Butterford Architecture, 1996, pg.16-17

## 2.2.1 Religious Influences

Religion or the beliefs of a community is one of the most important locomotive elements of the society. The beliefs of the society effect all of the social and physical institutions and also the urban form is effected by the religious beliefs. As Whittick mentioned: 'Many of the traditional patterns of city planning and the forms of ideal cities are due to the influence of religion and the supernatural.'<sup>14</sup>

At the beginning eras of the human social life, the institutions were not separated; in a way there were no secular authorities. The control power and the religious leader was the same and they had connected the power of the both institutions: religious and administrative, at the same authority. The reflection of this social structure to the urban layout was also a proof of it. The great buildings of that time were both the administrative and religious buildings as the community accepted them as the exalted institutions. The leader: whatever the mane is: a pharaoh, a king, used magnificent buildings as a device for showing his power to the members of the community and for intimidating them in a way.

The dominant elements and buildings were the language of expressing the power of the authority and power. Indeed in every period, urban structure had been the frequent way to show power and status. Man can read the social structure of a community by examining its urban structure and prominent buildings.

We can understand how important it is to be capable of building great buildings by the Legend of Hiram that takes part in Egypt. This legend is about a building craftsman, today's architect or an engineer, who can construct buildings with importance like pyramids, and who has great influence on his workers. He

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14 Whittick, Arnold; 'Encyclopedia of Urban Planning', Mc Graw and Hill Book Company, pg.859

becomes so powerful that with those powers he has, he becomes a threat for the pharaoh and comes across with the pharaoh of that time.

Magnificence of a structure can suit with how huge and tall a building is, but under the idea of making huge buildings there lies two meanings. One is the aim of showing the status and power of the builder and one is about the power of the social institution that the building serves. For religious buildings there is also one another meaning about height and gross that comes from spiritual means about the sky. Buildings for worship were thus erected on the tops of mountains, like the gods of Greeks dwelt on Mount Olympus and the Greek acropolis and its temple were situated on the hills. When there were no mountains, these were built, the Sumerians built ziggurats: a religious structure like a ladder to reach the sky.

Later when the religion and administrative organs were separated it is seen that the religious buildings were not as great as they had been before and that they were not built in much attention as they lost their status. Monumental structures are used to consolidate religious beliefs and to display the power. Some other institution, which is dominant on that era, reflects its dominance with its buildings of prominence.

With the end of polytheism, buildings of religions were exaggerated in order to reach wide amount of people for increasing the effects on the people. The buildings of polytheistic times were temples and they had lost their importance with the rise of the synagogue, the church and the mosque. Christianity was the chief cultural influence in the early middle ages in Europe and for that reason it led to some great buildings dated in middle ages, which were also chief buildings of their times.

One remarkable effort with religious influence, which even takes a part in urban planning history, is the one that Pope Sixtus V had done for the laying out of Rome. With the aim of helping pilgrims who visits the city to find their way easily, he situated a number of obelisks in front of the important religious buildings of that era. This effort had also strengthened the religious meaning of the city of Rome.

## **2.4. Landmarks for Orientation and Order**

Today in cities we live in, we all search for some clues to find where we are and find our way easily. Because the environmental organization of the places we live in usually based on monotony this lets human beings become sensorial blind in a way. If the arrangement of the city is logically designed, the elements are attached to each other in sense and if it is understood without difficulty; then the people living and traveling through it, will have a sense of orientation. This sense can be explained as 'knowing where one is at any time and how to reach any other part'<sup>15</sup>, or as 'a sense of where we are and where things are in relation to us.'<sup>16</sup> A good environment gives its users an important sense of emotional security. There will be a harmonious relationship between the individuals and the outside world.

But if a city is constructed in an opposite way: without any clear clues and with disorder and complexity, then the people would have feelings of anxiety and frustration, and the feeling of being lost. Being lost, not knowing where you are or not knowing how to get to where you want to go, can be distressing, especially for a stranger. So an imageable or legible city can make one feel more secure by providing cues for orientation and way finding. As Lozano stated; 'Monotony seriously reduces the potential for orientation. Environments must offer subtle

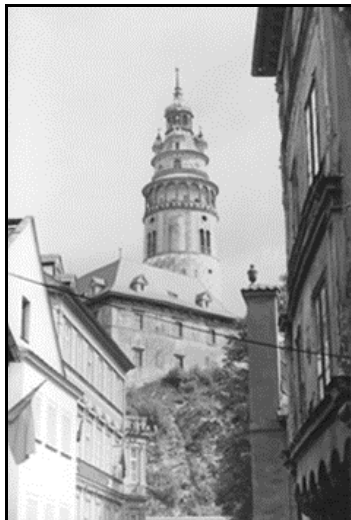
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15 Lynch Kevin; 'City sense and city design', The Mit Press, 1990

16 Spreiregen Paul D.; 'The architecture of towns and cities', Mc Graw and Hill, 1965, pg.65

gradations of oriented differences to provide clues of direction and distance, as well as landmarks within the pattern.'<sup>17</sup>

Landmarks are one most important element that helps the people to obtain the sense of orientation. As Jacobs mentioned; 'as their name says, they are prime orientation clues.'<sup>18</sup> Nodal or tall buildings, great works of art and architecture in the urban environment, natural features such as rivers or sea shores, clear and readable ways which reaches to a place, prominent districts can all be counted as helpers to orientation and way finding. Knowing the presence of these visible landmarks gives us the sense of orientation; a sense of where we are and where things are in relation to us. They are not only references, but also destinations with spiritual, artistic and historical value that represents a synthesis of the ideals of the community.



**Figure 2.6:** Palace in Cesky Krumlov



**Figure 2.7:** Palazzo Vecchio, Florence

A sense of orientation is basic to our understanding, familiarity and well being in a city. Having these feelings in a place has a lot to do with the process of way finding. 'Way finding is the original function of the environmental image, and

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17 E.Loranzo, Eduardo; 'Community design and the culture of cities', Cambridge, 1990, pg.284

the basis on which its emotional associations may have been founded'<sup>19</sup> according to Lynch. He stresses that every individual has his own environmental image, which is a product of the individual's senses and his memory of the past experiences. Every single person has a need for recognizing copying his surroundings, and this image has a great practical and emotional importance to the individual. It is connected to one of the important roles of buildings and complexes in cities; which is to create the needed visual psychological satisfaction for the people.

Individual's impressions of a building, a part of the urban environment or a whole city is more than visual. There are many factors and meanings on the composition of a city: places, buildings, places, people, memories and experiences. These are effecting each person in various ways according to his own likes and dislikes and therefore each person has his own image.

Montgomery explains image as follows; 'Image is a combination of identity of a place with how a place is perceived. To individuals, the image of a place is therefore their set of feelings and impressions about that place. These feelings come from a filtering of information received and collected about the place. This filtering is partly based on individuals' values, beliefs and ideas, but also on wider cultural values, beliefs and ideas. This means that images of place are created from amalgamations of cognition (comprehension or understanding) and perceptions, as well as individual, group and cultural personality constructs or meaning.'<sup>20</sup>

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18 Jacobs, Jane; 'The life and death of great American cities', England, 1961, pg. 397

19 Lynch, Kevin; 'The image of the city', MIT press, 1960, pg.125-126

20 Montgomery, John; 'Making a city; urbanity, vitality and urban design', Journal of Urban Design, Feb.98, Vol.3.1, pg.93

Another term derives from image and means to understand the environment easily with the help of the clues is imageability. Lynch says that: 'Imageability; that quality in physical object which gives it a high probability of evoking a strong image in any given observer. It is that shape, color, arrangement, which facilitates the making of vividly, identified, powerfully structured, highly useful mental images of the environment.'<sup>21</sup>

An individual's knowledge of a city is, according to Lynch, a function of the imageability of the urban environment, that is, the extent to which the components of the environment make a strong impression on the individual. In turn, imageability is influenced by a city's legibility, the degree to which the different elements of the city (defined as paths, edges, districts, nodes, and landmarks) are organized into a coherent and recognizable pattern.

The individual creates both an image of a city, and also a frame of reference by gathering information about elements in the city. Obtaining the spatial knowledge of these elements is possible and easier for long time residents or visitors with environmental clues such as nodes or landmarks in a city. As Spreiregen stresses; 'The more 'imageable' a city, the easier is to find one's way about in it, even if its street pattern is not clear. In designing a city, it is important to consider how a new development will affect the total urban image.'<sup>22</sup>

## **2.5. Landmarks for Symbolism and Identity**

Orientation and order in cities are closely related to symbolism. We mustn't only think that order and orientation is just a matter of guiding people to

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21 Lynch, Kevin; 'The image of the city', MIT press, 1960, pg.9

22 Paul D. Spreiregen, 'The architecture of towns and cities', Mc Graw and Hill, 1965, pg.51

functional destinations. Orientation and order leads to symbolism in an aesthetic unity of function and spirituality and involves an integration of aesthetic and symbolic values. Physical space is also a social space and with symbolism value. In some cases giving symbols to physical space is an act that is done intentionally and in some other, symbolic meanings are added by the society. In order to this; some visual symbols are obscure recognizable only to the members of a culture and to that group, where others are clear, universal symbols stressing the common experience of humankind and inviting outsiders to share.

As Lynch says; ‘the city is in itself the powerful symbol of a complex society.’<sup>23</sup> When being in a city or entering to a part of it: you can collect many clues about its social life, culture, people, and way of life. Saleh stresses this with these words; ‘The relationship between symbols and space, as well as architectural character, allowed landmarks to be a device for common memory, cultural reaffirmation and urban symbolism.’<sup>24</sup>

All of the urban elements in the built environment may only be isolated objects individually but they can be planned and designed to give character and identity to space. Even done without purpose they would create an identity when combined together; so every place has identity of its own. But for places or for an urban element to be successful or attractive it must represent a sense of identity for their users. The places which results in a sense of belonging to a place, of feeling involved and taking an interest are much more likely to be respected and looked after. However, this sense of local ownership must have tolerance for the strangers in order to have respect for the place an its people, but also for those who visit.

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23 Lynch, Kevin; ‘The Image of the City’, The MIT Press,1960, pg.5

24 Eben Saleh, M.A.; ‘The Use of Historic Symbols in Contemporary Planning and Design’, Cities, Vol.15, No.1, pg. 41-47, 1998



Creating a successful image requires first the identification of an object. It must be distinguishable from other things; it must be something separate with the meaning of individuality or oneness. But at the same time the object must have a relation to other objects and some meaning for the observer. This definition also fits to the properties of landmarks so as Saleh says; 'It is realized that landmarks are not the only elements of identity and continuity in cities, but they are major elements.'<sup>25</sup>



**Figure 2.8:** Hitite Monument, Ankara (Represents the Hitite background of the city.)  
(Source: Vale, J. Lawrence, *Architecture, Power and National Identity*, Yale University P, 1992)

There are many reasons behind the need for identity. It is necessary for continuity of culture for man not to be cut off from the past. Efforts for identity can enrich the urban layout pictorially; can be a way of control or even destructive way to remove everything that belongs to identity. The place identity and visual image in a settlement are linked firstly to social and cultural influences and secondly to spatial organization. Climate, economical, ritual and sociological, functional factors are the factor that effects the visual image.

The explanation of Lozano describes this best; 'The Greeks transformed floors by building platforms as sacred 'temenos', the Egyptians pushed floors

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<sup>25</sup> Eben Saleh, M.A.; 'The Use of Historic Symbols in Contemporary Planning and Design', *Cities*, Vol.15, No.1, pg. 41-47, 1998

upward to fight the desolate horizontal of the desert and created pyramids. Christian Europeans, transformed by the Romans, and roofs later into representation of the Heavens. Churches became scaled versions of the sacred profane universe that had specific meaning for the faithful and still touches even the most agnostic observer. Walls had always been seen as structures of defense, sometimes physical but always psychological, defining our turf versus the undefined and often hostile outside world.<sup>26</sup>



**Figure 2.9:** Karl Wilhelm Gedächtnis Kirche, Berlin  
(Destroyed during the World War II, stands out in order to remind.)

It is also possible for an object, structure or a place to remind or commemorate an event in wider meanings and processes. As for giving an example a place can be where someone was captured or where someone first met his wife for the first time. So, places can represent memory, meaning and association for individuals, groups or societies. Sometimes it is clear from the buildings themselves what sort of meaning is being expressed.

## CHAPTER 3

### CLASSIFICATION OF LANDMARKS

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<sup>26</sup> Loranzo, Eduardo E., 'Community design and the culture of cities', Cambridge, 1990,pg.290

It must be understood that this classification is done from my point of view and it is also possible to make many other classifications. In this study two types of classification had been done in one single classification. It may be a little superficial but the main aim is to express that most of the elements in the urban layout can act as landmarks following the aims to give examples and number the landmarks as possible as can be. As a result one classification according to the scale of the landmarks and one other classification about the functions of the landmarks that can be seen in the urban structure are combined in one single one. This is done for being able to see the type of landmarks in one classification.

### **3.1. Landmarks according to their scale and function**

As we studied in the first chapter that landmarks can be both in large scale and small scale it has been seen necessary to classify them according to their scale. Classification according to the scale of landmarks can be divided in grades from a smaller scale to a larger one. So each item that was divided according to its functions, is also arranged in order, according to its scale where possible. According to this landmarks are divided into four titles as: small-scaled urban elements for ornamentation as landmarks, buildings as landmarks, natural elements as landmarks and infrastructural elements as landmarks.

In general for all of the elements to name as landmarks; they are served for two main purposes. If the building or element has a historical value then it serves as an agent to transfer knowledge to the next generations, but if the building is a new made building then it means that it represents today and it will later serve as an agent to transfer knowledge to the next generations.

#### **3.1.1. Small scaled urban elements for ornamentation**

Landmarks can be in small scales such as urban sculptures, monumental arches, monumental columns, and water elements. Their functions are usually for ornamentation and for commemorating an event. Some other elements can surely be offered but these elements that been counted are the most frequent ones that can be seen in the cities.

- Injected urban elements (urban sculptures, street furniture)
- Monumental elements (arches, columns)
- Archeological elements
- Historical elements (clocks, obelisks)
- Water elements



**Figure 3.1:** Urban Element in Berlin



**Figure 3.2:** Brandenburg Gate, Berlin



**Figure 3.3:** Arch of Constantine, Rome



**Figure 3.4:** Street Arch in Prague



**Figure 3.5:** Columbus Column, Barcelona



**Figure 3.6:** Victor Emmanuelle Monument, Rome



**Figure 3.7:** Clock Tower, İzmir  
(It is the most important landmark of the city.)



**Figure 3.8:** Dönertaş, İzmir  
(It gave its name to the district where it is located.)

### 3.1.2. Buildings with various functions

Buildings are perhaps the main elements to form a city. All the other elements are ordered in accordance to these elements of plenty. They can be built for various aims in order to serve religion, administration, society, and culture of that society. Some buildings differs them from the others with the properties that comes from these functions of the buildings. They are prominent in the urban structure in order to present their functions and that makes them landmarks. One other thing is that they can have historical backgrounds and they transfer historical aspects to the next generations. The classification can be increased, for example a building, which an important person owns or lived, can be a landmark building.

Governmental buildings are the symbols of the administration and they are buildings for service. Grand state buildings need to be understood in political and cultural terms, which is the main reason of their being. State owns these buildings and they are buildings reflecting the functions that are at the top of the social level, such as justice court, governorship, ministry and municipality.

Religious buildings are buildings such as temples, ziggurats, synagogues, churches and mosques. As a matter of fact, with the end of polytheist religions it is not possible to see temples or buildings that present the polytheist idea, what we can see as religious buildings are only structures of the religions that are accepted by the communities of today. Social buildings are also buildings for service; such as hospitals, schools, universities, and courthouses where cultural buildings are theatres and opera houses, museums, buildings for sport facilities, historical baths. Commercial buildings usually of famous brands also come out as landmark buildings in cities, and are used as meeting points as they are the places that everyone recognizes.

- Religious buildings
- Governmental buildings
- Social buildings
- Cultural buildings



**Figure 3.9:** Ayasofya, İstanbul (Source: [www.greatbuildings.com](http://www.greatbuildings.com))  
(As an example for religious buildings, which served to both Christians and Muslims.)



**Figure 3.10:** The Capitol, Washington D.C. (Source: [www.greatbuildings.com](http://www.greatbuildings.com))  
(The most important governmental building of the United States)



**Figure 3.11:** Market Place, Barcelona



**Figure 3.12:** National Theatre, Prague



**Figure 3.13:** YKM, commercial landmark building in İzmir.





**Figure 3.14:** Vilayet Konağı, İzmir  
(Historical Governmental building)



**Figure 3.15:** Elhamra Sarayı, İzmir  
(Historical Opera Building)

### 3.1.3. Natural elements

Natural elements such as parks, forests, hilltops, seas, rivers, lakes and parts of the urban layout like cemeteries, car parks can also act as landmarks. They can help people to orientate, to find their way easily in a city and help to create identity. Especially hilltop for its height can meet these functions of landmarks. Also sea and river gives knowledge of orientation and direction to the individual. For example for İzmir, sea is an important element that acts as a landmark for the identity of the city. Natural elements can also have historical and cultural heritages: as in the example of St. James Park in London, which was a hunting ground of the kings at the time.

- Parks, forests
- Hilltops
- Sea, river, lake

### 3.1.4. Infrastructural elements

Infrastructural elements such as bus stops, metro stations, railway stations, car parks, cemeteries, ports and airports can act as landmarks in the urban structure. Bus stops are small-scaled elements that can be minor connections and that can reflect the characteristics of the city. Metro Stations in Paris, with its artistic value and for being a reminder of its time, had been landmarks for the visitors and inhabitants. Railway stations are usually buildings with great importance, and became the entrance points for the city since the industrial revolution. Ports and airports are also important for being entrance points and for being nodal connection points in the cities.

- Bus stops and metro stations
- Railway stations
- Car parks
- Cemeteries
- Ports
- Airports



Figure 3.16: Metro Entrance in Berlin



Figure 3.17: Metro Entrance in Paris



**Figure 3.18:** Railway Station, Barcelona.



**Figure 3.19:** Television Tower, Berlin

## CHAPTER 4

### LANDMARKS IN HISTORY

#### 4.1. The Ancient

On every age on the historical growth of the cities Human Beings had been the main element of design. Architecture and monuments had been the language for the religious, spiritual, political and social life where there is a human settlement. They are used since the ancient ages and used in the open space on the creation of the cities. Human beings are interrelated with its surroundings; therefore both; cities and human beings had affected each other from the very beginning of the history. This relation may vary according to different historical eras and different human settlements.

Because of this strong relationship, the history of the mankind and the history of the urban environment must be studied together. In this study therefore, it is seen necessary to analyze from the cities of the ancient history to the modern cities and the use of the landmarks in those cities, in relation with the history of the people who lived there.

New Stone Age, which is also called Neolithic Age, first started in the Middle East about '9000 BC.'<sup>27</sup> In this period man made revolutionary steps in various fields, as a result of these a social structure had formed which we call: Civilization.

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27 Trachtenberg, Marvin- Hyman, Isabelle, 'Architecture from pre-history to post-modernism- The Western Tradition'- Academy Editions, 1986, pg.47

The first step or the first discovery of man was to polish and ground the stone tools; that is why this period is called New Stone Age. This was technically far superior to the old; just sharpening the stone. More other tools were produced; tools of bone, stone and horn; axe, adze, sickle, hoe, finally arrow and bow which increased the importance of hunting. Also pottery, cooked cereals, new textiles was produced which helped the man in their daily life.

But, the most important novelty of the period was the domestication of the animals and following this finding out how to grow plants. This development let the man who were hunting and traveling in groups to a mass production and accordingly to settle down to a place where they can plant and grow crops.

This event was a great progress for the human history; birth of agriculture has also been a starting point for civilization. With the beginning of agriculture people began to live in bigger groups for having mass power and growing plants became the first source of living. All of the cultural and technological changes came one by one continuously: man produced tool for growing plants, domesticated more animals for agriculture and then started to breed animals, made tools for storing, using and transporting food and water, started to studying on mathematics and astronomy for learning the time of the flood of the rivers and for finding the suitable time for sowing plants. In order to these, enough food for bigger populations were gained, the percent of dying decreased, population increased speedily and huge populations became stable in some areas.

As man developed more and more, he began to produce more than he needed and some extra product was produced. People in other groups were exchanging their products, a basic form of trade had started and people get more specialized in some other areas. With this extra product and the settled way of life, a new social structure and social institutions have come into being.

At this stage man began to observe nature and tried to give meanings to the natural events. As it was difficult for man at that age with those technical opportunities to understand the natural world order, he gave some meanings to some imaginary powers and tried to explain it in his way. So, first religious thoughts of mankind were created just because man felt himself weak compared to the power of nature. The most powerful creature that he saw on earth was the huge wild animals and so firstly he gave some extraordinary properties to the ones that he was afraid of. Secondly, he fitted some supernatural powers to some material elements, believed that they had an effect on people and worshipped them. One other thing was that they couldn't prevent death and they were frightened of dying. According to this they started to give a meaning to their leaders' dead body, that they were frightened of when he was alive. They thought that there was 'another world' for the death's souls. And as the death had spiritual powers they tried to be nice to him by presenting sacrifices and by giving presents and food. By this we can understand that first religious beliefs and acts were because of the feeling of weakness and the feeling of fear of the mankind.

As it is not certainly clear, the first memorial that is found from the ancient times is megalith: which the oldest ones are about 6000 years old. They were a number of stones arranged in the form of a circle or an ellipse. Megalith comes from two Greek words: megalo-big and lithos-stone. These megaliths were found on several places in the world, like in North France, South England and Britain. The most known megalith is the Stonehenge, which is in England- Wiltshire from c.2750 to –1500 BC.

'Some of these huge stone monuments are connected with a death cult, some of them with a sun cult and most with some reasons which we don't know

yet.<sup>28</sup> But these tree dimensional objects that the human beings found from the nature and used as monuments created a place, a different environment and it became a cultural symbol on the relation with the nature and all these are brought to the future. In this activity, monumental architecture played a supreme role.



**Figure 4.1:** Stonehenge Megalith  
(Source: [www.greatbuildings.com](http://www.greatbuildings.com))

The giant stones or megaliths, so hard to move and stand up and so striking that it must have been proud symbols of community. They spoke of an advanced technology and of group effort. Moreover, they served to focus divinity. ‘The most impressive Neolithic architecture was not built for practical uses. Rather it served less easily definable emotional and spiritual needs, and above all, the realm of symbolism, ritual and magic.’<sup>29</sup>

‘With mere survival still such a prime concern, why did Neolithic man devote himself so much to tombs? Anthropologists surmise that the early man’s dreams about the departed may have led to a belief in their continuing existence in material form. In real life, a prime necessity was shelter, and it was natural to imagine the dead in need of it as well. To provide shelter for the dead, to appease

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28 Tanilli, Server, *Yüzyılların Gerçeđi ve Mirası*, Cilt 1, Adam Yayınları, 2002, pg.22

29 Trachtenberg, Marvin- Hyman, Isabelle, ‘Architecture from pre-history to post-modernism- The Western Tradition’, Academy Editions, 1986, pg.50

their restless and possibly dangerous spirits, and to incarcerate them were ample motives for immense expenditures of energy to create houses in which they might be remembered and appeased. Having first lived and buried his dead in hillside caves, man now built artificial caves in artificial mountains for the departed. The first monumental architecture- like so many that followed- thus imitates nature, and provides for social, psychological, and symbolic needs.<sup>30</sup>

Before the Neolithic period people used to share all the food that they gained from hunting and also they were sharing all the tools that they used. As they had only enough food and goods for the whole population just to survive, there was no ownership. But in Neolithic age as people produced extra goods and as they had more than they need for surviving they started to exchange some other products from others. These products were becoming their properties then. This relation of commerce led to another ownership: private ownership.

Private ownership changed the social life very strictly. The families who could produce more extra goods were exchanging more goods, tools and finally pieces of land. Groups haven't got the same amount of properties anymore and this made some of the people more wealthy, important and powerful.

This inequality was resulted again by the feeling of fear and weakness of the others of the community. The ones who had the power started to use the others for production, this was another form of ownership: ownership of man, this formed a new social group: slaves. Masters owned the tools and machines for production and slaves were working for enough food for them to survive and for their master to get wealthier day by day. There was also one another group which were not slaves and which were only small producers with their simple tools who

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30 Trachtenberg, Marvin- Hyman, Isabelle, 'Architecture from pre-history to post-modernism- The Western Tradition', Academy Editions, 1986, pg.50



were the small farmers and craftsman. For the first time in the history of the mankind, people of the society had been divided into CLASSES according to their ownership of the devices and tools for production.

This three social group: slaves, masters and free members of the society changed and varied in time. Some free members of the society had specialized in some different fields and they formed and took part in some social services. Some of the members of this group lost their wealth and became slaves of the masters eventually. Slaves were the servants of their masters and the masters became stronger by time. But only one or two master became more powerful than the other ones and as he was the most frightening 'one' of the others, other weak groups of the society gave some other roles to the 'one'. Usually this was a religious role as the weak ones wanted to protect themselves from the power of nature with the help of their powerful master.

This wealthy and rich master group of the community also had weapons and fighting tools and usually used these to enrich themselves. By this way they were having a strong pressure on the other groups, and using them for their own benefit. This group was also maintaining the protection of the society with the existence of the weapons and slave warriors. And some smaller groups from the master class became administrative members of the government. This structure was also a basic scheme for today's state.

All of the progress that tried to summarized in the Neolithic age ended with the first civilized states which were borned in four areas on earth: in Mesopotamia, in Egypt, in the Indus Valley, in Yellow River in China.

We are going to deal with two of them, which play part in our own civilized origins. One of them is the area along the Nile River: Nile Valley and Delta and the other one is the land between the Rivers Tigris and Euphrates, which is

called Mesopotamia. These are the places where out of them evolved, the Greek, Roman and Western European Civilizations.

#### **4.1.1. Sumerian**

‘In the Near East, examples of man’s first experiments in the craft of building have been found at many prehistorical sites. The first conscious attempts at the design of public buildings must be attributed to the Sumerians who lived in the southern Mesopotamia. The first buildings consciously contrived to create an aesthetic effect are found during the 4<sup>th</sup> millennium B.C.’<sup>31</sup>

Like most ancient peoples, The Sumerians were polytheistic, which means they believed in many gods. These gods were thought to control every aspect of life, war, business and especially the forces of nature. Sumerians believed that gods and goddesses behaved like ordinary people. They ate, drank, married, and raised families. Although the gods favored truth and justice, they were also responsible for violence and suffering. To Sumerians, their highest duty was to keep their gods happy and in accordance to ensure the safety of their city-state. Each city-state had its own special god or goddess to whom people prayed and offered sacrifices of animals, grain, and wine, and even each family had its own god. They worshiped their gods at ziggurats. Each ziggurat was dedicated to a specific god, whom the Sumerians believed ruled over their city.

Characteristics religious beliefs of Sumerians were well defined so that monumental architecture was the main way for religious expression. Their earliest public buildings accordingly took the form of temples. Temples were built of sun-dried brick and often decorated with mosaics and mural paintings about religious

scenes. These temples had a central sanctuary, sometimes cruciform, rising above its lateral chambers to allow lighting. They were surrounded by new forms of public buildings like royal palaces.

'The function of the Sumerian temple followed naturally from the Sumerian religion based on the elements; the sky, earth, water, sun and moon, storms and lightning, all were great forces in it. Essentially it was a religion of an agrarian society dependent on the weather, which ultimately led to the Sumerian invention of astrology as a means by which the priesthood might, so it was believed, predict and control the environment. The principal Sumerian rites were celebrated in the temple; an elaborate ritual was enacted in the courtyard with offerings set out upon the table and sacrifices taking place at the altar. The simplicity of the long court heightened the drama of the ritual.'<sup>32</sup>

As mud- brick buildings were short- lived, the application of building new temples upon the ruins led to a practice by which such shrines were raised above the surrounding buildings on a high artificial platform. These stages increased in scale and complexity and created the great staged towers which Sumerians worshiped their gods; named ziggurats.

The largest buildings were ziggurats; pyramid-temples that soared toward the heavens. Their sloping sides had terraces, or wide steps, that were sometimes planted with trees and shrubs. On top of each ziggurat stood a shrine to the chief god or goddess of the city.

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31 Norwich, John Julius, Great Architecture of the World, Mitchell Beazley Publishers Ltd., 1975, pg.39

32 Trachtenberg, Marvin- Hyman, Isabelle, Architecture from pre-history to post-modernism- The Western Tradition- Academy Editions, 1986, pg. 69

‘The essence of the ziggurat is that it be high. At its skirts will be arrayed the full panoply of theocratic socialism, store rooms and workshops, offices and priestly quarters, and a temple where the statue of the deity will stand for his or her epiphany, since the unshielded radiance of divinity is not commonly bearable. Up above, he or she will appear in a person to those entitled to witness the deity’s full glory.’<sup>33</sup>

‘The Egyptian pyramid was a ladder to the sky, and the symbolic function of the ziggurat was similar: the bridge the gap between the human and the divine. It not only resembled a mountain but actually was considered a sacred mount, the habitual setting of divine revelation. Such artificial mountains were built in the cities of the plains to favor the communication between man and god. The shrine or temple on top, was a hall where the divine manifestation was awaited, sanctuary of the god served by attendant priests.’<sup>34</sup>

Sumerian cities were often rectangular in shape, surrounded by high, wide walls and surrounded by suburban villages. According to the ruins of the Mesopotamian settlements, all the cities had city walls. Inside the walls there were areas for agriculture, areas for feeding animals and some open areas. The pattern of the settlements is composed of voids that were used for different aims. The cities were centered on the temple of the god, who was literally the ‘owner’ of the city. His temple arose as an artificial mountain: ziggurat.

Inside the city gates were broad avenues where people celebrated many holy days with ceremonies, religious processions or victory parades. There were two monumental centers: one of them was the ziggurat with its own defensive

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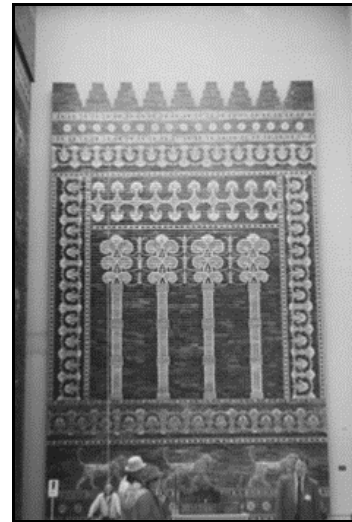
33 Kostof, Spiro, A History of Architecture, Settings and Rituals, Oxford University Press, 1995

34 Trachtenberg, Marvin- Hyman, Isabelle, Architecture from pre-history to post-modernism- The Western Tradition- Academy Editions, 1986, pg.70

wall, and the other was the palace of the king. In addition to these, there were lesser temples sprinkled inside the city gates within the rest of the city fabric. Ziggurats were the places for worship, dominated the city for religious purposes, the palace was representing the power of the leader and administration.



**Figure 4.2:** Sumerian ziggurat  
(Source: [www.fsmitha.com](http://www.fsmitha.com) )



**Figure 4.3:** Ishtar Gate.  
Pergamon Museum, Berlin

Each Sumerian city-state had a distinct social hierarchy or system of ranks. The highest class included the ruling family, leading officials, and high priests. A small middle class was made up of merchants, artisans, and lesser priests and scribes. Another important factor for the city was the economical one; craft and trade divided the city into parts. Accordingly to the levels of the craftsmen a new social classification is formed and this classification could also be seen in the city pattern.

According to this hierarchy rulers lived in magnificent palaces within courtyards. Most people lived in tiny houses packed in a web of narrow alleys and lanes. Artisans who practiced the same trade, such as weavers or carpenters, lived and worked in the same street. These shop-lined streets formed a bazaar, in the place of today's shopping mall. At the base of society were the majority of people,

peasant farmers. Some had their own land, but most worked land belonging to the king or temples. Sumerians also owned slaves. Most slaves had been captured in war. Some had to sell themselves into slavery to pay their debts.

Whittick explains the cities of the time with these words; 'Each of the many cities from north to south of the land of the two rivers centered upon a tall, brick-built ziggurat, or hill of heaven. This was a great stepped tower, its wide terraces then thickly planted with trees. Its summit was the abode of the god of that city, and from it the ziggurats of other cities could be seen. Their height is immensely impressive in the flat, treeless landscape. The ziggurat at Ur was the height of a seven-story building, and the Tower of Babel at Babylon is said to have reached 288 feet. At the floor of each ziggurat was an extensive rectangular temenos, or temple precinct, containing numerous offices, workshops, and storage chambers in addition to several temples, the palace of the divine king, and the residences of the priestly administrators. This temple precinct was the seat of the government. It operated as the taxation center and the court of law as well as the center of trade of each city-state. The buildings in the temenos were on a grander scale than elsewhere, and they were frequently brightly colored. Around the temenos the population of the city lived in one and two story patio houses varying in size and quality but very similar in plan, and the whole area of the city was surrounded by an extremely substantial and well-guarded wall.'<sup>35</sup>

In the later periods Assyrian and Babylon people effected the way of life and the pattern of the cities in Mesopotamia. 'Assyrian culture can be called militaristic. In their surviving sculpture the bearded warriors, the impaled lions and the lines of captives look out at us with exaggerated masculinity.'<sup>36</sup> The people

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35 Whittick, Arnold, 'Encyclopedia of Urban Planning', Mc Graw and Hill Book Company, pg.47

36 Brinton, Crane-Christopher, John B.-Wolf, Robert Lee, 'Civilization in the West', Prentice Hall Inc., 1964

were organized to conquest and military group ruled them. Therefore the city was also a fortress city and it had a castle in the middle.

On the other hand Babylon was a city of pleasure since it was a city built of adobe like brick, with its hanging gardens and luxury. Actually, it was probably the first great urban center with a big ruling class, merchants and professional men of all sorts and a common working people absorbed into the life of the metropolis.

Both in Egypt and in Mesopotamia, the dominating belief of the 'human beings as the slaves of the god-Pharaoh-king let him to exceed the human measures in architecture, let him feel weak comparing to the universe and his environment and most importantly let him make huge, overwhelming monuments like pyramids or ziggurats.

#### **4.1.2. Egyptian**

About 5,000 years ago, a remarkable way of life, or civilization, grew up along the banks of the Nile River in Egypt. It flourished for over 3,000 years, longer than most other civilizations in the world's history. Egyptian history begins around '3100 BC'<sup>37</sup>; it was the time when the pharaoh, King Menes, created Egypt by uniting the two parts of Egypt, also known as upper and lower Egypt, into a single kingdom.

It is possible to find all the elements of urban architecture in Egyptian settlements. The main factors on the foundation of the cities were religious and administrative. Usually every settlement belonged to a family. Religious authority

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37 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.27

and centralized strict powers were ruling the cities. Therefore, the administrative and religious buildings were localized in the city center. The defense thought that is usually seen in those ages' societies, can also be seen in Egypt. Almost every settlement had primitive city walls, but in the later periods in order to the union and expansion of the cities the city walls had disappeared.

As in all ancient societies, agriculture was the main source of life in Egypt. 'Ancient Egypt was a pharaonic monarchy, whose rulers believed themselves incarnations of divinities and they were worshiped in life and even in death. The pharaoh and the priests headed a centralized society, with a hierarchical structure ultimately based an agrarian economy.'<sup>38</sup> The strict hierarchical structure between common people and the nobles had effected the form of the cities. Settlements had been divided into parts according to the status of the inhabitants. The cities were gridal, one third of the area was for the dominant buildings owned by the nobles and the rest was for the worker class.

Pharaoh simply means: the one who lives in the palace. With that name we can understand the importance of the palace that dominates the city. For Egyptians their pharaoh was a god with several forms. They thought he was more than human and called him with the names of several gods. They believed that in return for the offerings of food and water that only the pharaoh could make, the gods would feed the souls of the Egyptians after death. The pharaoh's chief duty was to build and maintain temples for them to worship to the gods, so pharaoh was very precious for having the power for building temples.

A small priestly and noble class occupied the top of the social pyramid and a toiling mass of peasants at the bottom. Nobles were formed of the people who had professions and who were capable of showing specific talents, being



noble in Egypt was not about kinship. Much of economic life, from the control of the Nile floods to the distribution of the crops, was planned and regulated from above by agents of the pharaoh.

Egyptian religion evolved from elaborate rituals concerning life, death and afterlife. 'Even more than Neolithic man he was obsessed with the cult of the dead. Tombs and carefully mummified bodies have been synonymous with Egyptian civilization. The earlier graves including the pyramids and the accompanying inscriptions suggest a complicated relationship of soul and body. The body had a double, called ka, which survived the death of the body of daily life; the grave, the mummy and the symbolic statues were all provided for the sake of the undying ka.'<sup>39</sup>

The dead were laid into primitive oval-shaped tombs. The idea of giving them tombs, homes for the hereafter, showed up when the people of the Nile became settled. Burial donations such as pottery and primitive jewelry could be found in most of the early tombs. With the emergence of a political hierarchy in the early 3rd millennium BC, a new, more sophisticated way of burying came into being. The political and economic elites that have formed in various cities of Upper and Lower Egypt were buried in elite cemeteries that made a distinction to those burial places of the ordinary people. The tombs were equipped with magnificent burial donations and the facilities became complex.

The rulers in the first dynasties were buried in places called Mastabas, complex mausoleums that were made of mud brick. These Mastabas were built in rectangular shapes above deep burial shafts. A Mastaba generally consists of two

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38 Trachtenberg, Marvin- Hyman, Isabelle, 'Architecture from pre-history to post-modernism- The Western Tradition', Academy Editions, 1986, pg.52

39 Brinton, Crane-Christopher, John B.-Wolf, Robert Lee, 'Civilization in the West', Prentice Hall Inc., 1964

parts: the subterranean part that held the sarcophagus and additional chambers for donations and other goods, and storerooms as well as a chapel on the surface which was used for sacrifices and ceremonies.

Mastabas were the predecessors of the pyramids. Since the 4th dynasty the construction of Mastabas has been continuously modified. The subterranean facilities were reduced to a single burial chamber; the facilities on the surface became more and more complex. During the first dynasties they were developed further which led to a new trend in the construction of the houses for the dead. Mastabas became larger and larger whereas the step-like principle of architecture was still kept up. The whole burial site became larger in extent during the first dynasties as the pharaoh became increasingly important for the people, being regarded as the son of Ra, the sun god.

Smaller pyramids were built for the king's officials and overseers. Believing that the universe had been created from the top of a mountain shaped like a pyramid, the Egyptians believed that from the peak of the pyramid the spirit of the king would begin its climb to a unity with the god Re. They believed that the king's spirit would accompany Ra on his daily journey across the sky, into the underworld and back into the sky again.

Pharaoh Zoser's Step Pyramid in Sakkara is the first known pyramid of its kind in Egypt. It still represents a stairway to heaven that the dead pharaoh would climb for his ascension to the sky after death. Some people even believe that the pyramids' construction principle has been copied from Sumerian Ziggurat.

In fact, the pyramid age started with the construction of Zoser's Step Pyramid in Sakkara around '2800 BC.'<sup>40</sup> The pharaoh's chief architect Imhotep who is said to have been one of the most intelligent and talented persons of his time was instructed by Zoser to build a Mastaba that should represent the pharaoh's dignity and his power that would reach even beyond death. In the later periods pyramid forms were also used in symbolic meaning and as a crown of the monumental building. King Djoser was the first pharaoh who was regarded as a god king and who had initiated the pyramid age as he established the trend of being buried in a pyramid. Most impressive Egyptian pyramids are perhaps the group at Gizeh, 'built around 2500 BC, consisting of the colossal figure of a Spinx and tree pyramids, two of which are among the largest buildings ever built.'<sup>41</sup>



**Figure 4.4:** The Egyptian Pyramids of Giza  
(Source: [www.greatbuildings.com](http://www.greatbuildings.com))

We know little about the funerary rituals that were celebrated in the early days of the Egyptian civilization. But it is apparent that the pyramid and its surrounding buildings had a close connection to the cultic rites that were part of the religious life. Whittick explains this as follows; 'The pyramids, which are among the oldest monuments in stone, were the outcome of an insistent belief in future life

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40 Norwich, John Julius, Great Architecture of the World, Mitchell Beazley Publishers Ltd., 1975, pg.46

41 Risebero, Bill, 'The Story of Architecture', The MIT Press, Cambridge, 2001, pg.11

and the belief that the preservation of the body was essential to secure the immortality of the soul.<sup>42</sup>

King Snofru who initiated the 4th dynasty, gave the pyramid its typical form. The conjunction of two different cults (the sun-cult and the king-cult) is expressed in the architecture of his dynasty. The pyramids' steep walls materialize the sun's beams and allowed the Pharaoh's soul to directly rise into the sky. Their monumental effect is based on their enormous dimensions.

Temple facilities and pyramids were the most important religious buildings in ancient Egypt. Temples have always been part of royal burial sites and were used for cultural rites and celebrations in favor of the dead Pharaoh. But there did exist temples, which were built only for rites and sacrifices for deities.

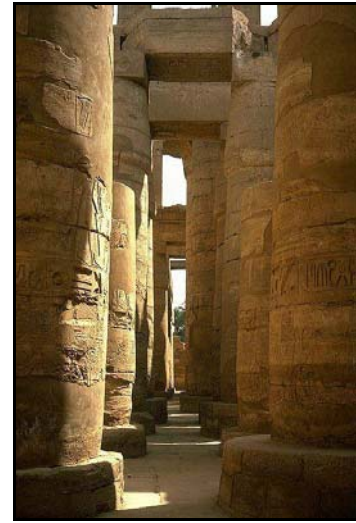
Temples consisted of rectangular halls, courtyards and chambers that were aligned around a middle axis. The feeling of eternity was expressed with these large, rectangle rooms. Pillars and columns held the heavy stone plates of the roof. In contrast to pyramids, the architecture of temples falls back on natural models: the columns copy bunches of reed and palm stems that had been used originally for the very primitive temples. The columns of stone imitate their natural examples.

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42 Whittick, Arnold; 'Encyclopedia of Urban Planning', Mc Graw and Hill Book Company, pg.40



**Figure 4.5** Temple at Luxor, Karnak  
(source: [www.greatbuildings.com](http://www.greatbuildings.com))



**Figure 4.6:** Temple of Amon  
(source: [www.greatbuildings.com](http://www.greatbuildings.com))

One pyramid was the labor of as many as ten thousand workers on the scene at any one time: craftsmen, engineers and common laborers. Archeologists examining a village of construction workers; a village of men, women and children, estimate that around 20,000 workers labored twenty years to complete one of the great pyramids, that the workers were Egyptians from various parts of Egypt and that they were a community serving the gods.

Sculptures of Egyptian artists strongly vary in size. Colossal sculptures are comparable to the huge monuments of stone, whereas monumental sculptures, which are hardly bigger than a man can be best compared to the single elements of buildings. Small sculptures in the form of humans, animals and ship models can be found in tombs as burial donations. Humans and animals, as well as animal-like and human-like gods, are portrayed in a firmly outlined block form in a front or side profile view.

Another element in Egyptian architecture is obelisks. At first they were used as gravestones. But later it had some religious meanings. It was believed to

have spiritual powers that can protect the place, the building or the city from harmful powers.

City structure and architecture were dominant on nature, and they were in geometrical forms. Cities were built on a basic scheme and settlements were designed for a complex role. By the effect of the increasing trade the city form had changed in time. The settlements usually were prevented from the effect of the floods. At a dominating point of the city there raised a shrine, obelisk or a pyramid, which all of these served to religious aims.

According to these properties it can be said that the modern planning had its roots in Egypt, with its regular layout and dominant buildings located as the symbols to reflect the life and understanding of life. The magnificence of the Egyptian architecture survived for years, and it is obvious that they tried to make works of art that make us believe the eminence and eternity of the human kind.

#### **4.1.3. Cretean and Greek**

‘**Crete** is a civilization that appeared on the Aegean island of Crete around 2000 B.C. and flourished there until it was almost totally obliterated during the period from 1400 to 1100 following some natural disaster.’<sup>43</sup>

The conditions of the rocky island Crete is far different from the other civilizations of Egypt and Sumerian; weather conditions, soil, vegetation, regional properties effected the way of life, economic facilities and the way of thinking. Although Cretean culture was effected from eastern civilizations, a new culture and

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43 Trachtenberg, Marvin- Hyman, Isabelle, Architecture from pre-history to post-modernism- The Western Tradition- Academy Editions, 1986, pg.77-78

art which had its own values and elements were borned. Crete had relations with Egypt and Assyrian; they were all Mediterranean and had made commerce with Egyptian, Middle-Eastern and Aegean States. They were importing copper and manufactured bronze. With this rich and cultural structure, Crete played a leading role in technology and art during its era. Their civilization named Minoan after their legendary King Minos.

Although not without having sources in the older regions of the East, Cretean culture was unique. 'Its boundaries and defenses were not deserts or fortresses, but the sea, which yielded great wealth and from which the Creteans created a luxurious, relaxed way of life quite distinct from any other. Palaces and towns, roads and sewers, wall painting and wine jars, paintings and jewelry preserve the record of Minoan life, which achieved its greatest splendor between 1700 and 1400 B.C.'<sup>44</sup>

'To understand Knossos one must realize that, it was more than a residence. It was also a religious focal point; the king was Crete's highest priest, and an administrative center. But rather than setting these functions in distinct areas, the Cretean monarchy at Knossos gathered together all the functions of kingship in chambers and apartments spread around a single large court. The palace did not embody monumentality or conceptual order: on the contrary: it was picturesque and colorful, its atmosphere one of comfort and informality.'<sup>45</sup>

The settlements of Crete had usually situated on the hilltops. According to the ruins: the roads were straight and had sidewalks, stores and houses were in a line and the houses had straight roofs, clean water and sewage systems. In

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44 Brinton, Crane-Christopher, John B. -Wolf, Robert Lee, 'Civilization in the West', Prentice Hall Inc., 1964

45 Trachtenberg, Marvin- Hyman, Isabelle, Architecture from pre-history to post-modernism- The Western Tradition- Academy Editions, 1986, pg.78

Crete a new house type was started to use, the houses had atriums and that helped to have sunlight in the rooms.

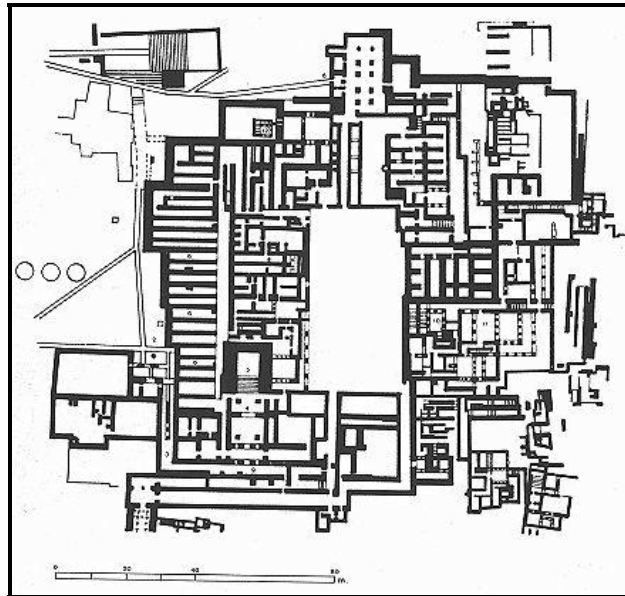
Cultural buildings were more important in the settlements than in any other society. Crete was the first place to have a stone theater with all service equipments. As public services had a significant role in the social life, public buildings were becoming costly and gorgeous. The roads were gridal; the facades of the houses were facing east. Plans of the houses were square, they were in linear order and they had two stories. Because the settlements had a natural sea border, they didn't have city walls for protection.

In Crete, the king was also the religious leader and therefore the palace was both an administrative and a religious center. Knossos and the palace in Knossos are the most important products of the Cretean architecture. In order to serve its aim of displaying the power of the king, it can be said that Knossos palace had succeeded more. 'The palace at Knossos, with its own theater and its elaborate drainage system, its maze of courtyards, corridors, storerooms, workshops, living quarters, council chambers and government offices, testifies the engineering skill of the Minoans. It may well have been the building that entered into myth as the labyrinth to which Greeks sent sacrificial victims. The wide range of ceramics from jars as tall as a man to cups as delicate as an eggshell, the marvelous frescoes of plants and flowers, courtiers and cupbearers, noble ladies and acrobats reflect rich, elegant and sophisticated society.'<sup>46</sup>

For the Minoan Period the important and monumental parts of urban settlements had been studied since these are the best known. They are the famous palaces of Crete and their immediate surroundings. The plan of the palace of Knossos brings to mind of the labyrinth. The Minoan temples represent



theocratic centers or feudal centers with their people under autocratic administrations.



**Figure 4.7:** Palace at Knossos  
([www.greatbuildings.com](http://www.greatbuildings.com))

After Crete fell, 'with the destruction of Knossos around 1400 BC, Mycenaeans conquered Crete and established<sup>47</sup> a culture slowly evolving on Greek mainland for several hundred years. Its character was notably different from Crete, the Mycenaeans were more a society of warriors than traders. They built citadels rather than pleasure palaces, organized royal precincts enclosed by huge cyclopean walls, stone blocks, difficult to access and highly defensible.

What we know about the urban settlements of Mycenaean Period is based mostly on the excavation of important fortresses and palaces, or palaces with small settlements around them. The settlement of Mycenae itself, which is a fortress with one palace and also other settlements are mostly a palace with

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46 Brinton, Crane-Christopher, John B. -Wolf, Robert Lee, 'Civilization in the West', Prentice Hall Inc., 1964

47 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.27

probably several more buildings around it. They can be considered as typical examples of major settlements during the Mycenaean period. The initial nucleus of Mycenae was the acropolis with its palace.

## GREEK

Greek culture took shape in the interaction of two diverse peoples. 'The Dorians, who invaded from the north about 1100 B.C. and settled in Peloponnesus, with Sparta as their center, were a militant, disciplined people with powerful sense of tribal order. In contrast, the Ionians, some of whom had been driven across the Aegean Sea to Asia Minor and the Greek Islands, had a mercantile, trading society. By the eighth century B.C. two groups had mingled and become a single though highly varied culture and they called themselves Hellenes.<sup>48</sup>

Their political unit was the city-state composed of colonies; which had spread by finding new cities in other parts of the Mediterranean. Colonization brought development of cities new ideas and new layouts combined with traditional patterns. Colonial cities were often with regular patterns whereas parent cities grown in irregular patterns in time. ' Each of the colonies was a city state organized along the social and economic lines of its parents, but in contrast to the generally unplanned, uncontrolled organic growth patterns of the parents the majority of the offspring were developed along planned lines.'<sup>49</sup>

For the Greeks, like in all the ancient people of Egypt, Mesopotamia and Anatolia, architecture began in the service of religion. They were religious and polytheistic, temples and shrines were built to their gods and goddesses. In

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48 Trachtenberg, Marvin- Hyman, Isabelle, 'Architecture from pre-history to post-modernism- The Western Tradition', Academy Editions, 1986, pg.83

49 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.41

accordance the important question that the Greeks had dealt with was the right form of their temples. They were placed to the acropolis and acted as the landmarks of their time. The most important of all Greek architectural forms was the temple.



**Figure 4.8:** The temple of Athena Nike, Acropolis, Athens

‘The parts of the settlements in ancient Greece, which survive, are usually their great monuments, either palaces or temples, because these were the parts of the settlements, which were built with much greater care and with much better materials. These monuments were also quite often built in higher places than the other buildings, and much less debris than the lower parts has therefore covered them.’<sup>50</sup>

The temple was not meant for worshipping; it was only symbolic dwelling of the deity. A statue of the god or goddess whom it was dedicated was located in the temple. ‘The early Greek temples comprised a rectangular interior and an entrance porch with columns standing between projecting walls. In the later arrangement, the altar for animal sacrifices is displaced to the exterior by the cult statue; sacred image rather than ritual now sanctified the building’s core.’<sup>51</sup> The task of architecture was to make temples beautiful. The Greeks regarded beauty

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50 Encyclopedia of Urban Planning, Arnold Whittick, Mc Graw and Hill Book Company, pg.48

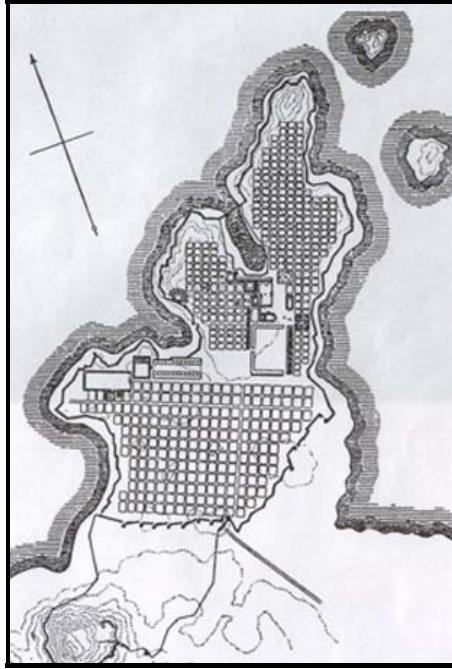
51 Trachtenberg, Marvin- Hyman, Isabelle, ‘Architecture from pre-history to post-modernism- The Western Tradition’, Academy Editions, 1986, pg.84

as a religious exercise and that the secrets of beauty lay in ratios or proportions; so their temples were in mathematical proportions.

Their gods were of a human sort. 'Men were gods, who lacked perfect beauty, immortality and power, and the gods were but men, with all the human frailties combined with higher qualities. Man became the measure of all things.'<sup>52</sup> With the awareness of the importance of man, Greek people gave also importance to the houses, palaces and social buildings other than temples.

In Greece, philosophy, history, drama, epic literature, democracy, and science appeared, these developments were inspired the construction of other forms of civic architecture: theatres, council halls, public halls, and the planning of the cities themselves. As for the Greeks man was a social creature, their architectural efforts were not directed to private life or the afterlife. It was more directed to public life than any other ancient civilizations. It is expressed in their architecture and their city planning.

Miletus, is one of the most important cities of colonization, which had established a number of colonies and become as a result the head of powerful city states. Its planner is Hippodamus under the task of rebuilding the city. He is also believed to be the first city planner who derived his principles of city planning. The scheme with which he is created involved these aspects. Several main streets crossing at right angles cut the city. Most of the resulting rectangles were divided into uniform grids of blocks. The rectangular blocks were further subdivided into house plots; the plan of the city was adapted to the terrain. The most important public buildings were situated on the main streets near the agora, where agora is located in the center.



**Figure 4.9:** Map of Miletus (Source: Wycherley,R.E., 'Antik Çağda Kentler Nasıl Kuruldu?', Arkeoloji ve Sanat Yayınları,1993,pg.18)

The agora was the focal point and the most important node of the Greek city, where people spent their daily life and democratic actions take place. 'It combined the functions of the market place, a place of assembly, and a setting for ceremonies and spectacles.'<sup>53</sup> Around the agora many public buildings took place in coordination with it. As a node the placement was important, agora was usually in the middle of the town, and near the sea when a harbor city. In Miletus it is near the harbor and also in the center with other important prominent buildings of the time, including one dolphin monument to welcome the visitors arriving from the sea.

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52 Trachtenberg, Marvin- Hyman, Isabelle, 'Architecture from pre-history to post-modernism- The Western Tradition', Academy Editions, 1986, pg.83

53 Ward- Perkins, J.B., Cities of Ancient Greece and Italy: Planning in Classical Antiquity, George Braziller, New York, 1991



**Figure 4.10:** The basement of the monumental entrance of Miletus from the sea.

#### **4.1.4. Roman**

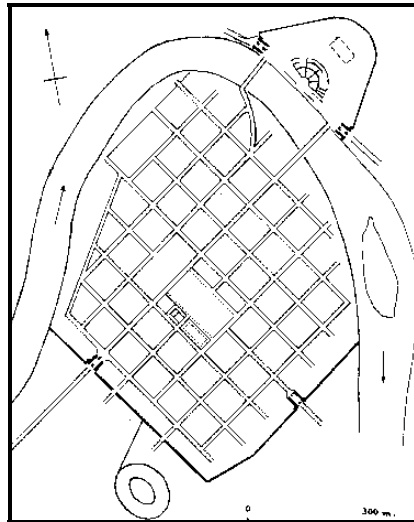
Etruscan people and their civilization were the first to rise on the Italian peninsula (800- 700 B.C.) They controlled all of Tuscany and Po valley and finally became independent. Later when they were destroyed by the early Romans, what survived from them were the structures, which were too massive or useful to be destroyed such as temples or city gates. Roman civilization was spread to the entire Italian peninsula and then slowly to the Mediterranean world by 3<sup>rd</sup> century B.C., centuries after the city of Rome was founded in 753 B.C.<sup>54</sup>

Romans had developed the Hellenistic and the Etruscan city according to their principles of discipline and order. Architecture was a useful ideological tool for Rome. Some main structures were symbols of political unity and they were intentionally repeated everywhere as the civilization grew. Many colonial towns were founded as military camps in geometric order in order to confederate the empire, control the land and assimilate the civic people. Rome used the concept of the city as a center where all the interests were focused into one of an autonomous

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54 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.55

administrative structure, which let empire to compose of populations that differed greatly from each other.<sup>55</sup>



**Figure 4. 11:** Verona, Plan from the Roman era.  
(Source: Ward- Perkins, J.B., *Cities of Ancient Greece and Italy: Planning in Classical Antiquity*, George Braziller, New York, 1991)

The cities were divided into four quarters by two main roads that were meeting at right angles; the cardo and decumanus. The strict axial basis used in the cities was a symbol of authority. This layout was planned for the military needs. In the center of the city by the main axes situated the administrative and religious buildings, where the forum had an important part. Forum was the most important part of the city as a node, a complex with a number of facilities. The other publics were also located as to be a landmark for the cities usually around the center of the towns, around the intersection of cardo and decumanus, in the respect to their forms and functions.

Like the Greek Agora, Forum was a lively market place and entertainment center. It provided the major shopping and commercial facilities with

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55 Jones, W.D., Montgomery, H., 'Civilization through the centuries', University of Georgia, Blaisdell Publishing Company, Toronto, London, 1960

many shops and workshops. Economic, cultural, and artistic exchanges, and the contacts made here helped to spread the Roman language, law, and cultural heritage throughout the countries. Forum later became a symbol of the republic and the administrative, commercial, and religious center as imbued with temples, victory columns and statues.

Around them in other parts of the city, usually placed temples, basilicas, theatres, baths and circuses. The quarters were divided into grid plots and the rest was containing housing. It was not surprising that around the city there were a defensive wall forming a ring around the city and a ditch, knowing that the cities' prime target was to fulfill the military needs.



**Figure 4.12:** Celcius Library, Efesus



**Figure 4.13:** Trajan's Markets, Rome (Today an Important landmark that represents the city's history.)

There was not one particular building type such as a temple. There were many building types, baths, circuses, arenas, basilicas, libraries, theatres as mentioned before, which was a sum of more complex social functions and social structure. In addition to these they developed water supply, distribution and

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drainage systems, and methods of heating. Roman people were great engineers who built huge and lengthwise aqueducts for the transportation of water, and underground sewers, which were very important structures for hygienic needs and well being of the people. It can be said that they have taken their amusements and pleasures more seriously rather than culture and religion by looking at their huge arenas, circuses or baths.

World conquest was the first ambition for Rome, so the monuments were erected in dedication of great victories; triumphal arches were built for the entry of generals. Emperors were crowned and new forums were made for them, which each one was competing in size. 'It was not the plan of the city which he saw emerging, but a series of ever greater monuments to the glory and deification of his rulers.'<sup>56</sup>

The Emperor Constantine adopted Christianity as the state religion in 313 A.D. With Christianity many changes in the urban form had occurred. The symbols and structures of Christianity began to ornament the cities, this attempts happened even before 313 A.C. New reference points in the cities were churches and the emperor had spent much of his effort to construct churches, since a new religion was adopted as the state religion. In the year 330 A.D the Emperor Constantine moved the capital of the Empire from Rome to Constantinople (Istanbul).<sup>57</sup>

First churches were originally the building adopted from the Roman basilica. Which the usage of the original building was to provide a sheltered area at the main town square for the people to manage their daily business affairs in non

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56 Gallion, Arthur B., 'The Urban Pattern', Van Nostrand Company Inc., pg.28

57 Norwich, John Julius, Great Architecture of the World, Mitchell Beazley Pub.Ltd., 1975, pg.78

Christian times. It was rectangular with two colonnades separating the nave from the aisles with seating and a sacrificial altar.<sup>58</sup>

In the Roman settlements the most prominent property was the presence of a unity formed of monuments, triumphal arches, perspectives; that can be named as urban aesthetics. Other than being plastic elements; obelisks were erected in particular points in the city as an explanative figure. Monumental arches with their figures and ornaments were on the main axis and they can be accepted as urban sculptures.

All the cities, which were founded by other nations, were rebuilt according to Roman city structure and social life in order to spread their religion and tradition. They were ornamented with buildings that physically represented Rome and its juridical, social, and religious order. The development of Roman imperialism was thus associated with the development of urban culture.

After Constantine established a capital of his own, in 395 the Empire was officially divided into two parts; west part to be ruled from Rome, east part to be ruled from Constantinople and with the name Byzantine Empire later. In the west during the 5<sup>th</sup> century the migrating barbarians established themselves in the Roman provinces. Accordingly, it is agreed that the collapse of the Roman Empire is in 476 A.D, when a barbarian leader killed the last Emperor of East Rome.<sup>59</sup>

There are many reasons underneath the ending of the empire. Maybe the most effective ones are the unlasting and effective immigration of the barbarians from the north and that the Romans lost their wealth source and that

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58 Trachtenberg, Marvin- Hyman, Isabelle, 'Architecture from pre-history to post-modernism- The Western Tradition', Academy Editions, 1986, pg.161

59 Tanilli, Server, 'Yüzyılların Gerçeđi ve Mirası, Cilt 1, Adam Yayınları, 2002, pg.555-558

they were spending a lot more than they were gaining, and reasonably economic balances had changed. A new economic system was about to develop by the Barbarians, which would form a basis for the medieval society.

## **4.2. The Medieval**

It is accepted that the Ancient Ages ends and the Middle Ages starts with the collapse of the Roman Empire in the year 476 A.D. This era continues until the Renaissance for about a thousand years. In this period there aroused stability in the society, politics, religion and economics, which continued until Renaissance. Medieval Ages can be studied and analyzed mainly in three stages from 5<sup>th</sup> and 15<sup>th</sup> centuries: Early Christian-Byzantine-Carolingian, Romanesque and Gothic in architectural means.

In Medieval Ages, because social, economic and political context was extremely complex, the towns were also in many various forms. A new social structure was formed which was feudal society. One of the reasons of the foundation of a new form of society was that new groups were borned after the invasion of the barbarians. This fact created new classes like kingship, lordship; which was based on kinship. One other and dominant reason, which mainly effected this era, was about religions as usual. This was a period when the presence of the church and the priests were very dominant. With the role of the church medieval age had scene the revival of commerce.<sup>60</sup>

In another hand, Islam had aroused and expanded during the 7<sup>th</sup>, accordingly had become a band between Europe and East. With a common word of this area, dark ages, comes from the dark structure of that era, which was not

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60 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.93

dominant on the Mediterranean, Arabian Peninsula and Islamic Spain with the positive effect of continuing trade and spreading Islam. It was generally dominant on the rest of Europe with the typical church towns.<sup>61</sup>

In the years around 500, the Western Empire was in ruins affected by the migrating barbarians. The invaders shattered the Western part and destroyed the political unity throughout the diverse areas. With the end of the Roman political and social institutions, cities, wealth and culture the monumental art in the cities had declined. One important effect of migrations was the replacement of the urban, educated society with the one that is more agricultural and illiterate. By the end of a centralized civil administration a new chief had took part to dominate the new rough society. And for this reason Church had introduced monasteries that have reflected a real Christian way of life, other than the churches that represents the religious power. Monasteries were complexes that had various buildings for different social, cultural and religious functions, which served as culture and economic centers.<sup>62</sup>



**Figure 4.14:** Cheský Krumlov, a typical medieval town with a dominating church.



**Figure 4.15:** Bratislava, Castle dominating the town.

The church, monastery and the castle of the lord dominated the medieval town. The church plaza became the market place with the merchant

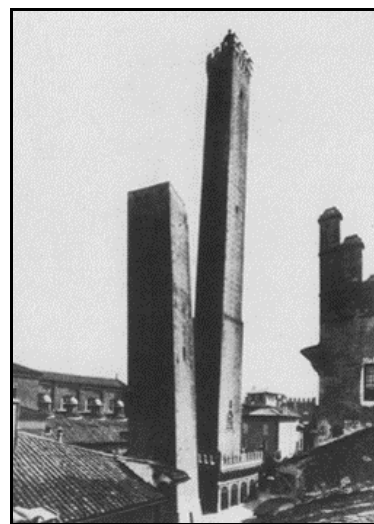
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61 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.92-97  
62 Jones, W.D., Montgomery, H., 'Civilization through the centuries', University of Georgia, Blaisdell Publishing Company, Toronto, London, 1960

guilds. The town hall and the guildhall were built on or adjacent to the market plaza. The cities were in irregular patterns with heavy walls. The streets were also irregular and narrow primarily for the people on foot. The focal point of the medieval town was the church and its plaza primarily and secondarily castle.<sup>63</sup> Fortifications were in all sizes and shapes; built for defensive purposes or as places of refuge in time of trouble. Basically they protected the lord's family and the natives from outsider attacks. For some centuries the security of towns was depended upon fortifications, other then this walls and towers had effected to shape the architecture of the cities.



**Figure 4.16:** Medieval street, Siena



**Figure 4.17:** Two family towers, Bologna  
(Source: Girouard, M., 'Cities and People',  
Yale University P., New Haven& London, 1985,

pg.40)

Later with the rising importance of the guilds, they began to construct taller buildings than the church's bell towers in order to express their economical importance and political force. But as a result the most prominent buildings of the middle age were made done by the chiefs of trade and religion. In Italy, with the rise of trade and with its prosperity some families became important and wealthy.

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63 Gallion, Arthur B., 'The Urban Pattern', Van Nostrand Company Inc., New York, 1986,pg.33-38

As a result of this structure many tall towers dominated the towns, such as San Gimignano, Bologna and Siena, which were representing the wealth and power of the owner families. So, the rivalry between the families was the question of who could build the highest tower.<sup>64</sup>

Only a few considerable empires had showed up in this era, but without question the Byzantine Empire was the most important one. As having the heritage of Rome, the empire developed architecture of its own having the economical advantage and collecting tips from the Roman and the Middle Eastern architecture for the first centuries of the middle age. The importance of their architecture is the capability of using great domes over rectangles that had its inspiration from east with the help of their engineering knowledge coming from their ancestors.

As for an example and without any doubt the greatest of this type is the magnificent Haghia Sophia, which was constructed in 532 and still stands proudly. One other that cannot be omitted is the St. Marks in Venice with its extraordinary domes and decoration.<sup>65</sup>



**Figure 4.18:** St. Marco, Venice

On the other hand in the west after the west empire ended, the Holy Roman Emperor crowned Charlemagne who was the King of Franks, in 800. He

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64 Girouard, M., 'Cities and People', (Yale University Press, New Haven & London, 1985, pg.37-40  
65 Trachtenberg, Marvin- Hyman, Isabelle, Architecture from pre-history to post-modernism- The Western Tradition- Academy Editions, 1986, pg.169-177

created the strongest unit in Western Europe since the fall of Rome. He moved his capital to Aachen and established his own institutions. The only noteworthy buildings of this years were built under his command which would later be called as Carolingian architecture, with the name same as its era. The sources of its inspiration have driven from a number of sources, but the principal one is his own palace chapel at Aachen. This domed, two-storied octagon represents a type of Early Christian and Byzantine architecture. Following the fall of the Carolingian Empire a time began with political chaos, cultural decline and a wave of violence and terror. Migrations continued to Western Europe from land to sea, from east by Muslims and from North by Vikings.<sup>66</sup>

Romanesque is the style of architecture, which arose in Western Europe towards the end of the 9<sup>th</sup> century till the rise of Gothic in 12<sup>th</sup> century. The style appeared first in Italy late in the 9<sup>th</sup> century. The other principal countries in which Romanesque flourished were France, England, Germany and Spain. Even though they had differences, the architecture was unified by certain characteristics; the reason was because the patron was the Christian Church. Christianity inspired all the symbolism in Romanesque.<sup>67</sup> Kings, emperors, dukes; popes were the primary patrons of Romanesque. In Romanesque architecture characteristic elements were the cruciform plan, the bell tower and the cloister. So the tower became very important for the first time in history. Romanesque looked back to Charlemagne period, to Early Christian, Imperial Rome and even Byzantine. The reborn of the Holy Empire comprised in 10<sup>th</sup> and 11<sup>th</sup> centuries mostly on today's Germany. In this period many towns, which were seats of monastic learning and of trade, grew in importance.

Gothic style began to be used in the 13<sup>th</sup> century. In Gothic age, the dominant art was architecture. During Gothic age religious architecture was of

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66 Risebero, Bill, 'The Story of Architecture', The MIT Press, Cambridge, 2001, pg.49

primary importance; many great cathedrals were produced with their ornaments with sculpture, painting and stained glass. Gothic architecture, which firstly developed in France, covered a wider area than Romanesque. This spread enables to create more efficient controlled changes in the cities. It became a united architectural language in Europe.



**Figure 4.19:** The Palazzo Pubblico, Siena with Torre del Mangia, Italy's highest bell tower.

Religious buildings were of enormous significance, and around them the urban center developed. In this era, other than Romanesque, new towns had grown, and as they get wealthier, they wanted their own churches that could also be symbols of civic pride other than their religious functions. By the end of this period, sharp and long towers and roofs crowned the silhouettes of the cities. These cathedrals are still the dominant elements in European cities; they and the area around them are attraction points in the city and the individual buildings acts as landmarks in addition to be religious buildings. Another building type introduced to the cities of trade with a secular understanding. It was the town halls, with high bell towers, municipal building of that time where wealthy merchants symbolized their pride. The best examples are in Italy as it is the leading peninsula of trade by the time.



## **4.3. Modern Ages**

### **4.3.1. The Renaissance and Reform**

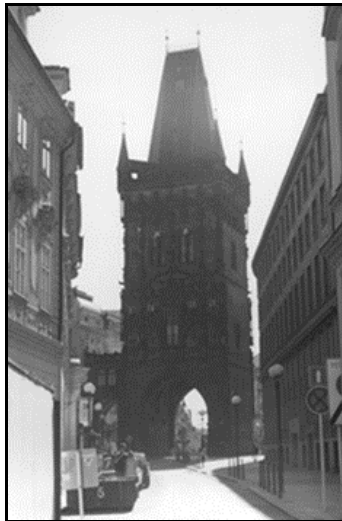
The term Renaissance means; rebirth; it was named as rebirth because in this period there was a revival of interest in classical art forms of ancient Rome and Greece and their use as the inspiration of European painting, sculpture, architecture and urbanism. At the end of the 13<sup>th</sup> century, the importance of Greek and Roman civilizations, which were about to be forgotten, had taken importance again. They were used as the inspiration to European art, architecture and urbanism. The rediscovering of the ruins of antique architecture and rediscovering 'The Ten Books of Architecture', which was written by Vitruvius in the ancient age, had a big effect and impression on the Renaissance planners. Proportions, dimensions and the understanding of the antique era were adapted to Renaissance planners. Humanism was also a main source of Renaissance; a new understanding of humanity developed: an understanding that destroyed slavery and gave importance to man's thoughts, mind and intellectual powers. The growth of individualism gave rise to the development of Renaissance.<sup>68</sup>

By that era many medieval towns lost their dynamism that helped them to develop. However with the rise of world trade and travel and with the increasing commerce between towns and even countries, a new social and economic order appeared. Mercantile economy and the wealth merchants took place of the old order. Institutions were weaker and individuals became more powerful, and even the church was taken over by some individuals or by families of commerce. The

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68 Jones, W.D., Montgomery, H., 'Civilization through the centuries', University of Georgia, Blaisdell Publishing Company, Toronto, London, 1960

wide spread use of gunpowder in the 15<sup>th</sup> century marked the end of the walled town, this corset of a wall around the medieval town became useless, so it was logical that the towns should spread. As the towns grew, overcrowding occurred. Building up to tree or four stories were built without changing systems of water supply and sanitation. Other than these Black Death had ravaged Europe and took the lives of a big amount of the population. Accordingly superstition occurred, cults grew and religion became polytheistic. Plague caused social and political chaos and effected on the development.<sup>69</sup>



**Figure 4.20:** Gunpowder Tower, Prague  
(It is one of towers of the 13 entrances to the town,  
and still stands out as an evidence of that era.)

With the lessening of the church's importance, its expression in its buildings also became lesser. As the old order died a new one appeared, its symbols also changed and new dominants appeared with the rise of a new society. With this new era, the monumental road, buildings of commerce, the princely churches, and most importantly the palaces was about to become dominant in the urban environment.

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69 Gallion, Arthur B., 'The Urban Pattern', Van Nostrand Company Inc., pg.40-45

Urbanism of Renaissance was very characteristics; it was firstly seen in 15<sup>th</sup> century in Italy and then in other European towns. Florence had become the wealthiest city in Europe in the 15<sup>th</sup> century with its bankers and merchants. This wealth increased the intellectual and aesthetics demands and Renaissance aroused firstly in this city. At the beginning, the rise of secular power was expressed by the building of the individual palaces. These rich and powerful men extended their patronage to artists for improving their cities, as this became the ambition of the rulers to display wealth and power, just as once the church had fulfilled this function. The design of towns in the Europe of the Renaissance period changed slowly at first from that conceived in the medieval spirit. At first there were no planning at but only the structures of the buildings was decorated with classical influence.<sup>70</sup>



**Figure 4.21:** Florence, center for Renaissance and its dominating buildings;  
The Duomo and Palazzo Vecchio

The city of the 16<sup>th</sup> century became more a symbol of a defined social government and order. It was a result of the changing economic and political system. New elements of the ruling class were emerged. An autocratic ruler governed them, whose residence created a new center in the city. A change in the role of a ruler and aristocracy produced a new building type, called the city palace.

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70 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.157-161

The palace directly derives from Ancient Roman forms of blocks of flats (insula) with rooms for the owner and the family on the first floor and servants on the upper floors.<sup>71</sup>

The effects were seen in arts, religion and architecture. Instead of the churches dominating the skyline of the towns and their very plans, as of old, the new dominants, palaces of the rulers, appeared. But the church didn't lose its primary importance. The centralization of power in the hands of a king or a prince created the grandiose buildings that the town itself is completely dominated by it. They were a symbol of how much power rested in the hands of a secular ruler.

Another form of building that was important and gave many grand architectural examples of that era were the villas which the noble families and banker families had owned. They were built for fulfilling the delights of country life of their owners. These buildings were magnificent and luxurious and designed by the leading architects of the day.

The ideal urban concepts of this era are very important for urban planning. These plans were served for creating defined borders, rules and balance. Urban issues were taken consciously as a scientific research topic. Renaissance was not only conceptual, it also reflected the life of an era which; all defense, organization, infrastructural and urban elements had taken place in the buildings. Individualism showed itself also in other means, it was given importance to the names of architectures and planners of this period. Their works and names reached till today just because an individual was important as for the things he made or thought. They were much more important than the ones who patron them.

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71 Norwich, John Julius, Great Architecture of the World, Mitchell Beazley Publishers Ltd., 1975, pg.150

The principal medieval and Renaissance piazzas were either religious, with a church or cathedral as a dominating feature, or civic, with the town hall as a dominating feature. The piazza was opened at one end for an avenue approach with the principal building opposite. The reason for the placement of the monumental building was for to increase the effect as a landmark for the city. And by linear streets opened to the landmark building, the façade and the structure was more obvious and clear for the viewer. The monumental effect was obvious with the usage of centerline and axis in every space and form. The axis and the strong centerline symbolized the growing concentration of power.



**Figure 4.22 & Figure 4.23:** Campodoglio and the statue of Marcus Aurelius in the center. (Source: [www.mediasoft.it/piazze](http://www.mediasoft.it/piazze))

‘Formal plazas of the Renaissance were carved out of the medieval town and given a monumental scale and form reminiscent of classical antiquity. Bernini designed Piazza St. Peter, Michelangelo created Campodoglio on the Capitoline, Rainaldi built Piazza del Popolo in Rome, Place de Royal and Place des Vodes were built in Renaissance.<sup>72</sup> The Campodoglio is located in the Capitoline Hill with a view of the Forum Romanum and can easily be seen by the passerby. It is an important node for the city and also represents the Renaissance

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72 Gallion, Arthur B., ‘The Urban Pattern’, Van Nostrand Company Inc., pg.44-45

era with its principles; the axis ending with a prominent building, symmetric layout and a focus element that commemorates history, Michelangelo used Marcus Aurelius statue as a focal point of the piazza on the capitol.

Main design components of their work were the primary straight street, gridiron districts and enclosed spaces, squares. In Renaissance, elements such as arch, column, triumphal arches and especially sculptures were used as in Roman times. Sculptures were used in the squares, in the fountains and took part as a figurative role in urban space. The monumental character of the classic returned back to the cities. Unity and symmetry were the key words used in planning. Renaissance cities concentrated in the image of mathematically organized universe. Great importance was given to the vistas, accordingly to the placement of the monumental buildings.

### **4.3.2. Baroque**

Renaissance architecture lost its significance at the end of 16<sup>th</sup> century. Following that Baroque architecture took its part. In this period religion became the dominant factor on arts once again. From the first decades of the 17<sup>th</sup> century, Roman urban design tradition passed from Renaissance to the Baroque, a pronounced wish for systematization became evident starting from the city of Rome. The aim was to express the role of Rome as the dominant focus of the Catholic Church.

Indeed planning of Renaissance and Baroque is tied with each other. Characteristic of Baroque planning was the royal squares which were done with leveled geometry. Baroque planning had a revolutionary meaning: because everything was about vistas and perspective. Usage of the monuments and usage of the gardens as a main element for ornamentation was important. With revolution

Baroque fountains, pools, great residential buildings, parks, colleges, museums, universities and hospitals were built.<sup>73</sup>

Baroque town planning and architecture appears as a reflection of the great systems of the 17<sup>th</sup> and 18<sup>th</sup> centuries, especially the Roman Catholic Church and the political system of a centralized French state. Baroque design appears as a synthesis of dynamism and systematization. Baroque city was like the ceremony area of the absolute power. The aim was to unify the city space with continuous building surfaces. The tall domes of the churches were particularly fitted into the city, so that the church symbol became an organic part of the urban system.

It has monarchic, aristocratic and religious character. Baroque features had spread in countries where hierarchy of society was based on the labour of peasants. The new world of and Baroque offered man a choice between different alternatives; such as religious, philosophical, economic and political. It had an open and dynamic character, probably because of exploratory travels, scientific researches and new discoveries.

Typical institutions were the army, bureaucracy and the court. Law was to secure the position of privileged classes that was an outcome of mercantile capitalist economy. There was an ideology coming from absolute monarchy, army, bureaucracy and dependently industrial and economic capitalism. This ideology was based on discipline, order and precision. This new absolute state idea brought new urban arrangements. The power of bureaucracy and army was being felt on the monotony of new appearance of cities.

The Baroque city presents a clear system of places, paths and domains organized to form a hierarchy focused on a dominant center. Two building types

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73 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994

were seen in 17<sup>th</sup> century: the city palace and the country house. Their developments were related in the changes in political, economical and social structure that seemed as the reason of the rise of the capital city. The dominant building was either a seat of a new type of capitalist as in Florence, either a prince of the church (Rome) or an aristocratic member of a centralized court (Paris).



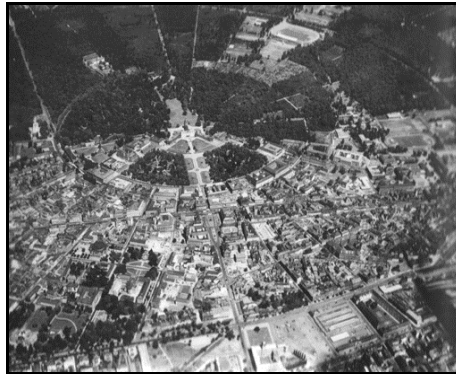
**Figure 4.24:** Milan Cathedral  
(Source: [www.mediasoft.it/piazze](http://www.mediasoft.it/piazze))



**Figure 4.25:** Spanish Steps as an urban node.

Also Piazza St. Pietro was a marvelous example of space composition, with its function as being the principal focus of the Catholic world. The obelisk at the center had an important function as the node where all directions were unified and connected with longitudinal axis that leads to the church. The Place Royale is one of great significance in European urban history as the prototype of the residential square. Piazza di Spagna; the staircase became a square itself and also a node for the urban structure, which tied two topographically different levels. Sculptures were used as an architectural element and in city squares either imbued in a water element or as individual.





**Figure 4.26:** Karlsruhe: Streets starting from the palace.  
(Source: Kostof; Spiro, 'City Shaped',  
Thames and Hudson, 1991, pg.188)

In the 18<sup>th</sup> century the Baroque city expanded and the dominance of the ruler intensified. The avenues focused upon the royal palace, where as in some examples like Karlsruhe the whole city revolved about and radiate from the palaces and great gardens of the royalty. The centerline and the axis symbolized the mighty power of the monarch. Most important elements were the palaces and palace gardens. First big-scaled projects were done in this era, which were about making of great squares and axis. The avenue was the most significant symbol and the main fact of the central authority on the Baroque city. The necessity of long and wide spaces in the city created straight, wide streets and big squares. Except cathedral and municipality, buildings were not big in scale.<sup>74</sup>

The importance of building monumental buildings and the connection of the buildings and the status of the owner can be understood with this example: Louis 14 threw the wealthy financier; Fouquet, into prison for his temerity to built a chateau almost as fine as the king' s in this period.<sup>75</sup>

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74 Gallion, Arthur B., 'The Urban Pattern', Van Nostrand Company Inc., pg.45-49

75 Jones, W.D., Montgomery, H., 'Civilization through the centuries', University of Georgia, Blaisdell Publishing Company, Toronto, London, 1960

Scientific researches had given priority to religious beliefs. At the end of the 18<sup>th</sup> century, French revolution happened which permanently changed the society. Indeed it was also the time when technical era had started. What had been succeeding in this era had brought many new opportunities for the life of men. Steam machine was a great invention and it brought a new era: industrial era. Production was easier and much more important but it also created a new social class which played a big part in this period; these were the workmen.

As conditions of life changed, there occurred new problems to be solved. Planning of 19<sup>th</sup> century was a sum of economical events that was a sum of the industrial revolution. Industrial revolution brought a lot of problems so this forced planners to find solutions. Behind these fine palaces and wide avenues there was a congested urban population. The city lacked sanitation, sewers, water distribution and drainage. Poverty and diseases were frequent. A gap was widening between the masses and aristocracy. Oppression brought revolutions in the 18<sup>th</sup> century. Another change was taking place: machines were replacing handcraft methods for making goods for trade.<sup>76</sup>

New transportation vehicles, new machines, organization of work and technical developments were affected negatively to the cities on the second half of the 19<sup>th</sup> century. Because the city was not ready for this development and it spread too fast that planning couldn't reach and the efforts done was not enough. As a sum of colonization politics to Asia, Africa and Australia 19<sup>th</sup> century had become a century of urban creation. In this century modern America was born and a number of urban development was planned.

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76 Gallion, Arthur B., 'The Urban Pattern', Van Nostrand Company Inc., pg.49

### **4.3.3. The Modern Era**

Many characteristics of the period of 18<sup>th</sup> and 19<sup>th</sup> century can be expressed by the term 'revolutionary'. The industrial and social revolutions confirmed the decline of the old world. Powerful nation states structures and operated. Human power was replaced by cheap mechanical power. There were attempts for concretizing new meanings to replace traditional symbolic forms of church, palace, and walled town and during the second half of the 18<sup>th</sup> century; a new kind of towns related to the new industrial technology became important. The term modern has been in use since the 18<sup>th</sup> century. At the end of 18<sup>th</sup> century, traditional institutions were completely crumbled with American Revolution 1775-85 and French Revolution, 1789. New republican state was risen instead of bourgeoisie society.

Europe is a sum of political, social and cultural events that spread to ages. Structural changes, technology and scientific developments that effected production and economical and political growth are the main factors. In the second part of the 19<sup>th</sup> century, city space was much more different than what men knew, was hard to understand and because it was different was attractive and interesting. With industrialization, a deformation of cities had started.

Urbanization had taken a great role and importance in Europe, especially in France. Haussmann's project of Paris had been the most important effort of that era. Road system was redesigned and new avenues were presented for the development of the city and buildings were rebuilt along the avenues. By the same time in America, industrial towns were planned in gridiron pattern without the difficulty of a historic core of the towns.

During the 19<sup>th</sup> century, the museum, the dwelling, the monument, the theatre, the exhibition hall, the factory and the office building took the places in the history of architecture. Matrix of streets and squares was extended, in order to meet the residential requirements of a growing urban class. Widening gap emerged between the capitalist and the labouring classes. Enlightenment, philosophy of 18<sup>th</sup> and 19<sup>th</sup> century was against the power of tradition and authority.

Most of the 19<sup>th</sup> century projects were based on this general image of an open space, and at the same time they tried to find a solution to the social problems. Problems of settlements appeared in the industrial age. For this aim, planners interpret concepts of place (center), path (linear continuity) and domain (zoning). The new typical urban plan was the orthogonal grid, with similar building groups that could be accepted as economic commodities. By 1890, concentrated development of the city was possible by the erection of the high-rise buildings, perfection of steel frame and the invention of the passenger lift.

The 20<sup>th</sup> century is a kind of break away from traditions in cultural history. During the first half of the 20<sup>th</sup> century two important social events oriented societies and urban forms: the two world wars. These wars had created new atmospheres in terms of society, economics, culture and politics. World Wars brought new attempts for town planning. After war period, destructed cities needed being rebuilt and restored.

City planning changed direction and appearance in the 20<sup>th</sup> century, with the invention of motor vehicles. Railway also entered city. Pedestrian access gained importance as a design principle. Another was the overthrow of the older building hierarchy, appearance of dominant forms of churches and other public buildings changed by commercial buildings.

The Bauhaus movement that developed after the World War I, in 1919, encouraged simplicity in architecture. The new appearance of city has some distinctions as; a functional organization, (dwelling, work, recreation, transportation and circulation) open spaces in geometrical order, row houses and skyscrapers in open areas, dwellings with minimum standards, vehicular and pedestrian traffic segregated. With skyscrapers, it symbolized capitalistic success. Roads and centers were redesigned for the automobile.

#### **4.3.4. A Brief Explanation of Turkish Planning Practice**

##### **4.3.4.1. Ottoman period**

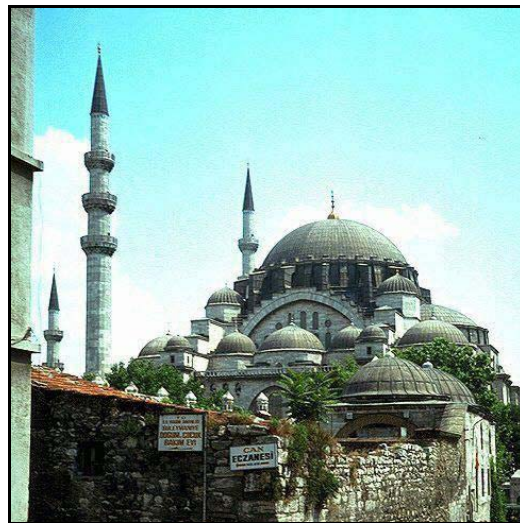
The Ottoman Empire derived almost all its institutions and organizations from Turkish traditions and Islamic rules. The Ottoman society was ruled by the Sultan called Padişah, he was the ruler who represents central authority as a dominator of state. Beylerbeys ruled the great provinces and Sancakbeys ruled smaller provinces. Spiritual control was exercised by the Şeyhülislam and Müftü. In general Ottoman social structure was monarchic, religion oriented and had been separated into different ethnic groups; Moslem, Greek-orthodox, Armenian and Jewish. Hierarchically according to their relations to Sultan and social status: the army, scientists, tradesman, artisans and villagers.<sup>77</sup>

Ottoman towns were generally were divided into two centers; the religious complex 'külliye' around the major square and the commercial area around the bedesten. Külliye served various functions and became the activity centers of the settlements in early years. The mosque was the most significant

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77 Tokol, S.A., 'Conceptual Analysis of the Relationships between the social sturcture and physical urban form', Masters Thesis, METU, Department of Architecture, Ankara, June, 1990

element and baths were the centers of the civic life. Many magnificent mosques were built in order to show the power of the ruler and in order to announce the religion of the cities. The minarets were dominant figures of the cities attached to the mosques racing with the enormous Ayasofya. 'A uniquely Muslim invention, the balconied minaret tower is recognized, as a religious symbol through its long association with the mosque. Towers of early mosques functioned only as indicators of a sacred site and as a symbols of the political power of the caliphs.'<sup>78</sup>



**Figure 4.27:** Süleymaniye, İstanbul

Social organization had levels such as administrative organization of the Empire, organization community, organization of guilds and trade. Quarters of a town called mahalle, which shows homogeneous features in terms of socio-economic and religious aspects. Main elements of urban planning were high density, low height, separation of public and private residential spaces, compactness and continuity of urban form, narrow curved roads and landmarks, which are mosques, baths and a public square in front of the mosque.

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78 Trachtenberg, Marvin- Hyman, Isabelle, 'Architecture from pre-history to post-modernism- The Western Tradition', Academy Editions, 1986, pg.222

Villages might have two centers, the mosque and the great tree where the place underneath plays the role of an ancient square, where men meet and discuss local matters. The concept of the administrative, commercial and religious center and the residential neighborhoods spread around is a common feature in Muslim town.

Social institutions were mosques, soup kitchens, caravanserais, hospitals, bridges and fountains. With the increase in trade in later periods, trade and business were the main activity. The focus of the center and the trade was the bedesten. The commercial center included markets, mosques, and small mosques called mescits, closed bazaars, open-air bazaars and fountains. And finally inns developed called hans, built closely to each other around the market place. Late in the 19<sup>th</sup> century, with foreign influence the square came into the Ottoman urban form. Commercial center, administrative center, bourgeoisie districts and railroads were the units of the 19<sup>th</sup> century urban form. The proclamation of the Reformation called Tanzimat in 1839 was an important event. During this period, urban spaces having monumental scales began to replace with the classical ones. Natural elements were used in order to define spaces by creation of vistas. During the era of Mimar Sinan who was the genius of both Turkish and world architecture, many masterpieces were produced and they dominated the urban environment of the Ottoman world.

#### **4.3.4.2. Modern Turkish Period**

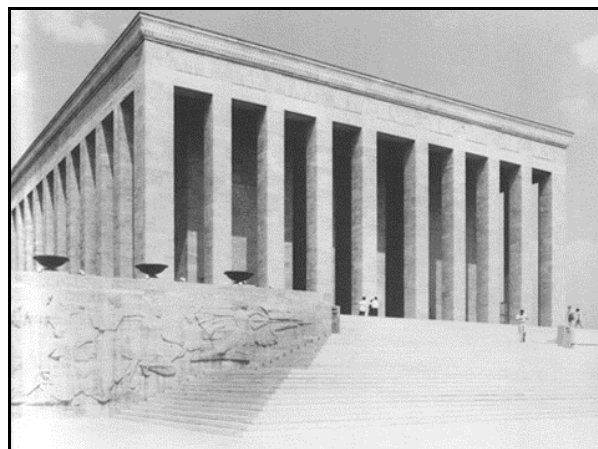
After the proclamation of the Republic in October 1923, a series of reforms was carried the new governmental body headed by M. Kemal Atatürk. In the period of 1923- 1932 villagers, workers and middle class members were the main elements existing of the social hierarchy. After the War of Independence the cities were mostly in ruins and because of migrations and changes, social structure

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was changed. At first years of the Republic, the most determinant social activities were the reforms, which aimed to create a modern society and national consciousness. The most important reform of them was probably the separation of religion and government. Parallel to reforms, there were many efforts for modernizing Turkish architecture, therefore foreign architects were invited by the state for planning firstly the new capital city of the new republic: Ankara.<sup>79</sup>



**Figure 4.28:** Diagramic plan, Ankara  
 Vale,J.Lawrence, 'Architecture, Power and National Identity', Yale Un P, 1992,pg.97-104)



**Figure 4.29:** Anıtkabir, Ankara(Source: Vale,J.Lawrence, 'Architecture, Power and National Identity', Yale Un P, 1992,pg.97-104)

The declaration of Ankara as the capital has been one of the most important events of the period and had lasting effects on the modern Turkish architecture. The old capital, Imperial Istanbul was closely associated with the

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79 Vale,J.Lawrence, 'Architecture, Power and National Identity', Yale University P, 1992,pg.97-104



Ottoman past, and was replaced by Ankara. With economic shortages recreating Ankara as a modern capital: providing monumental governmental buildings symbolizing the victory and ambitions of the state, public buildings for education, health and etc. were among the first tasks of the republic.<sup>80</sup>

In order to publish the official state ideology called 'Atatürkçülük', elements that refer this ideology were imbued in the urban pattern. In the Republican period, in order to serve this ideology and creating the new national identity cities were equipped with elements such as, a main road called 'Atatürk or Cumhuriyet caddesi' ending with a municipality building to represent the government, a square for in front of the municipality for national ceremonies with an Atatürk monument that usually is an equestrian statue of him. These elements were all the main elements in all cities of the new Republic founded by Atatürk.

As an example to this urban structure, Atatürk Boulevard is the main road for the city of Ankara, which starts with one node for the city; President's House and ends with another one: old Parliament Building which was in use when this scheme was planned. Another important building and the most important landmark for the city is Anıtkabir, which is the Mausoleum for the founder of Turkish Republic. It is situated on the highest hill of Ankara in order to serve its aim as a landmark, and in order to act as a commemoration implement for the leader of the War of Independence and the founder of the republic.

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80 Yavuz Y, Özkan S, 'Modern Turkish Architecture', University of Pennsylvania P., 1984,pg.51-67

## CHAPTER 5

### DESIGN AND PLACEMENT OF LANDMARKS

In this chapter four important cities are analyzed according to their ways of development and efforts made for building monumental structures and the reasons in building them are discussed. As Montgomery says 'Landmarks, meeting places and smaller scale signatures have always played an important role in the life and design of cities.'<sup>81</sup> The first tree cities: Rome, Paris and London are all important for being a capital to saw many political changes and for representing their nations throughout history. Washington DC is studied as the fourth city, as it presents a federal administration, a new way of understanding and a new world. It is also very important because it was planned on a vacant area. Even though it hasn't got a much long history, it is important because it has its roots on the whole cultural heritages of western civilizations.

#### 5.1. Rome

The city of Rome had been an attraction point since the establishment of the city for various reasons. The city Rome was founded in 753 BC by Romulus, who became its first king of Rome. Over a thousand years passed from its birth to the decline of Roman Empire following the barbarian invasion. Rome in his history had become the capital of the ancient empire, had been the seat of Renaissance papal power, and in 19<sup>th</sup> century the capital of modern Italian state.

The original settlement of Rome lay on the banks of the Tiber near the later Forum Romanum. From this center, protected by the surrounding hills, the city

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<sup>81</sup> Montgomery, John, 'Making a city; urbanity, vitality and urban design', Journal of Urban Design, Feb.98, Vol.3.1, pg.93

spread out to all directions. It became the scene for a series of projects glorifying the military leaders and emperors. In addition temples, forums, palaces, huge facilities for entertainment were built that reflected the culture of the Romans. The most outstanding buildings of that period were the Forum Romanum, Colosseum, temples, theatres, circuses, baths, triumphal arches.<sup>82</sup>

In the ancient ages, the residential areas were mainly on the hills, while almost all large public buildings were located at the foot of the hills. From the Republican Period there were many admirable works left. Imperial Age was one of the most exciting periods of Roman culture. Imperial Rome appears with all of its magnificence in the area of the Roman Forum, the Palatine Hill and the Colloseum. In this era the Empire celebrated itself in artistic and urban level. Triumphal arches, extraordinary monuments, and the outstanding Imperial Forum exalted the greatness of Rome and its emperor.<sup>83</sup>

Rome by the end of the 2<sup>nd</sup> century, reached its greatest splendor. After Christianity, 4<sup>th</sup> century AD, many great basilicas were built and some others followed them. The celebration of the spiritual and temporal superiority of the Christian world led to Rome's urban Renaissance. Popes efforts increased the magnificence of their reign. During the Middle Ages, when the city was acted as the center of Catholic Church, it was the most frequented place of pilgrimage in the west. Several important churches were built in Rome from the beginning of the Christianity.<sup>84</sup>

From the second half of the 15th century, the Church's great influence gave rise to an urban rebirth; the medieval city of Rome was transformed. The idea was indeed rising from an easy idea; connecting two points forms a line. Pope

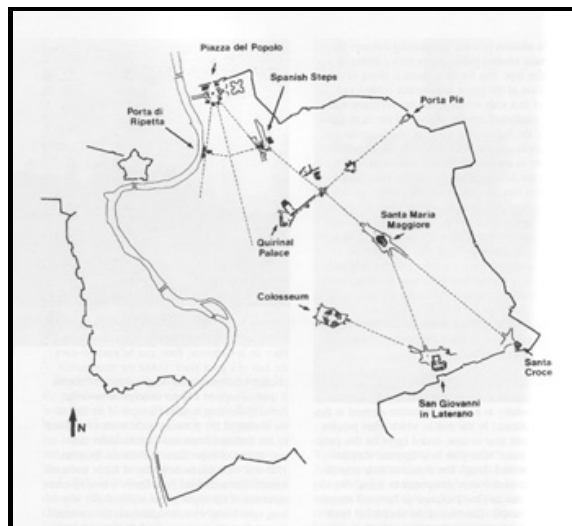
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82 Gallion, Arthur B., 'The Urban Pattern', Van Nostrand Company Inc., pg.31

83 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.65-69

84 'The great art cities of Italy', Lozzi, Roma, 1998, pg.4

Sixtus V integrated this idea to the urban layout in order to connect seven main churches in the city, which had to be visited by pilgrims. He created order out of chaos of the medieval city by using the long vista of wide, straight roads. He developed a whole new network of major access routes through the city. Obelisks were raised at important points and as landmarks and points to be connected with the important nodes and churches.<sup>85</sup> Accordingly many streets in the 16<sup>th</sup> century ended in front of a monumental building, this provided to see these buildings from a distance. The criteria of streets being straight and ending with an eye-catching landmark: building, monument or column was the main idea and used for enhancing a city.



**Figure 5.1:** Plan of Pope Sixtus V  
(Source: Moughtin, Cliff; 'Ornament and Decoration',  
Architectural Press, 1999,pg.120)

The Renaissance architectural model followed classical examples, which were centered on the exactness of rigid geometrical proportions. Rome saw the rise of the great noble palaces, the construction of villas with gardens, piazzas, streets and new network of urban roads on the orders of Sixtus V and the

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85 Hall, T., 'Planning Europe's Capital Cities', E & FN Spon, London, 1997

reconstruction of the Campidoglio. Without destroying what was there on the Capitol Hill, Michelangelo redesigned it with a monumental approach with steps, and with the statue of Marcus Aurelius as a focal point of the complex.



**Figure 5.2:** Piazza Navona, Rome (Source: [www.mediasoft.piazze.it](http://www.mediasoft.piazze.it) )

Rome' multiplicity of historical roles retains many prominent urban traces, both physical and symbolic. In many cases several many historical eras can be observed in one place such as Piazza Navona. This node of the city actually followed the traces of the Stadium of Domitian of ancient Rome. It can be observed that the shape of the piazza fits to the shape of the stadium, as the surrounding buildings also follow the layout. The final layout and the fountain in the middle were carried, and an Egyptian obelisk was added by Bernini in the 17<sup>th</sup> century.<sup>86</sup> In the 17<sup>th</sup> century, Roman Baroque gave importance to creativity and abundance of decorative elements. New forms to the city's fountains, facades, churches and piazzas were produced. 18<sup>th</sup> century was characterized instead by the creation of works of urban impact. Trevi Fountain, which is a landmark for the city with the piazza in front of it, and the Spanish Steps which the steps are acting like a piazza in the area, are the ones who were built in this era. In the years of 19<sup>th</sup> century, the Baroque passed to the simpler forms of the Neo classical period on the wave of the rediscovery of classical antiquity in all its forms.

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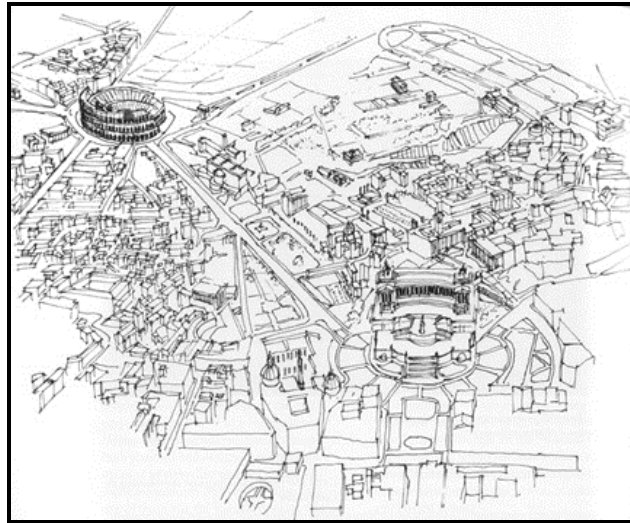
86 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.186



**Figure 5.3:** Piazza del Popolo with its twin churches.

The development of Piazza del Popolo was totally finished in the 19<sup>th</sup> century, 'which demonstrates more clearly than any other single work in Rome the power of an idea as an organizing force over time.'<sup>87</sup> In ancient era, it was the area at the approach to the city. The redevelopment of the area started in Renaissance with the constructing of a road that connects the area to the city and created a vista. Later, Sixtus V erected an obelisk as the focal point of the piazza. But what created a symmetrical scheme and a harmonious effect are the twin churches, which are placed at the corner of the three connecting roads.

The proclamation of Rome as a capital of the newly unified Italy in 1870 brought radical change. In this period in accordance with the regime a lot of public buildings, royal court, governmental buildings and Vittorio Emmanuale II monument was erected. After the fascist regime architectural models inspired by ancient Rome celebrated the glories of the Roman Empire were erected, boulevards were built. They believed that the characteristics of the regime should have monumental and grandeur architecture. Mussolini' s planners and designers created a series of straight avenues and linked monuments by destroying housing units. Another effort done at this time for celebrating the Roman Empire was to excavate, restore and reuse of ancient monuments and sites.



**Figure 5.4:** Via dell' Impero in Rome; the avenue linking two landmarks.  
(Source: Vale, J.Lawrence, 'Architecture, Power, and National Identity',  
Yale University Press, 1992, pg.32)

Via dell'Impero and Via della Conciliazione were the most important effort done at that time for those aims of the regime. Via dell'Impero was linking the ancient Colosseum with the Piazza Venezia where the great monument of Victor Emmanuele II was located. He was both signifying the greatness of these landmarks and also the power of its regime. The avenue was also letting people to see the great Forum Romanum of the ancient times. Via della Conciliazione provides an axial approach to St.Peter's, which is extends the urban design presence of the Vatican to the other prominent parts of the city.



**Figure 5. 5:** Via Della Conciliazione from St.Peter's.

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87 Bacon, Edmund, N., 'Design of cities', Thames & Hudson, 1975

Rome is a city full of monumental buildings from various times of the cities history. It has been a city to scene many political eras, many important leaders, what Rome succeeded probably more than any city in the world is to protect all these monuments as reminders and symbols of various eras, which now acts as nodes and landmarks in the city.

## 5.2. Paris

It was on the Ile de la Cite' about 200 BC, the first important settlement was established. Its founders were a Gallic tribe known as the Parisii. This village having become a small market town was conquered by Roman legions in 52 BC. It was soon replaced by a city conceived along Roman lives, taking the form of a rectangular area oriented north south. During the barbarian invasions the town was fortified like almost all Roman towns in Gaul. Development of the island proceeded with the construction of two monumental buildings at the either end; the cathedral of Notre Dame to the east and the Palais de la Cite to the west, a royal residence that, beginning in 1360, was gradually became the Palais de Justice.<sup>88</sup>



**Figure 5.6:** Notre Dame, on Ile de la Cite, Paris (Source:[www.greatbuildings.com](http://www.greatbuildings.com) )



By the end of the Middle Ages Paris had become a complex urban structure consisting of several core settlements that later combined. Population increased and the built area was extended. Apart from some of churches there were practically no monumental efforts. In 1564 Catherine de Medicis had introduced a new idea of creating pleasure gardens outside the city walls and Tuileres Gardens and Tuileres Palace was built. With this effort an important nodal point of the city was constructed and accordingly that influenced the orientation of the city.<sup>89</sup>

During the Reign of Henri IV, Tuileres Palace was connected with the Louvre by Grande Galerie This effort indeed gave a rise to construct a grand palace complex of Louvre. Later in 19<sup>th</sup> century the palace complex was completed with the construction of the mirrored wing of the Grande Galerie. In 1982, an addition by the architect I.M.Pei was constructed which we know as the glass pyramid.

From the 16<sup>th</sup> century a type of local design planning began to emerge, with the creation of monumental squares. The first significant urban development was done under Henri IV; he constructed Place des Royale in 1605 (today Place des Vodges) and the building of the Pont- Neuf (new bridge), which led to the construction of the Place Dauphine. They were both surrounded by ordered architectural elements and ornamented with the statues of the royal statutes. These two squares a model for a ceremonial square was introduced and Place Royal became a model for the design of monumental urban squares. By the end of the 17<sup>th</sup> century two more squares were added, Place des Victories and Place Vendome that were both commissioned by Louis XIV and acted like monumental outdoor rooms in the urban structure.<sup>90</sup> These royal squares beginning with Place

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88 Poisson, M., 'Paris: Buildings and Monuments', Abrams, N. Harry Inc. Publish. New York, 1999

89 Bacon, Edmund, N., 'Design of cities', Thames & Hudson, 1975

90 Hall, T., 'Planning Europe's Capital Cities', (E & FN Spon, London, 1997,pg.56

des Royale are all dedicated to a king, and they all received in their center a statue of the king to which they were dedicated. At the center of Place des Royale there is a column named The Vendome Column, which is modeled after Column of Trajan, with bronze relief and a statue of the emperor at the top.

Louis XV rejected Paris as his capital and had transformed his capital city by making Versailles the new political and administrative center of France. It is not only a palace or a park, but is a town planned as a second capital city for France. Versailles is an example of combined landscape and townscape planning, which consists of a palace together with a park on one side and a town on the other. Street and squares have been designed in a way to reflect the Italian ideal plan. In order to achieve architectural and symbolical dominance it was situated outside the center of the city. It is still a spectacular monument for the city, for inhabitants and visitors. The efforts made in Versailles influenced city planning and also garden design. Many European and colonial cities were built according to these principles, which were the usage of the straight avenues in order to form a vista, usage of the grid layout of routes and the round or square which acts as a landmark point or node in the cities.<sup>91</sup>

After the demolition of the fortifications in order to enlarge the urban area, a new type of street came into being, which we know as boulevard following the prints of older walls. Although there were no borders left for the city to spread, old structure was the same with a concentrated population in the center. During the enlightenment embellishment of the city had began to be discussed in order to make the city healthy and functional. Another royal square, Place de la Concorde was opened in order to make an action. 'The viceroy of Egypt gave the obelisk,

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91 Kostof, S., 'The City Shaped: Urban Patterns and Meanings Through History', Thames & Hudson, 1991

which is in the center of the square, to Louis Philippe in 1831; it was taken from the temple at Luxor dating from 12<sup>th</sup> century BC.’<sup>92</sup>

By the 19<sup>th</sup> century, population of Paris was more than one million, buildings in the center were in bad condition and they were overcrowded. Street network was poor and still medieval and there were no pavements. Fresh water, fresh air and light was inaccessible, for all of this reasons there was social unrest, illness and chaos.



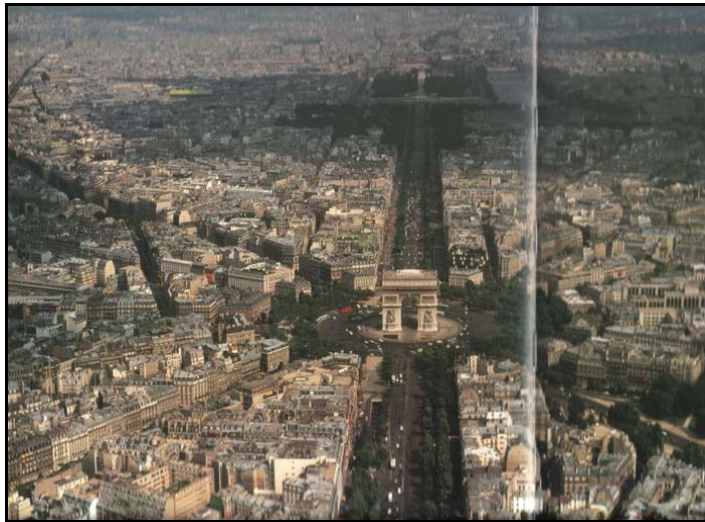
**Figure 5. 7:** Opera House, Paris (Source: [www.greatbuildings.com](http://www.greatbuildings.com) )

Napoleon III was determined to take a radical action in Paris. When he assumed power, important planning decisions were made and some projects launched. It was Napoleon III and the achievements of Haussmann that led to the reintegration of the center of Paris and strengthening the structure of the city. He created grand axes in order to improve the traffic condition in the center and to make easier communication with the outer zones. For creating a more functional and accessible, he made an extensive redevelopment on the Ile de la Cite. For creating a ring of boulevards around the central zone, an extension of grand boulevards over the Seine was constructed. It is clear that Haussmann’s main aid to the urban structure of Paris is the radically created streets and boulevards through the existing structure. Long vistas and impressive markers were also very

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92 Poisson, M., ‘Paris: Buildings and Monuments’, Abrams, N. Harry Inc. Publish. New York, 1999

important elements for him, so he erected many great public buildings acting as landmarks of the city, such as Bibliotheque Nationale and The Opera House.<sup>93</sup>



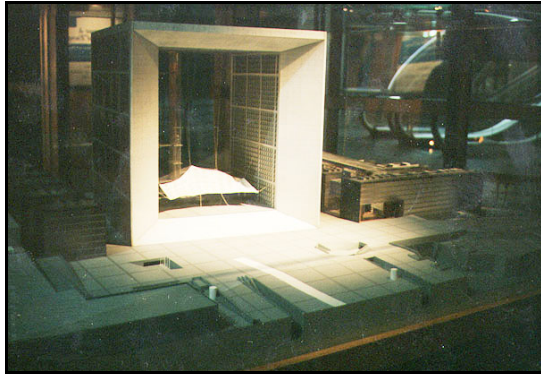
**Figure 5. 8:** Place Charles de Gaulle with Arc de Triomphe (Source: Kostof, S., 'The City Shaped: Urban Patterns and Meanings Through History', Thames & Hudson, 1991,pg.244)

Place de l'Etoile or with the name that is used today; Place Charles de Gaulle was created by Haussmann in a monumental scale by linking streets into a symmetrical pattern with the four which already terminated at this point. Place Charles de Gaulle dominates the whole western part of the city and Arc de Triomphe of Napoleon is a great landmark, which is situated at the center the monumental junction where twelve radiating streets meet. Arc de Triomphe was constructed with the order of Napoleon I in order to mark the western entry to Paris and to glorify the armies of the empire. It was adopted version of the Arc de Titus in Rome at a colossal scale. One of the avenues is connected with Place de la Concorde, is the Avenue de Champs Elysees, which is the most prestigious addresses of the world in tourism, business and entertainment means. It is obvious that the importance of that avenue has increased because of its location as

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93 Hall, T., 'Planning Europe's Capital Cities', (E & FN Spon, London, 1997

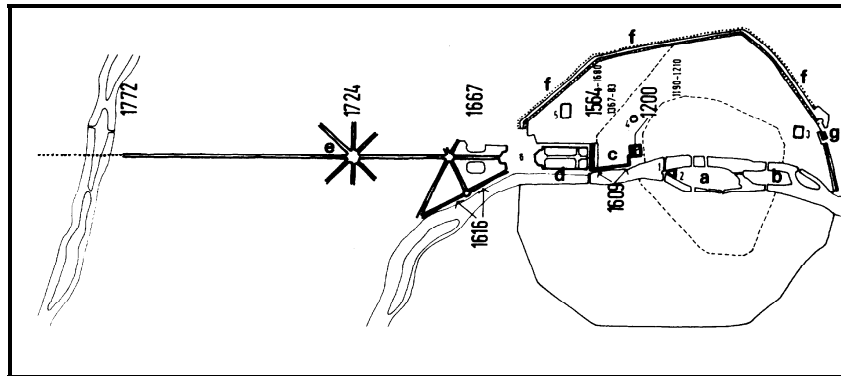
connecting two important landmarks of the city of Paris; Place de la Concorde with the obelisk and Place Charles de Gaulle with the famous Arc de Triomphe.



**Figure 5.9:** The model of La Grande Arche.

In today's Paris there are two important buildings of the modern times to be called as landmark buildings. One of them is the Arc of the Defense or Le Grande Arche that acts as a kind of triumphal arch and La Place de la Defense, which the building is located. The idea of the project was also to extend one of the world's most famous streets and historic axes: the Louvre to Champs Elysées axis, which allows the extension of the vista by way of an unobstructed view from the Arc de Triomphe through to the north west of Paris. It has become an icon of Paris. The aim was to use the role of monumental architecture as being a physical and symbolic vehicle. New monuments had to be erected celebrating the personality and political message of the current ruler. Representational connections were obtained by linking the historical parts and memories with that modern arch.

And the other is the world famous Eiffel Tower, which dates back to the beginning of the 20<sup>th</sup> century and acts as the symbol for both Paris and France. The Eiffel Tower is a structure of enormous proportions with a large, open public space at its feet, with a regular geometry and the space landscaped.



**Figure 5. 10:** Development of Paris dependent on the nodes through history. (Source: Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.201)

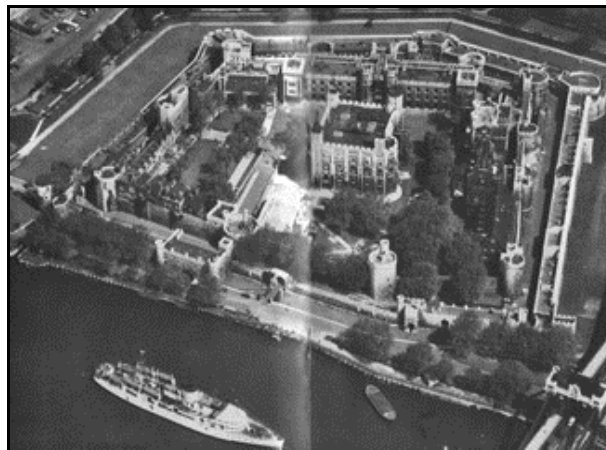
This figure shows the development of Paris from the core of the Ile de la Cite (a) to the modern building complex of La Defence area. Development in the isle continues with the Louvre Palace (c) linking with the Tuilieres Garden (d). Arc de Triomphe (e) was built on this main axis in order to create a vista with the linear connection beginning from Louvre. The stages of the spread can easily be seen on the scheme, with imbuing the landmarks firstly from Palace Dauphine on the core, then by the following landmarks and nodes.

### 5.3. London

The Romans conquered Britain and founded a town called Londinium on the north banks of the Thames in 43 AD. The Romans fortified it with walls and for the next three centuries London flourished as one of the most important outposts of the Roman Empire north of the Alps. A defensive wall circled the town, which is now the main visible evidence of the Roman occupation of London. It had an extensive basilica, a forum, an amphitheatre, temples and public baths for citizens. With the growing barbarian assaults on the empire at the end of the 4<sup>th</sup> century, raids by Angles and Saxons led to the abandonment of the city.<sup>94</sup>

<sup>94</sup> Best, N., Historic Britain, "Weidenfeld & Nicholson", London pg: 75- 87

As the Anglo- Saxon settlement took root, London revived by the 8<sup>th</sup> century trade was prospering again. In the 9<sup>th</sup> century London was a prime target for the raids of the Vikings, so the walls were restored as a defense against invasions. The Anglo- Saxon monarchy could not repulse the Normans. With the crowning of William Duke of Normandy, he built a white tower with the purpose of protecting and controlling the city: a monumental stone, which was the core of the Tower of London. It is called White Tower and is the oldest and the most important building of the complex. The Normans restored the wall of the city and rebuilt London Bridge in stone for the first time. The Tower of London dominated the town for centuries as the attraction point and greatest node for the city.<sup>95</sup>



**Figure 5. 11:** The Tower of London (Source: 'The Tower of London', London, 1974)

The city developed from two cores: the city of London and the city of Westminster. When the abbey at Westminster (it means the big church in the west) was completed in 1066, The City of London became the country's royal capital and center of economic activity; Westminster became the focus of court life, and religious and administrative center of the kingdom with its two focuses of Westminster Abbey and Westminster Hall. It can be said that the cores to form the

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95 Jones, E., 'A Guide to the Architecture of London', Seven Dials pg: 9

city were mainly medieval cores, which formed around the two landmark buildings: churches of St. Paul's and Westminster Abbey.

At the end of the 14<sup>th</sup> century with the establishment of Inns of Court, started the connection between Westminster and the city. The Normans made England a strong port and a manufacturing center, in order to that there were about a hundred guilds and the government was conducted from the Guild Hall.<sup>96</sup>

In 16<sup>th</sup> century under Tudors trade increased and effects of exploration and discovery abroad brought prosperity and the city grew bigger. Henry VIII made huge changes in the physical pattern of London, with the changing uses of the Catholic lands, there aroused royal and aristocratic palaces, buildings for commercial and residential uses. Also areas opened as royal hunting grounds, like Hyde Park and St. James Park, today, which are still green spots of the city. Renaissance appeared first in the literature, but Renaissance architecture also showed out with the Royal Exchange building as a commercial headquarter of the city. It symbolized London's growing confidence as a world-trading center.

Several important events happened in the 17<sup>th</sup> century. First was the event that let the Civil War to begin, which was about the two forces to come across: the Parliament and the Kings. During the four-year civil war London was in parliamentary hands. Today there is the Oliver Cromwell monument across Parliament Square in order to commemorate the days of civil war and the events. The placement of the monument is meaningful if thought Cromwell was representing the parliament during civil war.<sup>97</sup>

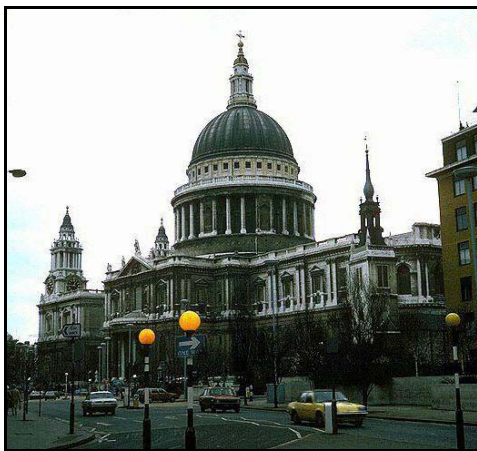
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96 Jones, E., 'A Guide to the Architecture of London', Seven Dials pg: 10

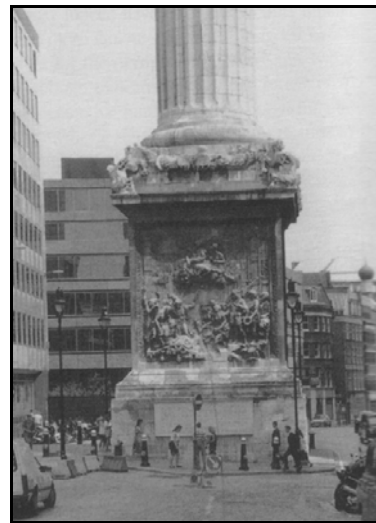
97 Jones, W.D., Montgomery, H., 'Civilization through the centuries', University of Georgia, Blaisdell Publishing Company, Toronto, London, 1960



The most important names in architectural means were Inigo Jones and Christopher Wren who made important buildings of that era. Jones constructed Covent Garden Piazza, which became the first example of London Square. Bloomsbury Square and later St. James Square were built following that example by the Earls of that era. Around the piazzas elegant and fashionable residential areas developed accordingly.



**Figure 5. 12:** St. Paul's Cathedral  
(Source: [www.greatbuildings.com](http://www.greatbuildings.com))



**Figure 5.13:** Wren's Column

Later in 1665 plague broke out and thousands were died. Following year in 1666 came the Great Fire of London, which let the city to a new plan and urban structure. Most of the old city and the buildings were destroyed; Wren had rebuilt many important buildings, churches and St. Paul's Cathedral. Wren rebuilt St. Paul's according to the original one but it was much great and significant, today its dome is a symbol for the city of London. Rebuilding act after the fire was successful and as trade increased, the city of London grew into a world wide financial center. As being a trade center the bank of England and Stock Exchange were built. Wren's proposal had two monuments: St. Paul's and Stock Exchange building. He connected St. Paul's with the Tower of London and also with the new building of stock exchange in a straight line with straight wide roads in order to make a monumental effect. He also moved the places of the churches to

intersections and alongside important roads. For to commemorate the Great Fire of London; Wren erected a monument in great dimensions; which is called Wren's column today.<sup>98</sup>

During the 1812 Regent Street and neighborhood John Nash planned areas after the idea of promoting the building of high quality houses around that district. The street ended with a monumental approach to the Prince's residence: Carlton House and many important monumental squares and roundabouts like Piccadilly Circus, Oxford Circus, Trafalgar Square, St. Martin in the Fields Church and National Gallery were constructed with this effort. Nelson column were erected later in the Trafalgar Square in honor of the hero died in the war of Trafalgar. Regent Street is also an important link to connect the north and south part of the city.<sup>99</sup>

#### **5.4. Washington**

After the independence and after federal constitution came into being, the new independent states of America intended to create a federal capital. For the capital an area settled on the banks of Potomac River had been selected at today's Washington. It was a question of designing a capital city for the newly created federation and as a capital the city should stage the power of the federal government.<sup>100</sup>

The job of laying out the new town and the task of drawing up a plan for the new federal capital was given to a Frenchman, Pierre L' Enfant by the first president George Washington. L' Enfant studied a number of plans of European cities for making a new plan for Washington, but some specific ones clearly

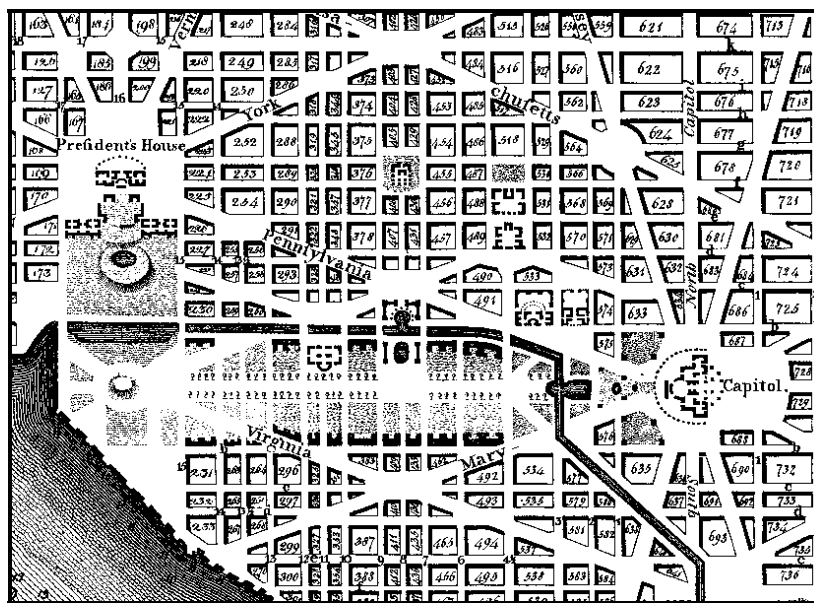
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98 Bosselmann, P., Representation of Places: Reality and Realism in City Design, (University of California Press) pg: 23- 26

99 Hall, T., 'Planning Europe's Capital Cities', (E & FN Spon, London, 1997 pg: 87

100 Girouard, M., 'Cities and People', (Yale University Press, New Haven& London, 1985, pg.252

influenced him, plan of Paris and inclusion of diagonal streets, may recall Wren's plan for London. L' Enfant was aware of the mission he had been given and it is understood with these words of his; 'Proportioned to the greatness which ... the Capital of a powerful empire ought to manifest.'<sup>101</sup> He was going to make a plan to manifest the greatness of the powerful federation.



**Figure 5. 14:** The map of L' Enfant for Washington DC.  
Two main landmarks: The Capitol and Presidents House, and their relations.  
(Source: Bacon, Edmund, Design of Cities, Thames & Hudson, 1975)

L' Enfant presented his plan in 1791; it was based on gridiron and a web of diagonals. Diagonals were obtaining easy movement and reducing the monotony of the grid. The plan was aware of the topography and the hierarchy of public buildings such as the Capitol, President's House, the Supreme Court and they were situated to the area in accordance to each other. There were fifteen squares to be established as nodes, which represent the fifteen states of the Union, each of them on the intersection of the diagonals with a statue or a monument in the middle.

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<sup>101</sup> Kostof, Spiro, 'The City Shaped: Urban Patterns and Meanings Through History', Thames & Hudson, 1991, pg.271

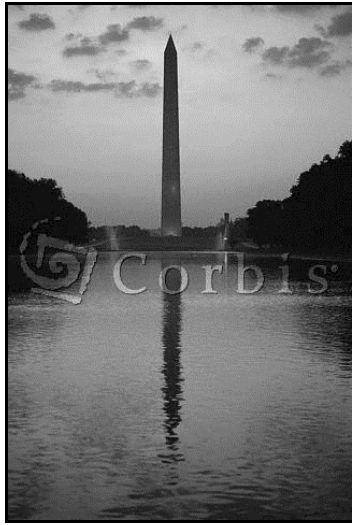
There were two main monuments in the plan: the president's house and The Capitol. One was a representation of the state and the other of the leader of the state, so they were carefully placed in the plan. They are directly connected by one of the diagonal avenues. (With the name Pennsylvania Figure 5.) The capitol was situated at the end of three lined Grand Avenue, as it is the most important landmark of the city and also the state. The avenue was ending with a monument on the intersection of diagonals, and at right angles president's house was in line with the connection of green space. The capitol, built on top of the highest hill on the site, was to look down the grand avenue and across the river, and the president's house to have a clear view along the river reach. The Grand Avenue was not planned as a public road; by about 1796 it had been named The Mall. On either side of it was to be a mixture of public buildings and private gardens and grand houses, suitable for ambassadorial residences. Network of diagonal streets were very wide and planted with a double line of trees.<sup>102</sup>

'In L'Enfant's plan, only the names and the functions of the buildings changed; the most basic planning principles remained constant.'<sup>103</sup> Today President's House with its frequent name The White House and The Capitol meet at right angles where the Washington Monument stands. Another monumental effect is obtained with commemorating many national events, such as Korean and Vietnam Wars, and usage of national identity in the area between the Lincoln Memorial and the Washington Memorial. The area with the Capitol at the head of the long green band and the Lincoln Memorial at the opposite end is called The Mall. Many national museums, galleries and memorials are located at the either sides of the Mall beginning from the Capitol to the Washington Memorial.

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102 Morris, A. E. J., 'History of Urban Form', Longman Scientific & Technical, 1994, pg.350-356

103 Vale, J.Lawrence, 'Architecture, Power and Natural Identity', Yale University Press, 1992,pg.67



**Figure 5. 15:** Washington Monument (Source: [www.corbis.com](http://www.corbis.com) )



**Figure 5. 16:** The Mall, the Capitol and Washington monument from air.  
(Source: Kostof, Spiro, 'The City Shaped', Thames & Hudson, 1991,pg.271)

This whole area including the most important landmarks of the state, the Capitol, the White House, and the Lincoln Memorial creates a triangle of national identity, display area of power of the nation, to support Washington's role as a symbolic center of the United States.

## **CHAPTER 6**

### **CONCLUSION**

As we study landmarks throughout history, we see that physical landmark structures are still active in spite of the changing land uses and their relations in between, in accordance with their macro forms and their functional scheme. All of the effects of the necessities driven from these new relationships of new cities and land uses, and the effects driven from many radical changes and the needs of the new city structure, which is not similar to the older one, change the land uses and their relations. Anyhow, in general, the structures that can be identified as landmarks are the elements and buildings left standing in the physical structure of cities.

However many structures and elements which have survived till today haven't been built as a landmark element, with respect to the point where they were erected and with respect to their aim, at the time they were built. They didn't have the qualities and quantities of being a landmark, as we described in other chapters. However, when considering the fact that, their story of construction gives clues about events of that time about the histories of the inhabitants of the city, and that today we are constructing our cities on these remains from the past, it can be said that their effects are continuous and effecting the constitution of the city life in every phase.

It is obvious that; the landmarks which will be erected in the future, their type, where they will be situated will effect the order and arrangement of their surroundings, and will effect the future life of cities as the historical buildings effect

today's city life. Therefore, when planning in the scale of a revision plan of a district, or when planning in the scale of a whole town: the place of landmarks and where they will be situated in the physical plan will be very important and must be taken into consideration. This necessity is revealed by the observations of this study. During the preparation of the plans, regardless of what power or event the landmark will reflect, it must be understood that it is an element and device that will orientate the development.

From this point of view, during planning process, finding out location criteria for situating the points or structures which are going to be added to the plan for various aims and determining the probable locations is an important effort, which mustn't be overlooked. Determining the location criteria, with the help of the classification (classification according to the scale, classification according to the function) given in this study, which will effect the locations of various types of landmarks is a lateral aim of this study, where the main purpose is to investigate the effects of landmarks and nodes on the cities and on the city life.

Classification of the location criteria is as follows;

- Human scale: Although it is a must for all the urban elements to be in human scale, elements such as landmarks can make contrast with their surroundings, and can be enlarged without being against the main criteria of the human scale, in order to fulfill their role of representing an event, power unit or a concept.
- Form: The form which is used for a landmark must fit the urban space with its scale, height and with the relationship with its surrounding and it mustn't be recognizably in contrast with its surrounding.

- Texture: There is a dominant urban texture in the physical structure of every urban settlement that is derived from the urban pattern. New elements, which will be added to that pattern, must be in harmony with this urban texture; this must be achieved even without a repetition of that urban texture.
- Pattern: Locations of these landmarks must be distributed with a new pattern structure in the present total city pattern. Repetition of these elements on a linear line or between two different elements must be used in order to orientate urban development or urban reconstruction in a district. This repetition of these elements must be recognizable without particularly looking at them or observing them.
- Skyline: In spite of the need of applying the structural characteristics and criteria, which we tried to explain above for both urban texture and urban pattern, in some cases in order to have an effect on the total city structure and for giving a specific characteristic to the city, creating torn or exaggerating topographic heights in the smooth structure of cities is also a general effort which has been observed, as in the examples of Anıtkabir in Ankara and minarets in İstanbul.

Design criteria, which we tried to summarize above, have been observed during the study, and are common for the various types of landmarks that have been built in various eras and various places. The elements that don't display these characteristics and that don't have these properties have disappeared and couldn't reach today as a result of this or that reason, which means that they haven't been made suitable enough for their purpose.



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## APPENDIXES